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- ► Producing and disseminating original research
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The institute is committed to expanding and deepening policy-relevant knowledge production in and about the Arab region; and to creating a space for the interdisciplinary exchange of ideas among researchers, civil society and policy-makers.

Main goals

- ► Enhancing and broadening public policy-related debate and knowledge production in the Arab world and beyond
- ► Better understanding the Arab world within shifting international and global contexts
- ► Providing a space to enrich the quality of interaction among scholars, officials and civil society actors in and about the Arab world
- ► Disseminating knowledge that is accessible to policy-makers, media, research communities and the general public
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TOWARDS CONNECTED LEARNING IN LEBANON

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ACRONYMS

ADIP Apprentissage à Distance et Innovation Pédagogique

AOU Arab Open University

AUB American University of Beirut

AUF Agence Universitaire de la Francophonie

BMW Bavarian Motor Works

CEC Continuing Education Center

CLCC Connected Learning in Crisis Consortium

CMIC Community Mobilization in Crisis

HEEAP Higher Education English Access Program

HOPES Higher and Further Education Opportunities and Perspectives for Syrians

IELTS International English Language Testing System
ICT Information Communication Technologies

JWL Jesuit Worldwide Learning

LASER Language and Academic Skills and E-learning Resources

LASeR Lebanese Association for Scientific Research

LMS Lebanese International University
LMS Learning Management System

LU Lebanese University
MAPS Multi Aid Programs

MBA Master of Business Administration

MEHE Ministry of Education and Higher Education
MIT Massachusetts Institute of Technology

MOOCS Massive Open Online Courses
NGO Non-governmental organization

PADILEIA Partnership for Digital Learning and Increased Access

RESUM Réseau Méditerranéen Pour L'employabilité

SNHU Southern New Hampshire University

STEM Science, Technology, Engineering, and Mathematics

UK United Kingdom

UNHCR United Nations Refugee Agency

UNRWA United Nations Relief and Works Agency for Palestine Refugees in the Near East

USB Universal Serial Bus (or memory stick)

USEK Holy Spirit University – Kaslik

EXECUTIVE SUMMARY

Connected learning is one of the fastest growing trends in tertiary education today. The demand for tertiary education globally presents a pressing need to explore innovative ways of responding to such a demand. Institutions of tertiary education in Lebanon began offering connected learning in varied modes and modalities, for both Lebanese as well as Syrian refugees hosted in the country. The growing Syrian refugee population includes a large number of university-aged youth who have fled their homes and studies in Syria and are struggling to continue their education in the host countries in which they seek asylum (King, 2014). Connected learning has emerged as one of the modern approaches within the scope of the provision of education, not limited to refugees and displaced youth.

This report identifies connected learning programs in Lebanon, highlighting ones that facilitate Syrian refugees' access to tertiary education. The report maps the practices of connected learning programs, the challenges encountered within these programs, and the opportunities made available through such initiatives.

Key Findings

There are four different categories of connected learning programs offered in Lebanon: blended learning programs in formal education, fully online programs in formal education, bridging programs to tertiary education, and building skills to manage conflicts in crisis. Many of these programs have been created to reach out to Syrian refugees.

A number of barriers and challenges inhibit the expansion and implementation of connected learning programs in tertiary education in Lebanon:

► Structural Barriers: Among the primary structural barriers is the absence of the legal framework for the provision and accreditation of online programs. The political situation in the country also adds to the challenges inherent to the structural barriers leading to the delay in the legislation recognizing online learning. This limitation leads to an increased resistance from institutions to engage in the planning, design and provision of connected learning programs in Lebanon. Limited awareness of the availability of online learning programs offered in Lebanon, coupled with a negative cultural view of online learning result in additional structural barriers

- whereby students still prefer traditional face-toface learning. Finally, the uncertainty of obtaining recognition inside Syria for degrees obtained through connected learning programs presents a structural barrier to engaging in such programs.
- ► Pedagogical Barriers: The bureaucratic nature of institutions of tertiary education in Lebanon, coupled with the limited autonomy granted to faculty members to design and deliver connected learning programs presents some of the pedagogical barriers for engaging in the provision of connected learning programs. Additionally, most faculty members lack the skills needed for teaching online courses and had limited ability to support students online. Similar to faculty members, students were reported to have limited ICT skills preventing them from engaging in connected learning programs. .
- ► Technical Barriers: Slow internet connectivity and unreliable electricity supply present challenges for both institutions as well as students trying to engage in any form of connected learning. Additionally, some institutions of higher education do not have some of the necessary equipment needed to run connected learning classes. One of the examples may be the Lebanese University which still struggles with outdated technology equipment and computers. These technical issues present significant frustrations for leaders, faculty members and students engaged in connected learning programs.
- ► Faculty Challenges: There is a stiff bureaucracy present in the organization, lack of autonomy granted to faculty members, difficulty of integrating Syrian refugees in the local community, inability to control student cheating, doubt in the ability to support students, and resistance to online learning among faculty members and students.
- ► Student Challenges: Some students have little to no interaction with facilitators, while others feel no motivation in the program or sense of belonging to the organization. Other challenges related to Syrian refugees were difficulty in using technology, weakness in foreign language proficiency, lack of legal papers or financial resources, and inability to meet criteria for scholarships.

RECOMMENDATIONS

- Policy-makers should introduce legislation that would recognize online learning of not just blended learning but also fully online programs.
- ► A committee needs to be formed that would monitor the licensing of online programs.
- Organizations should reduce bureaucracy and collaborate with faculty members during development and implementation of the online programs.
- ► To use resources efficiently, organizations must coordinate with each other. Here, UNHCR can play a role in organizing coordination among organizations and make sure that the programs on offer do not overlap with one another and create competition.
- ► Organizations must raise awareness among the community and employers about the benefits of online learning.
- ► It is vital that organizations secure a fast connection and appropriate infrastructure to ensure a smooth videoconferencing and student access.
- ► Training must be provided to faculty members on online learning methods.
- ► Syrian refugees have financial restraints and are in need of scholarships to continue their education and many of them are above the age of 25. Therefore, there should be flexibility in criteria for scholarships to reach out to a bigger number of students.
- ► Organizations can consider using mobile learning as a method of connected learning since almost all Syrians have smartphones but not all of them have computers.



I) INTRODUCTION

Skills supplied by formal educational institutions seem to be disconnected from today's labor market demands, particularly in light of the fast paced changes due to a new globalized economy. Educational institutions are structured in a factorylike manner where students are being prepared for assembly line jobs, categorized according to age, and instruction delivered according to subject matter and in a traditional face-to-face setting. The curriculum of educational institutions continues to be outdated and designed as a 'one size fits all' despite the increase in the use of technology. In fact, 60% of managers claim that new graduates do not have critical thinking and problem-solving skills (PayScale, 2018), and other statistics revealed that "6 of 10 millennials have 'low' technology skills" (Schaffhauser, 2015). Therefore, higher education institutions must redesign their curriculum to include higher level of skills and teach to innovate. In addition, there is movement towards the digital economy, which is "eroding the effectiveness and leverage of domestic policies in many areas" (OECD, 2017). Consequently, there needs to be greater international collaboration and advocacy of more flexible domestic policies that can accommodate the advancement in the economy.

Lebanon with a population of only six million is hosting more than one million refugees. The Syrian crisis has impacted millions of Syrians and left them in exile for almost nine years now. Many of these refugees are university-aged youth who have fled their homes and studies in Syria and are struggling to continue their education in the host countries in which they seek asylum (King, 2014). A number of initiatives have emerged within the scope of providing education to refugees within host countries, including Lebanon. Connected learning has emerged as one of the modern approaches within the scope of the provision of education not limited to refugees and displaced youth. In the following sections, we introduce a brief literature review about connected learning that identifies the definition, describes programs implemented in the Middle East and in Lebanon, the barriers, the opportunities, and the impact of these programs.

Rationale and Purpose of the Study

Several studies have recognized the need for enhancing support to Syrian refugee students to pursue their education, recognizing that more support is needed at higher levels including tertiary education. Connected learning opportunities present a mode of support for students whether in providing an opportunity to learn or an opportunity to supplement their learning. UNHCR initiated efforts towards establishing the Connected Learning Consortium in 2016, which focuses particularly on addressing the under-met needs of refugees and displaced communities by working towards unifying innovative and digital higher education efforts.

There is a critical need to better understand the new practices within the scope of connected learning particularly through addressing the current situation of the use of connected learning programs in Lebanon. It is equally important to better understand the challenges for refugee students around connected learning and academic entities, and areas of coordination between the Lebanese private universities and the public university and other key stakeholders within the sector. The existing policy and legal frameworks in Lebanon as related to connected learning and the tertiary education provision for Syrian refugees present important factors that influence the practices of administering and providing tertiary education for refugees, including coordination and exchange of information, measures and practices of diplomas, certificates and degree recognition and their equivalencies for refugee students.

Research Questions

This study aims to identify connected learning programs in Lebanon that enable Syrian refugees to access tertiary education with the aim of understanding their practices, challenges, and opportunities by investigating the perspectives of key stakeholders, among which are the Ministry of Education and Higher Education, tertiary education institutions, educational entities, and students. This report attempts to answer the following questions:

- 1. What connected learning programs are available in Lebanon?
- 2. What challenges do students face in accessing connected learning programs?

- 3. What support is available for students for these connected learning programs in tertiary education?
- 4. What policies exist that support/hinder connected learning programs?
- 5. What is the equivalence of the certifications of these connected learning programs inside Syria?
- 6. How do different connected learning models contribute to improved local integration of refugees in host communities?
- 7. What is the impact of connected learning programs for graduates' local employment opportunities, engagement with lifelong learning, and resilience among their family and communities (across local host community, resettlement, and post-repatriation contexts)?



II) LITERATURE REVIEW

a.Definition of Connected Learning

Connected learning is "the process of transferring knowledge to learners (students) through the use of information communication technologies (ICTs), that enable more flexible learning not bound by the same time or geographical limitations that exist within traditional tertiary programmes" (UNHCR, 2014, p. 4). Connected learning is interest-driven, peersupported, and academically-oriented learning that results in an increase in a person's economic and social opportunities (UNHCR, 2017; Ito et al., 2013). In addition, learning occurs when a person feels that care and support are provided (Jones, 2007) especially with vulnerable groups such as Syrian refugees (UNHCR, 2014). Through connected learning programs, peer and academic support are provided to assist these students, who lack access to tertiary education and financial resources, to continue their education (UNHCR, 2017). Also, using digital technology, learning becomes more enjoyable and interactive for students. Another significant factor of connected learning is accessibility and dissemination of information that can reach a large number of students in different parts of the world with low cost (UNHCR, 2017).

b. Context of Syrian Refugees in Lebanon

There are around 449,957 Palestinian refugees (UNRWA, 2014) and 1.1 million Syrians refugees in different parts of Lebanon (UNESCO, 2017a). Lebanon has opened up its borders to host Syrians who were fleeing the Syrian war in 2011. The number of Syrians in Lebanon has increased because the war escalated and other Arab neighboring countries have limited the flow of Syrian refugees into its countries (Thibos, 2014). Although "displaced" is often used in the Lebanese context rather than "refugees" for political reasons, this report will use the term "refugees". There are "about half of Syrian refugees [that] are economically active, and only one third have access to employment with little opportunities for employment" (Mikhael & Norman, 2018, p. 57). However, Syrians who seek jobs in Lebanon are required to get work permits. In fact, only 1,233 Syrians had work permits in 2013 and the majority is working in informal job settings (CAS, 2013).

Other statistics show that around 17% of Syrian

refugees have finished secondary school and are eligible to enter tertiary education, and about 70,000 Syrian refugees have had their education interrupted by the conflict in Syria (UNESCO, 2017b). The Syrian refugee youths who did not continue their education are at a critical age. Because of deprivation, social marginalization, and political exclusion, these youth become at-risk students and potentially a target for extremist groups (Mikhael & Normal, 2018). Connected learning programs would engage Syrians potentially atrisk in learning to advance their knowledge and skills, find employment, build resilience, and utilize their learning towards helping others in their community.

c. The Use of ICT in Teaching and Learning in Tertiary Education

Connected learning works on building the individual and collective capacity of a person using technologyenhanced tools. This report describes three methods used in connected learning courses and programs in tertiary education: web-facilitated learning, blended learning, and fully online learning. Each of these methods can use either synchronous or asynchronous modes in learning or even both. Synchronous is when the instructor and students interact and learn in a realtime setting such as videoconferencing or live chats (Hrastinski, 2008). Asynchronous differs in the sense that the instructor and students engage in activities such as posting on discussion boards, each at his or her own convenience or learn from video-taped lectures (Hrastinski, 2008). In addition, all connected learning courses or programs can use mobile technology such as texting, mobile games, e-reading, and mobile learning applications for learning. Others might also use simulations, game-based e-learning, and media technology such as websites, emails, online videos and audio, online social platforms, and blogs or social media applications such as Facebook, Twitter, Skype, and WhatsApp (GIZ, 2016).

i. Web-facilitated Learning

Web-facilitated learning, also known as web-enhanced learning, is defined as courses that are delivered up to 29% online and uses web-technology to create a more interactive classroom environment that enriches students' learning (Xin, Kempland, & Blankson, 2015; Allen & Seaman, 2010). Many universities have invested in technology and training of faculty members to transform traditional instruction into web-facilitated instruction that shifts learning from being teacher-centered to learner-centered, which reduces

partly the power held by the facilitator (Walker & Johnson, 2008). One of the common digital tools used for web-facilitated learning is the Moodle, a learning management system (LMS) used to post content material for students, manage assignments, track students' progress, and administer tests. Other digital tools support teaching through video and audio, social media, mobile applications, and so on. However, research shows that the success of any web-facilitated online learning course depends on the flexibility and ease of use of the digital tool and the interaction between student and instructor (Hermans, Haytko, & Mott-Stenerson, 2009). Particularly, when students perceive that the instructor has organized the course effectively, has used appropriate instructional design, and has facilitated discourse smoothly, they would report a higher satisfaction of learning (Hermans, Haytko, & Mott-Stenerson, 2009; Shea et al., 2006).

ii. Blended Learning

Blended learning courses, also known as "hybrid" or "mixed" courses (Gideon & Khalil, 2015), combines face-to-face learning through the physical presence of the students and the instructor in the classroom and online learning using ICT (Graham, 2006). The percentage of online portion of blended learning ranges from 30 to 74% (Xin et al., 2015) and can occur at an activity level, course level, program level, or institutional level. Although some research has shown that blended learning courses work well in large classes and first-year undergraduate courses (Huon et al., 2007; López-Pérez et al., 2011), the success of any blended learning course depends on context which might even affect the subject matter. This means that the same blended learning course might be successful in one geographical area and unsuccessful in another, contradicting the generalization rule of blended learning being effective across subjects and applicable anywhere (Harris et al., 2009; Shorey et al., 2018). In addition, Mitchell and Forer (2010) reveal that students' satisfaction with blended learning courses is influenced by students' preferential way to learn and their overall university experience. In addition, studies that measured the effect of blended learning on students have shown inconclusive findings. Some studies found that blended learning has improved student achievement and motivation (EL-Deghaidy & Nouby, 2008; Haripersad & Naidoo, 2008; Shorey et al., 2018), while others have reported no significant effect (Hsu & Hsieh, 2011).

iii. Online Learnina

Online learning is used to refer to fully online courses that are 75% to 100% online (Xin et al., 2015). These courses or programs are usually appealing to students who cannot attend face-to-face sessions for reasons that are usually related to work, family, or location. Online learning occurs in a virtual environment where students gain access to content material online and learn either at pace or self-pace. Most online learning courses or programs usually use asynchronous learning, but there are currently tools that engage students in collaborative learning with their peers and the instructor. Some of these collaborative learning tools are "blogs, wikis and podcasts, chat rooms and online forums" (UNESCO, 2017b, p. 31).

Among the fully online learning courses are the Massive Open Online Course (MOOCs), which are free of charge courses made available through online learning platforms created by elite universities and other providers such as Coursera, EdX, and Udacity (Livanagunawardena et al., 2014). MOOCs were first introduced as a tool that can address inequity. unemployment, and innovation and create life-long learning (Schuwer et al., 2015). It became very popular around 2012 where it reached 1.7 million persons through one provider (Pappano, 2012). Critics of MOOCs have highlighted the high dropout rate of registered participants in the courses. This is caused by different factors. First, MOOCs are usually offered as a non-degree resource and accessed at self-pace (Liyanagunawardena et al., 2014). Second, there seems to be a concern about the quality of MOOCs. Some scholars believe that these courses offered by elite universities are created for advertisement only (Schuwer et al., 2015; Krause & Lowe, 2014).

d. Informal Learning and the Use of Social Media

Informal learning occurs through activities that we do in our everyday lives. One way we learn is by using the internet and accessing community platforms, YouTube videos, blogs, or websites. Social media has a huge impact on formal and informal learning, especially when combined with mobile devices. Indeed, students can interact both with their peer students and with their instructors in a more informal way that can be complementary in their learning experience. Also, students are often connected through social media and thus they can create and share their own content, directly in context and "within the course of their everyday lives" through these tools (Gikas & Grant,

2013). As a result, social media tools make learning more student-centered (Greenhow, 2011).

Social media can be useful in a context of crisis. especially when the number of refugees increases but their access to education remains limited. Indeed, according to the UNHCR (2014), while 34% of youth globally attend university, only 1% of refugees have access to tertiary education. It is noted that refugees often own mobiles with internet access and as Filippo Grandi, the UN High Commissioner for Refugees states: "In the world we live in today, internet connectivity and smart phones can become a lifeline for refugees", meaning those same tools that are being used to access education-related material in many refugee camps (UNHCR, 2017). Refugees use social media as information resources to share and find data about tertiary education opportunities among other subjects. For instance, a Facebook group called "I am a Syrian in Lebanon" connects and provides a platform for 149,000 Syrians, whom interact and exchange information about education (Gladwell et al., 2016b).

The Lebanese Ministry of Education and Higher Education even encourages the use of technology, including social media, in schools and universities and in initiatives directed towards refugees. In fact, the Lebanese national strategy *Teaching and Learning* in the Digital Age: Lebanon's National Educational *Technology Strategic Plan* focuses on the contribution of new technologies to improve teaching and learning and emphasizes the importance of social media. Social media, as an informal learning tool, connects refugees with their instructors and peers through Facebook and WhatsApp groups. Moreover, instructors are beginning to use social media to share information about the course and assignments or course materials, instead of using the traditional Learning Management System, which might seem complex for students (Gladwell et al., 2016b). These education-related uses of social media raise issues regarding information control and accuracy that are intensified in times of crisis, and thus require a strong support in the host communities (GIZ, 2016).

However, the use of social media, and even ICTs more globally, in education also has its challenges and limitations. Some instructors are still reluctant to use technology in their courses, either due to their unfamiliarity with these tools, a generational gap, or many other reasons. Some social media also prove to be quite difficult to use. Moreover, some discussions

arise about technology devices or social media becoming distractions in class and as a consequence many instructors forbid their students to use these devices in class (Gikas & Grant, 2013).

e. Connected Learning in an International Context
International organizations are partnering with

local organizations and communities to implement programs that would increase accessibility to tertiary education for Syrian refugees. Many of these programs are using either web-facilitated learning, blended learning, or fully online learning as methods for teaching and learning. We present a description of the organizations and their programs implemented in the Middle East region. It includes the purpose, the pedagogy, and the assessments used to measure the learning outcomes. Then, we identify the barriers that exist that impede connected learning programs. Finally, we show the impact of connected learning programs on students and community. The organizations covered are the Jesuit Worldwide Learning, InZone, and Edraak.

i. Description of Programs

Jesuit Worldwide Learning (JWL): Higher Education at the Margins is a not-for- profit organization that has built partnerships with international universities and organizations, offering certificates and diplomas to individuals that are not able to access tertiary education. JWL provides a Diploma in Liberal Arts and Community Service, Learning Courses in Applied English as a foreign language, and advanced English in Jordan using blended learning method and online digital tools as a support in teaching (JWL, 2018). A learning center opened in Syria in 2010, but due to the war they decided to relocate the center to Jordan in 2012 (JWL, 2018). In addition, JWL uses Ignatian pedagogy that provides a student-centered, participatory approach and peer-to-peer support to develop students' social awareness, critical decisionmaking, leadership skills, and positive perception through experience, reflection, and action while also considering context and performing evaluation at the end of the program (JWL, 2018; Gladwell et al., 2016a). One of the unique aspects of the program is that it engages its alumni in the program by giving them the opportunity to teach and improve the program. Some of the digital tools that JWL uses are mobile learning applications (JWL, 2018) since smartphones are accessible to many students and it provides its students access to technology devices

through learning centers (Gladwell et al., 2016a). For assessment, JWL focuses on assignments, exams, and informal feedback and examines their alignment with the learning outcomes (Gladwell et al., 2016a).

InZone is an academic center for higher education in conflict zones at the University of Geneva that provides online courses to the youth in the Azraq refugee camp in Amman, Jordan to build their resilience and cultivate their problem-solving skills. This can be clearly shown through the courses offered at the refugee camp such as 'Resilience in a Refugee Context' and 'Engineering and Innovation' that are created with the assistance of its partners Edraak, Purdue University, Princeton University, and MIT (InZone, 2018). The pedagogy used is socio-constructivist and problem-based learning approach (Moser-Mercer et al., 2013) that promotes peer collaboration and utilizes innovative digital learning technology tools such as mobile learning platforms (InZone, 2018). As a teaching method, InZone uses blended learning that includes face-to-face interaction with a facilitator along with virtual tutoring and MOOCs accessible through its online platform. InZone students are able to earn accreditation for the courses they take through the University of Geneva. InZone not only works in the Middle East region but also in Africa and Europe as well to build capacities of interpreters and translators who have been in conflict or post-conflict and help them find a job opportunity with international NGOs (Gladwell et al., 2016b).

Edraak is an Arabic language online platform that began in 2014 and is supported by the Queen Rania Foundation from Jordan. It offers a free self-paced and short-term residence of non-degree courses, specifically MOOCs, to everyone with the purpose of life-long learning (Edraak, 2018). Courses offered are accredited by the Queen Rania Foundation and are categorized according to the goal of learning or domain of interest such as taking personal development courses, STEM courses, employment skills courses, health, business and entrepreneurship, and education for citizenship courses (Edraak, 2018). In the courses, Edraak has assignments and exams used for assessment to evaluate students' understanding (Gladwell et al., 2016b). To facilitate access to material, Edraak has created applications that students can use to work from their phones (Gladwell et al., 2016b).

i. Barriers

Some of the challenges that the organizers and students of connected learning programs have reported are related to connectivity, electricity, poor online course assessments, high attrition rate, lack of technology skills, and difficulty in understanding foreign languages. For example, 50% of JWL students in Jordan had encountered problems with the internet connection every week (Gladwell et al., 2016a). Hence, to resolve this problem, instructors seek temporary solutions to these issues by being flexible and understanding, providing students with materials via USB, permitting the uploading of assignments at a later time when connection is more stable, extending deadlines, changing assignments, and allowing students to repeat failed courses (Gladwell et al., 2016a; GIZ, 2016). Moreover, to address electricity problems, InZone uses solar power in learning centers.

Students and staff members have also expressed concerns about the assessment of online programs. For example, in JWL, students reported that some staff tend to raise grades for compassionate reasons and they do not provide them with enough feedback (Gladwell et al., 2016a). Other challenges were related to monitoring the success of the program. Most programs have challenges that emerge from inaccurate statistics received from partners due to outdated software. Others have trust issues with local partners or disagreements about definitions of success (Gladwell et al., 2016a, p. 29).

Additionally, other programs such as Edraak are facing barriers in the retention of students and in motivating them to complete the registered courses. Connectivity issues, recognition of certificates, student unfamiliarity with online learning, and absence of a facilitator and a supportive environment also contribute to the increase in student attrition (Gladwell et al., 2016a). A number of Syrian refugees in Jordan have raised concerns about employability after completing their programs. They communicated that the certificates might not help them find a job in the country due to Jordanian policies preventing Syrian refugees from working.

iii. Opportunity

Most connected learning programs are initiated by international organizations that have the resources needed to empower students, and especially refugees with the knowledge and skills needed to rebuild their communities. These organizations provide qualified

professionals, ICT, peer support and mentoring, and career services (Gladwell et al., 2016b) and address the barriers that refugees are encountering. Some programs work on students' holistic development (Kiron and CMIC) to improve their readiness, employability, social responsibility, and perceptions (Gladwell et al., 2016b). Other opportunities that benefit students who complete connected programs are personal development, building peer relationships, developing networking opportunities, and receiving career guidance and a possible job opportunity. For example, Kiron, an international organization working in Lebanon and the wider Middle East (presented in a later section) provides peer support to their students through a program called buddy program where a mentor would be assigned to assist students in overcoming academic barriers. It also offers career development services that provide mentoring opportunities with professionals from partners such as BMW, Google, the German Development Ministry and local and international non-governmental organizations. Kiron also works on providing students with free counseling services to help them deal with their hardships (Gladwell et al., 2016b). To maintain a level of quality, most of these international organizations evaluate and reassess their programs, ultimately benefitting the students (Gladwell et al., 2016b).

iv. Impact

Connected learning programs have shown great potential for improving the overall higher education sector. They can raise revenues and enrollments. develop new educational courses, improve retention, remove the obstacles of securing physical space for teaching, save commuting time, reduce total cost for students, and enhance the students' learning outcomes (El Turk & Cherney, 2016). It can also create a more inclusiveness and equitable society and enrich students' learning experience (Gedeon & Khalil, 2015). Higher and Further Education Opportunities & Perspectives for Syrians (HOPES) has conducted its own survey of students in Mansoura University in Egypt about online learning It revealed that 89% of students prefer a blended learning program. Many students were indeed satisfied and enjoyed online learning, while some expressed preference for traditional faceto-face learning (HOPES PowerPoint presentation). However, it seems that the long-term impact of these programs have not been measured since connected

learning programs are a relatively new concept and are only just being implemented (Gladwell et al., 2016b).

The Jigsaw Group study *Higher education for refugees in low resource environments: research study* has shown the impact of JWL programs. The results reveal that students who completed this program have built confidence, critical thinking skills, improved communication skills, and increased their social awareness (Gladwell et al., 2016a). Other noted improvements were related to students' wellbeing. Students felt that the program made them feel safe and helped in reducing their stress level and trauma. Also, students believed that completing the programs would help them improve the lives of others in their community and host countries (Gladwell et al., 2016a).

f. Connected Learning in Lebanon

Lebanese universities usually use web-facilitated learning in courses but are beginning to move towards blended learning courses and programs to reach out to Syrian refugees and potential students residing in remote areas or overseas (Gladwell et al., 2016b). Unfortunately, some universities are not able to offer fully online degrees due to certain government policies, however they do offer fully online certificates and courses.

In the following section, we chose to briefly describe one of the universities that offers a connected learning program (Arab Open University), two international organizations that are applying connected learning program in Lebanon (British Council and Kiron), and an internationally-led program (Community Mobilization in Crisis), with a specific focus on the common and context-unique barriers, and the opportunities that emerge from these programs.

i. Description of Programs

The Arab Open University (AOU) is a Lebanese university that has branches in different Arab countries including Kuwait, Saudi Arabia, Bahrain, Oman, and Egypt, and has established a partnership with the Open University in the UK (AOU, 2018). AOU has undergraduate and postgraduate programs that are taught mainly in English and use video and audio materials and tutorials to enhance learning experience (Gladwell et al., 2016b). AOU uses the Moodle system and e-books for instruction (Interview with Dr. Yara Abdallah). Upon completion of regular undergraduate and graduate programs, students receive two degrees, a Lebanese degree and a British degree. AOU also

offers one-semester microfinance certificates that consist of 15 modules and is delivered fully online, offered in both English and Arabic. The targeted audiences are bankers and microfinance staff (AOU, 2018), in addition to Syrian refugees. Around 200 to 250 students have graduated from this program (Interview with Dr. Yara Abdallah). This program uses an asynchronous mode that includes video lectures, animated PowerPoint presentations, and online discussion forms (AOU, 2018). For assessment, students must pass an online test for each module (Interview with Dr. Yara Abdallah).

Community Mobilization in Crisis (CMIC) is a program led by the University of Ottawa and affiliated with the American University of Beirut (AUB) that aims to develop the capacity and resilience of refugees and youth in Lebanon and cater to their wellbeing to enable them to become change-makers in their communities (Community Mobilization in Crisis, n.d.). Started in 2017, it is a blended learning program where courses are delivered face-to-face by the faculty at the American University of Beirut and others taught online by faculty at the University of Ottawa (Gladwell et al., 2016b). The program intends to educate 216 of the registered and unregistered refugees as cohorts during the following five years (Gladwell et al., 2016b). Moreover, the program is offered free of charge and even the students receive a stipend during the study period. Candidates must meet certain requirements to be accepted into the program. Students must be in need to access tertiary education or have been affected by the Syrian crisis. and have the ability and understanding of community development initiatives to successfully complete the program (Gladwell et al., 2016b). The CMIC adopts a "reflective, dialogical pedagogy" with context being emphasized to allow students to analyze, understand, and share their experiences (Gladwell et al., 2016b, p. 21). The organizers have made program resources available online in English, French, and Arabic, to facilitate student learning (Community Mobilization in Crisis, n.d.). CMIC also supports students with English courses in the preface stage of the program and offers staff assistance by World University Service of Canada and the Caritas Lebanon Migrant Center to increase commitment of students and be able to finish the program (Gladwell et al., 2016b).

The British Council has two programs in Lebanon that works on bridging tertiary education for Syrian

refugees, namely the Higher Education English Access Programme (HEEAP) supported by the Higher and Further Education Opportunities & Perspectives for Syrians (HOPES) project; the second is the Language and Academic Skills and E-learning for Refugees (LASER). Despite similarities in purpose and their use of blended learning as a method, the funding source of these programs and approach differ. HEEAP is offered in a university setting in Egypt, Jordan, Lebanon, Iraq, and Turkey and funded by the MADAD Fund. Through a scholarship, university students receive the opportunity to strengthen their English skills by completing 100 hours of face-toface learning and 40 hours of online courses at their own convenience (HOPES-MADAD, 2017). For assessment, HEEAP requires students to take an English exam prior to entering the program to assess their level of English and then take Aptis and at times IELTS after they complete their programs. The HEEAP curriculum including online courses and workshops and entry and exit English exams are designed by the HOPES team (Interview with Harry Haynes). The Hopes team also train faculty members to deliver the curriculum. LASER, on the other hand, is funded by the European Union and has two parts. The first part offers 96 hours of English courses to Syrian refugees between the age of 18 and 30 with classes taking place in their learning centers using FutureLearn as an online platform (British Council, 2018). Another condition for acceptance is that Syrian refugees should demonstrate English literacy proficiency on the LASER's English placement exam. LASER also offers MOOCs, including Small Private Online Course (SPOC), and online certificates and degrees by their partnering organizations, the Open University and Amit University (British Council, 2018).

Kiron is a German non-governmental organization that provides MOOCs in the following disciplines: business and economics, computer science, engineering and social sciences to anyone interested. Since Kiron does not take into consideration a person's prior education level, individuals who want to enroll in their program must first pass two MOOC exams. Each month a cohort group starts the program to build a relationship between students. When these students complete one to two years of MOOCs, they would earn accreditation and can continue their learning with the aim of obtaining a university degree in one of Kiron's partnering universities. There are currently

2,350 students who are enrolled internationally in this program and half of these students are from Syria (Gladwell et al., 2016b). Kiron applies a collaborative pedagogical approach through peer support that focuses on grounding learning using real problems and cases. For assessment, the instructor considers the discussions of the online forum and determines assessment processes according to his or her learning outcomes. To contextualize its courses, Kiron partners with local organizations such as the American University of Beirut. It is currently working with them on the Partnership for Digital Learning and Increased Access (PADILEIA) project meant to address the needs of Syrian refugees in Lebanon (Kiron, 2016).

ii. Barriers of Connected Learning

Similar to the barriers faced in an international context, organizations in Lebanon reported technical problems and inadequate technology tools that are interrupting the students' learning. For instance, HOPES collected data on the challenges their students faced with online programs and found that some students are illiterate in technology and do not know how to use a computer despite the fact that they might have a smartphone or can access social media (Interview with Harry Haynes).

Two studies were conducted on the impediments that prevent implementation of online degrees in Lebanese universities. One study found that the most important obstacles are related to structural, pedagogical, and technical aspects. The El Turk and Cherney (2016) study was done in an American tertiary education institution on faculty and staff about online learning. Both groups stated that there is little awareness in Lebanon about online learning programs. They also communicated that there is an absence of key administrative or technical support to launch these programs. In addition, the technical aspects such as the slow internet connection, the continuous electricity cuts, and the lack of equipment do not encourage the use of online programs. Moreover, there are concerns that students would not be learning as much as they would with face-to-face interactions and would miss the opportunity to develop relationships with their peers and engage in social interactions in class. Faculty and staff also find it difficult to support students online and clearly convey concepts in some subjects. There is also a challenge in limiting student cheating and maintaining quality in these courses. Besides, faculty are concerned about the anxiety

associated with using online methods and technology to facilitate their course content and believe that students must be disciplined in these courses to succeed. Finally, participants raised concerns of potential employers' oppositions to online degrees, which would reduce the employment opportunities for students.

Another study conducted by Beaini and Balcioglu (2017) at the University of Balamand shows the significance of blended learning. The University of Balamand uses blended learning in mass communication, language and business majors. The results show that 83% of participating faculty members do not understand the meaning of blended learning yet they believe that blended learning has a positive effect on the quality of education. Another significant aspect mentioned is that the University of Balamand does not train its faculty to use online resources and thus the faculty either learn by themselves or attend training centers outside the university.

Other barriers were related to the absence of accreditation policies of online programs in Lebanon that affect students' decisions of enrollment (Lebanese Ministry of Education and Higher Education, 2018). There are concerns that fully online degrees might jeopardize the quality standards in education and reduce social competences. These concerns emerged due to a lack of a clear legal and procedural framework, which is not only absent in the Arab region but also in many countries around the world (Gedeon & Khalil, 2015).

iii. Opportunities

Connected learning programs are being offered to local students and Syrian refugees at little to no cost and benefit the person, the Syrian refugee community, and the host community. CMIC, for example, offers Syrian refugees a scholarship to develop their resilience and guides them to apply community development initiatives. The selection process seems to be rigorous since candidates must go through interviews, essays, and tests (Gladwell et al., 2016b) to make sure that they have the capacity needed to complete the program. Using a holistic approach, CMIC provides a stipend to students as an incentive to retain them in the program, English language courses to help them overcome the language barrier, and a nonacademic support group to assist them in handling any emerging

challenges during their program. Moreover, some organizations provide employment opportunities or internships to students. The AOU is connecting Syrian refugees who completed their Microfinance certificate to IBDAA, a microfinance institution that can hire them in Syria (Interview with Dr. Yara Abdallah). Also, other organizations are responding to the demands of their students. HOPES, for example, are offering their students who have acquired English skills the opportunity to take the IELTS (Interview with Mr. Harry Haynes).

III) METHODOLOGY

The purpose of our study is to provide a succinct and thorough analysis of the current situation on

Research Participants

We selected a total of 38 participants for this study from the groups of key stakeholders. One representative was chosen from the MEHE, 14 representatives from local public and private universities, four representatives from international and local organizations, and 19 university students. The MEHE representative is the general director of tertiary education. The 14 representatives include three technical and quality assurance managers, six faculty members, and five leaders. Lastly, we selected four Lebanese students and 15 Syrian students.

	ADMINISTRATORS PUBLIC/PRIVATE	FACULTY PUBLIC/PRIVATE	NATIONALITY LEBANEESE/SYRIAN	ENGAGED/NOT ENGAGED IN CONNECTED LEARNING	GENDER MALE/FEMALE
Universities	0/8	2/4	-	14/0	5/9
Education	-	-	-	4/0	1/3
Agencies	-	-	-		
Students	-	-	4/15	8/11	13/6
Director of Higher Education	-	-	-		1/0

Overview of Study Student Participants

the use of connected learning programs in Lebanon in the area of tertiary education using a qualitative approach and investigates its implication on Syrian refugees. This study also adopts a constructivist paradigm, which states that reality is constructed in the way that people perceive it through "human action, interaction, and emotional responses that people have to events and problems they encounter" (Corbin & Strauss, 2008, p. 6). To gain this insight, we diversified our sources of data and analyzed the perceptions of the key stakeholders in connected learning in Lebanon from the Ministry of Education and Higher Education (MEHE), Lebanese private and public universities, education agencies and service providers, and Lebanese and Syrian students. Moreover, we examined the policies, legal frameworks, and practices of connected learning in Lebanon, in an attempt to provide a better understanding of the prospects available to promote and coordinate the scale up of programs that utilize information technology.

CITIES IN SYRIA	FREQ.	RESIDENCE	FREQ
Aleppo	5	Akkar	1
Aleppo Area	2	Beirut	9
Daryya	2	Bekaa	2
Damascus	2	Mount Lebanon	2
Damascus Area	1	Saida	1
Homs	1		
Idlib	1		
Lasaka	1		
Total	15		15

Table 2
Overview of Origin and Current Residence Location of Study Student Participants

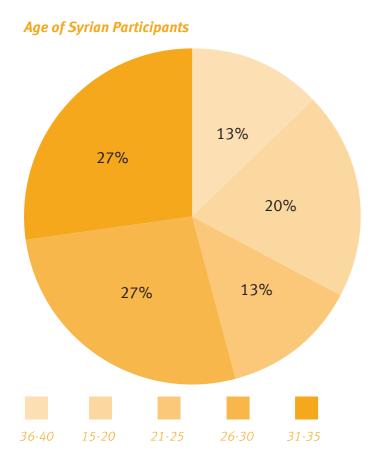


Figure 1

Overview of Age Distribution of Study Student Participants

Data Collection Procedure

The tools used for data collection include interviews with individuals and focus groups and a background information sheet was used for Lebanese and Syrian students. We used purposeful sampling to select participants from universities and international and local agencies that are implementing connected learning programs and held semi-structured individual interviews with them. Many of these persons are decision-makers in their institutions. In the case of students, we used non-random sampling and conducted focus group interviews with them. We also held two focus groups with Syrian students; one has completed a connected learning program while the other group has completed a traditional program. We also held a focus group interview with Lebanese students who have not taken any connected learning

programs to perform a comparison between the traditional and nontraditional education groups and understand their preferential learning style and their challenges and opportunities that emerged from their programs. In addition, we used artifacts such as legal and organization documents related to connected learning programs to triangulate data.

Data Analysis Procedure

We used the constant comparative method to generate a theory that explains how aspects of the social world works (Merriam & Tisdell, 2016). The analysis procedure follows grounded theory as described by Corbin and Strauss (2015) who present three stages to interpret the data: open coding, axial coding, and selective coding. In the first stage, individual interviews and focus groups were transcribed and then coded using the software MAXQDA. In the second stage, we examined categories and subcategories again considering context, conditions, and consequences. In the third stage, we identified one or two categories to which all other subcategories relate. For the artifacts, critical discourse analysis was used to critically examine the legal and organizational documents and field notes. The purpose of critical discourse analysis "is to shed light on the linguistic-discursive dimension of social and cultural phenomena and processes of change in late modernity" (Jørgensen & Phillips, 2002, p. 61).

Legal Frameworks and Policies

There are currently no policies that recognize online learning in Lebanon. Law 285 that was issued in 2014 constitutes the general provisions of tertiary education and the regulation of private tertiary education. This law explains the structure of tertiary education and the conditions for choosing committees that review programs and their responsibilities. A statement posted on the website of the Ministry of Higher Education warns students that "degrees from universities not on the list of licensed universities in Lebanon, are not accredited and cannot receive equivalency or recognition from the Lebanese government. As such, education by correspondence or distance learning is not recognized in Lebanon" (Ministry of Higher Education main website). The Ministry of Higher Education is beginning to understand that online learning, whether it is by course or a program, has many benefits but there is a concern related to maintaining the standards of quality.

The Ministry of Education and Higher Education has drafted a law on May 9, 2016 calling for "determining the conditions and procedures of providing a formal educational program in the tertiary education field according to unconventional methods". Firstly, the draft law at the beginning defines terms related to the law that include blended learning and distance learning. Despite the intention of clarifying that distance learning means fully online learning, the current definition overlaps with the 'blended learning' term since a student residing abroad could be enrolled in a blended program and traveling to Lebanon for their face-to-face classes. Secondly, the law specifies that the organization must have the infrastructure and human resources needed that includes a quality assurance team in order to support the nontraditional program. The Director General of Higher Education at MEHE raised concerns about maintaining quality of online learning programs or courses. One of the conditions specified, namely that students must be able to use ICT, is considered essential in the case of Syrian refugees, however, ensuring training and support is provided to the faculty is not mentioned and can affect quality in the delivery of the program. Most participants mentioned the importance of the role of the facilitator in the online programs and therefore should be emphasized in the law. Finally, the draft law requires the program to have at least 40% face-to-face, which means that fully online programs and blended programs above 60% online are not accredited. This draft law though does not take into account graduate studies. Some persons seeking to pursue their Master's or PhD while working at the same time are thus restricted by time and location and would benefit from fully online programs. This draft law, if implemented, would continue to hinder their career advancements.

Program Practices and Support

The first category of programs is *Blended Learning Programs in Formal Education*: these are provided by USEK MBA, and AOU, in undergraduate and graduate programs, in addition to the AUB Executive MBA, and the Lebanese University Master in Science. The purpose of these programs is to provide a certification or a degree that could be used for employment purposes or to develop needed skills that can be used for career advancement. Two programs (the USEK MBA and AOU programs) are partnering with foreign universities (HEC in Montreal and Open University

in UK respectively) to deliver their programs, which would enable students to gain two degrees from two universities. None of these programs specifically target Syrian refugees but are open to Syrians who have legal residential papers in Lebanon.

The delivery of the USEK MBA and LU Master Programs enhance their students' experience using the synchronous mode where faculty expertise in international contexts incorporate videoconferencing and support them with an ICT room to ensure a conducive learning experience. In addition, USEK also has four telepresence robots that move the option of videoconferencing around the room and campus. LU is moving towards an asynchronous mode creating MOOCs with their partners Agence Universitaire de la Francophonie (AUF), which will be offered the coming year. "This is a European-funded project called Réseau Méditerranéen Pour L'employabilité (RESUM)... we found a way to develop MOOCs in different domains... I think in the LU faculty of management, they are working on that project as well" (Interview with Dr. Kazpard). As for the EMBA program at AUB, it will use both synchronous and asynchronous modes for the online part of the program, including storyline PowerPoint presentations, videoconferencing, and discussion forums. At AOU, the Open University in the UK provides the e-textbooks and material for the programs, however, the courses at AOU are offered as web-facilitated with Moodle, YouTube videos, and online discussion forums as a support for students' learning.

The language of instruction for these programs is either English (USEK MBA, EMBA, AOU degrees) or French (LU Master in Science). Some programs use traditional assessments (AOU degrees and LU Master in Science program) while others use multiple tools to evaluate students' learning such as writing a paper, executing a project, peer review activities, and group discussions (EMBA, USEK MBA).

The second category is *Fully Online Programs in Formal Education*: ProGreen Diploma, USEK Geopolitics certificate, AOU Microfinance certificate, Southern New Hampshire University (SNHU) College for America, and Certificate for teaching and learning. All of these programs are not MEHE accredited. Students enrolled in these programs are usually professionals seeking to advance their skills or to open new career opportunities, or are individuals interested to learn



new skills for employment purposes. It is important to note that SNHU has recently started implementing its online programs at two local NGOs, LASeR in the North of Lebanon and MAPS in the Bekaa targeting Syrian youth, primarily who have acquired the Coalition Baccalaureate and thus cannot pursue any form of traditional higher education in the country because they cannot get an equivalency for their grade 12 diploma from the Lebanese government.

The curriculum is competency-based with a focus on skills such as technology skills (All), teamwork, innovation, self-reflection (Teaching and Learning), self-directed learning skills and technical skills (ProGreen), microfinance skills (AOU Microfinance), and skills related to the labor market (SNHU). When designing courses, USEK has certain guidelines for the instructor to follow that specifies a "technology plan whether it is Moodle or Learning Glass, communication plan, implementation plan, and review plan" (Interview with Ms. Nathalie Bouldoukian). SNHU College for America curriculum has a set of online projects, not courses, linked to competences and designed by professors who are content subject experts with consultation from employers.

The pedagogy in these programs are student-centered with an asynchronous mode in delivery and academic support. Some programs also provide peer support. For example, "When a class has more than six people, a blog is created for discussions and communication. So even if students don't know each other, they respond and connect...When I was teaching a course, students have my skype name and can also drop by anytime... There must be faculty interaction and support for online courses, otherwise students might drop" (Interview with Dr. Nesreen Ghaddar).

There are multiple assessments tools used to evaluate students' learning in fully online programs: quizzes, exams (Teaching and Learning), activities such as reading, summarizing, and giving recommendations (ProGreen), discussions (almost all), simulations, risk factor analysis, mapping conflicts (Geopolitics), or projects (SNHU). In SNHU, students receive detailed and direct feedback within 48 hours on projects and can resubmit their projects as many times as needed to achieve mastery on all components and competencies. For quality assurance, ProGreen coordinates with the Moodle groups to check the course design and sends evaluations twice per semester middle and end of

the semester to examine the satisfaction of students. SNHU assesses quality of its program by maintaining university degree accreditation. They are currently collaborating with a firm called IDinsight on a study to review the mapping of program learning outcomes.

The third group of programs are categorized as *Bridging Programs to Higher Education*: Partnership for Digital Learning and Increased Access (PADILEIA), Kiron (MOOCs program), HOPES Project (HEEAP), SNHU and the MAPs English program. It is noteworthy that all of these programs are partnering with at least one local organization to contextualize the program and aim to support Syrian refugees in overcoming the English language barrier.

PADILEIA has two parts to their program, a foundation course lead by AUB and Al al-Bayt University and online courses or MOOCs developed by Kiron and King's College London. The foundation program is an eight-month face-to-face program that prepares 50 high school Syrian refugees and Lebanese graduates per year to enter university. Students take Information Technology, English, and Math classes using Google Classroom as a platform. During the first semester, students learn basic IT skills and progress to learn how to create a website in the second semester. As for the second part of the program, the leading organizations have launched two MOOCs, regular English and elementary English, and will develop nine more MOOCs in different languages. For quality assurance, PADILEIA relies on feedback from AUB students and faculty. AUB faculty visit the program twice per semester to give feedback to the instructor delivering the course. The instructor reflects on his performance and submits weekly reports. The online team of King's College also meets with the instructor at least once a week during the first part of the program.

Kiron also has a program in Lebanon that offers MOOCs in three areas: computer sciences, mechanical engineering, and business and economics. Each program is 150 hours of workload on average. The curriculum of each of these tracks is made of MOOCs taken from Coursera, EdX, and Sailor and compiled by academic experts and professors from Germany into modules. Each module with learning outcomes constitutes of two to six MOOCs, and may be used for credit in partnering universities locally and abroad. Thus, students would be able

to continue and finish a university degree at these partnering universities. They are currently working on partnering with universities in Lebanon. For assessments, there are exams, sometimes tasks, quizzes, and peer-to-peer evaluation in these MOOCs. For quality assurance, Kiron is confident that the MOOCs are developed by experts at Coursera, EdX, and Sailor. In addition, Sailor has a proctoring system that prevents students from cheating and confirms their identity.

The fourth group is *Building Skills to Manage Conflicts in Crisis* that include a Community Research and Teacher Professional Development certificate, the AUB Continuing Education Center's (CEC) Understanding of Basic Journalistic Skills and Journalistic Work, AUB CEC's Humanitarian certificate, and a Competence-based Degree. The aim of these programs is to build knowledge and skills of people in crisis that can support local organizations in establishing internal emergency response systems and foster collaboration. All of these programs will use the blended method, will be offering programs free of charge to Syrian refugees, and will be launched this coming year (except for Journalism which is fully online and launched a year after).

The Understanding of Basic Journalistic Skills and Journalistic Work and Humanitarian certificate will be offered by AUB CEC. The Journalism program consists of 11 courses delivered fully online, while the Humanitarian program is made up of four courses delivered as blended learning. CEC administrators work with instructors to digitize their courses and then trains them on the Learning Management System. CEC reaches out to Syrian refugees through scholarship organizations such as Spark and social media. They believe that the best method to do this is through WhatsApp groups. "Currently we have 2,800 people applied for next year...we do an interview before we enroll students. We don't really look at gender, but the aim is not to have a class where students are really at different levels" (Interview with Ziad Shaaban). The language of instruction of CEC programs for Syrian refugees is Arabic. As for assessment, CEC courses use assignments, attendance, exams, and discussions to measure learning outcomes of students.

The Community Research and Teacher Professional Development certificate is a program that is being

established by a UCL and LAU team to be offered at LAU for Syrian and Lebanese teachers which would later be developed into a teaching diploma. "We focus on how to teach in these conflict-affected societies in the classroom and cater to the needs of the children and how teachers can use technology" (Interview with Dr. Maha Shuayb). Enrollment will be done through LAU's regular registration system and will also be offered at a later stage at the Lebanese University and UNRWA. The certificate is designed as one to two MOOCs that a student will take online and a practicum which will be face-to-face where the instructor meets four times with the student in the semester. This certificate will be equivalent to a course at LAU. The language of instruction will be adjusted to context and can be done in English or Arabic. The assessment tools that will be used are debates, assignments, activities, home visits, essays, and journals.

A Competence-based Degree is a three-way partnership program between SNHU, MAPs, and Kiron that will be piloted for 18 months, offering students support courses needed to succeed in the program and access to resources in addition to the online competence-based degrees that will help students enter the workforce. One way to reach out to Syrian students will be to attract students who completed the PADILEIA program (interview with Ms. Nina Weaver). Students will begin with the MAPS foundation courses and Kiron modules in the first three months and then move to continue to fully online degree at SNHU (Interview with Ms. Lea Batal). As part of the support, students will also receive workshops periodically onsite by AUB CEC on professional skills and employability in the Lebanese context. The instruction will be offered in English since it is part of the SNHU university accreditation requirement in the U.S. The program will be adjusted at a later stage according to students' feedback and needs (Interview with Ms. Nina Weaver).

Connected Learning Program Barriers

Connected learning programs are relatively new in Lebanon and therefore many challenges have emerged with the three key groups involved: university and education organization leaders, faculty members, and students. The themes have been organized under three categories: institutional challenges, faculty challenges, and student challenges. For institutional challenges, the

main issues are an absence of a government law accrediting online programs, little awareness about online programs in Lebanon, a negative cultural view about online learning, lack of coordination among organizations, slow connectivity and inadequate infrastructure, minimal student commitment to the program, and political instability in Lebanon. The faculty challenges are stiff bureaucracy, lack of autonomy, difficulty of integrating Syrian refugees in the local community, inability to control student cheating, doubt in the ability to support students, and resistance to online learning. Students on the other hand are

facing other kinds of challenges that affect their decisions of choosing online learning programs for their education, such as lack of interaction with facilitators, no legal papers, lack of motivation, lack of sense of belonging to the organization, difficulty in using technology, weakness in foreign language proficiency, ineligibility to meet the scholarship criteria, non-recognition of Syrian degrees, and lack of resources.

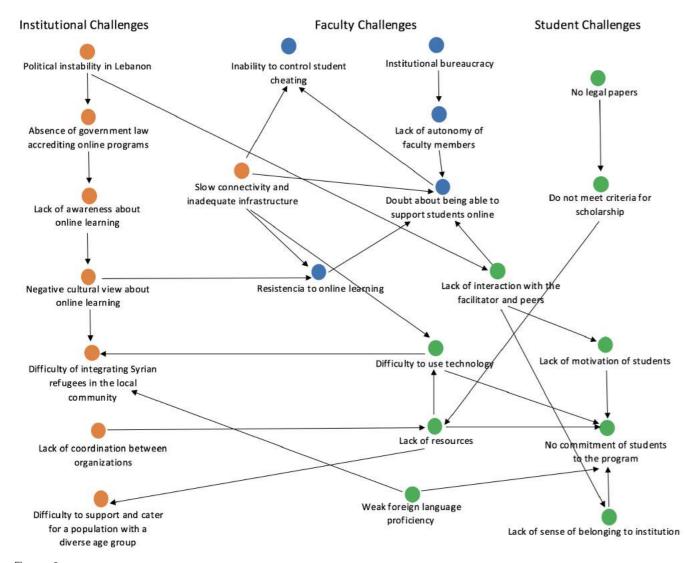


Figure 2
Interrelation between Key Issues and Barriers of Connected Learning in Lebanon

Institutional Challenges

Participants have recognized the absence of a government law recognizing online learning, which makes online learning programs less appealing than face-to-face for students seeking employment. The AUB CEC director stated "online learning is not accredited on the university level, but it is permitted. And you can get the certificate stamped in the Ministry, but you will not get an equivalence." The MEHE relies on draft law ADIP which permits accreditation of blended learning programs that have at least 40% face-to-face. This is encouraging leaders to open new opportunities for students and create new low-cost programs. The director of ProGreen shared, "The government accepts blended learning. So, we are working on a proposal to have some of the courses of this diploma transferable to master's degree. How? By changing delivery of the courses and having a comprehensive exam done face-to-face". The director of the Ministry of Higher Education recognizes the benefits of online learning but has concerns related to maintaining quality and standards of education.

There is little awareness about online learning in Lebanon often resulting in doubts about its benefit and impact and showing a preference for traditional methods in learning. Kiron noted that students are searching for reassurance that the organization is valid and actually exists. "They come all the way from Saida to see that Kiron is real", said Ms. Lea Batal, "so we work on building trust which means they need to see us at least once." Also, three university leaders expressed a preference for face-to-face methods rather than online learning, especially in the case of Syrian refugees. One of the leaders expressed that online learning will not benefit their fresh high school graduates who are in need of face-to-face support. This leader believes that technology can only be useful as a support tool for enhancing teaching and learning. Another university leader doubted that certain skills can be applied online stating, "Collaborative learning is one of the 21st century skills that I doubt can be done online. You have to embody it in face-to-face classes." The third leader assumed that the impact differs between face-to-face and online learning stating that "it would be better for the UNHCR to go invest in face-to-face programs because it would be less expensive and would have more impact." Resistance is common in any new implementation taking place.

There is also a negative cultural view about online learning that needs to be altered or addressed by the organization. At LIU, for example, the administration shared their experience of how Syrian female students did not accept to be on camera for videoconferencing. The LIU Dean of Education shared "The female students in Bekaa campus who are from the Damascus area do not want to take any photos. They say they are not allowed and that their fiancé or husband might see it. It is a cultural barrier, a different mindset." Lebanese students have also conveyed the message that their parents would question them if they choose online learning over face-to-face and would consider it as less prestigious education. UNHCR representative Ms. Agatha Abi-Aad recognized this challenge and explained, "There should be more awareness on perception, bound for students and parents also. We have to work a lot on the perception of both...The private sector should also say you're not class B or C education, you're just educated in another way and that is a plus."

Online methods of education can be a highly effective alternative method of education; however, the students' experience relies heavily on connectivity and good infrastructure. Lebanon has a very slow internet connection which has been emphasized as a problem by nearly all of the participants. This has become a frustration for leaders, faculty members, and students alike who have been engaged in online learning. A Syrian student who attended a blended learning course conveyed this frustration when she said:

We all know that in this country the connection is not very good and I have faced a lot of difficulties downloading documents. I couldn't download the assignment on campus several times. It's very hard to explain to the instructor.

One of the faculty members also shared a similar experience related to technology failure:

The other day I was in a conference meeting with refugees, they connected with a university in New York and it was a disaster. After 15 minutes, I couldn't understand what they were saying. They mentioned that the microphone was the issue. They can't get all these people and then say that the microphone was the issue!

Organization leaders have criticized the lack of coordination between organizations that offer



scholarships to Syrian refugees. One of the university leaders perceived it to be more of a competition that is negatively impacting organizations and students:

We offered an English program, then Spark did the same as us, at the same time and day and even gave them an amount of money. Students receive scholarships from these organizations and they get confused about which program to choose.

Students have echoed the same problem that is indeed creating confusion for them. They stated that some students end up enrolling in all of the programs and then dropping out from the ones that do not suit them in time, day, or service offered. The AUB CEC director chose to address this issue by placing a condition on enrollment of Syrian refugees in AUB CEC programs that they must not be benefiting from another scholarship.

Organization leaders and students have shared that there is no commitment of students to connected learning programs. There are many reasons why students drop from courses that are self-paced. In fact, a student who took a course in Microsoft at Makassed chose to drop the course because he felt that there was no support provided. No one answered his questions and as a result was demotivated to continue the program. It is noteworthy to state that these courses were offered in an asynchronous mode. AUB Moodle manager Mr. Wissam Nahas stated that high dropouts rate of these types of programs occur because of a lack of interaction between the facilitator and the student, and due to a lack of assessment that measures learning outcomes. The Kiron administration provides a lot of support to students to retain them in the program. They are working on personalizing support for their members who have a busy working schedule or have family responsibilities and children. They face challenges in supporting a diverse age group particularly after an increase of students.

Due to the political instability in Lebanon, MEHE policies are being delayed, including having the ADIP legislation approved. It also has prevented in the past students from attending their classes. When threats and uncertainty in Lebanon arose, many students from the Arab Gulf region were not allowed to leave their countries and attend their courses in Lebanon. A professor shared his concern about this challenge and feared there would be restrictions on technology devices in certain countries.

One thing that we used to do is to video tape a lot of our courses and send them to our students to catch up...well I can imagine some countries cutting the videos. I mean it could happen.

Although with connected learning programs this would become less of a concern since it requires less face-to-face attendance, but nevertheless, students must attend class for blended learning programs. This would not resolve the issue completely, therefore pre-planning and taking into consideration any uncertainty that might arise is a practice that faculty members and facilitators should be aware of in the context of Lebanon.

Faculty Challenges

There are several challenges facing faculty members that are involved in connected learning programs in both public and private universities. Stiff bureaucracy is a major impediment for faculty members in the Lebanese University exemplified by the two or three year delays of necessary resources reaching their destination. Even in private universities, bureaucracy is influencing the autonomy of the professor in the classroom. A private university professor explicitly stated that this effect can create doubts about the effectiveness of online learning.

I have doubts because I don't get to determine what's online and what's not online...I don't get to build my course in a way that takes maximum advantage of what is most useful online and what is most useful face to face. I'm in a situation where I'm putting content online which I think should be taught face to face, and things that are online that I'm giving face to face. The timing is imposed on me.

Another concern related to maintaining quality of education is raised by faculty members regarding their inability to control student cheating in online programs. An AUB professor shares this concern about ethics in assessment when he stated, "If they are in class I can see them doing it, if I ask them to read certain things, I can also ask them questions while reading." He emphasized the importance of reinforcing student discipline for online learning. A Lebanese University professor agreed and stated that this might be a cultural issue, "How can you make sure that the student is working alone and that no one is helping them? In the Lebanese mentality, we are used to helping each other. Students are used to copying and talking with each other."

Furthermore, there is a challenge in integrating Syrian refugees into the Lebanese community. A Lebanese University professor described how a Syrian student in her classroom was rejected by his peers because he had weak language skills.

There is a refusal for them [Lebanese students] to accept that he [Syrian student] is good academically in science, but they believe that they [Lebanese students] are better than him [Syrian student] because they [Lebanese students] speak good French and English...And this creates a crisis in the class.

A student who completed the AOU Microfinance program felt programs that target solely Syrian refugees do not encourage integration in the local community. Organizational leaders took a controversial stand about the ability of connected learning programs to integrate Syrian refugees. Some believe that rich Syrians have already integrated in the community, others believe that the specific type of connected learning program is essential in assisting in integration of Syrians. For instance, a program that includes cultural aspects, and faculty and peer interaction, might help in integration. One the other hand, a few do not believe connected learning programs can help Syrians integrate.

Faculty members also raise doubts about their ability to support students online. One of the professors shared this perspective and his preference for face-to-face learning in maintaining interaction with the student.

I'm a believer in the importance of face to face. So with the teacher what is very important is seeing the eyes to determine if they are getting what I'm teaching them. So when I see someone lost or sleepy I can wake them up, tell them a story, ask them a question, do whatever I can to re-engage them.

LU faculty member highlighted the importance of choosing the most effective tools for learning and take into consideration a student's background. She explained that when Syrian students participate in videoconferencing in a large class, they cannot ask the faculty member who resides in another country to repeat the lecture. However, using MOOCs, Syrian students can re-watch the lecture as many times as needed and even translate it from English or French to Arabic at their own convenience.

Some faculty members have expressed preference for face-to-face over online learning. According to an

LU faculty member, some of their faculty members are unwilling to train on Moodle. He stated that only 15 registered and out of those five or six attended. This unwillingness of faculty might be due to the internet connectivity issue and insufficient technology infrastructure. Many Syrian students have also preferred face-to-face learning. One student who did not engage in online programs stated, "Personally, I would prefer to have a book to study from. I don't like to study online." This response aligns with statistics from a HOPES project presentation based on a focus group they conducted with university students showing "64% of students were not interested in online learning having never tried it". Another student explained that preference is age-related, "some older students are used to teacher teaching on a board and being physically present, but students from age group 16 to 20 years prefer online more." Most of the students have emphasized the importance of the role of the facilitator in engaging students in the class, which reflects on the success of the program.

Student Challenges

In the focus interview, we noted that **Lebanese** students who have not been engaged in any connected learning programs have a misconception that online learning is only done in an asynchronous mode. This assumption is a result of the lack of awareness about online learning. On the other hand, Syrian students who have been engaged in connected learning programs have highlighted the lack of interaction with facilitators as a major issue. For instance, two Syrian students who have taken microfinance programs have complained that they did not benefit from the program. The reason was that the facilitator was not responsive to their questions and there was no follow-up or feedback provided. One of the solutions to this problem, according to the USEK director of quality assurance, is to improve studentfaculty interaction through faculty training about online learning programs that can improve the student learning experience.

Syrian refugees face a challenge in securing legal papers needed to enroll in tertiary education programs even in connected learning programs. The AUB CEC director explained that sometimes Syrian students suffer delays in receiving their residential papers from the government for no particular reason. Recognizing this challenge and with the approval of MEHE, most Lebanese universities are accepting unregistered



Syrians into their programs. This flexibility encourages students to access tertiary education, but it does not completely remove their feeling of being unsafe in commuting from and to their classes. Additionally, not all Syrian students can secure the documents needed from Syria to get an equivalence of a Lebanese baccalaureate degree. While some connected learning programs that offer certificates might not need a baccalaureate diploma for enrollment, others that offer a bachelor or master degree (LU Master's in Science, AUB EMBA, USEK MBA, etc.) require a baccalaureate diploma or its equivalency. Kiron recognizes this problem and addresses the issue stating:

They must have the level of secondary education, ideally even the baccalaureate. But it is difficult actually check, first because there are a lot of people that don't have their papers with them, even, the diplomas. So we just let them on the platform and actually we figure out pretty quickly if they can have the level to actually complete those courses.

Also, some Syrian students have an *Etilaf*¹, a high school diploma from a program run by the Syrian National Coalition that did not gain recognition in most countries, including Lebanon and Syria. These Syrian students who seek to access universities must study the Lebanese curriculum to attain a Lebanese baccalaureate. These students have also enrolled in bridging programs like PADILEIA, providing a challenge to the students to manage the two programs along with life struggles.

Other challenges facing Syrian students are the difficulty in accessing technology and having a weak language proficiency. The regional project manager of the HOPES project mentioned that some students are not familiar with hardware devices and software programs. He stated:

There is a lot of research on the LASER project done on this. So it is not just that they are not really familiar using a mouse or a keyboard, but also don't have the years of experience of using something like Facebook to know what is appropriate to post or useful sources of information...we asked students to type up their homework on Microsoft Word for a change. The vast majority do not have a clue how to do that.

Similarly, a director at a university shared how this challenge has impeded a Syrian student's success in one of their programs.

We had someone registered in IT, who had done 2 years of engineering, but he had no capability. And you cannot convince them that they cannot continue, it's hard, because they would say that they can do it. *Interviewer: Is it language or technical barrier*? Both.

Therefore, they have placed a condition in the selection process at their institution to take only Syrian refugees who have a Lebanese baccalaureate. This way, she believes, students would be more prepared and have a higher probability in succeeding in their programs. Syrian students have voiced these issues as barriers in their learning. Also, several organizational leaders have recognized these problems and are addressing these issues by providing support courses and facilitators to help Syrian refugees overcome these barriers. Other programs that students found helpful were those that had instructors teach them in English but translated words in Arabic when needed.

Recognition of the degree in Syria is a main determinant among some Syrian students in pursuing a tertiary education program. Their reason is that when the Syrian crisis is over they will be returning to their country. Syrian students have revealed that some private Lebanese universities is not recognized in Syria despite the fact that its degrees are recognized in Lebanon. Hence, some students prefer degrees from prestigious universities since they have accessibility to many resources and receive quality education and recognition. Other Syrian students currently do not care about recognition because they believe that when the Syrian crises ends, international organizations will, via politics, impose recognition in Syria of all degrees.

Lastly, Syrian students raised the issues related to lack of resources and age criteria set in scholarships that is preventing them from accessing tertiary education. Most of the Syrian students that were interviewed were above 25 years in age and working in formal or informal labor markets to support their families. Some of them do not qualify for scholarships in connected learning programs with age restrictions. In addition, although connected learning programs are less expensive or are even free of charge compared to face-to-face programs, students must have technology devices and internet connection to access material online. Despite the fact that international organizations and universities have learning centers or computer labs, some students work during the day and cannot benefit from this service and therefore it becomes difficult for them to do assignments, activities,

and exams from home. PADILEIA manager Ms. Melissa Mattar described the situation of Syrian refugees in their program that can impede their learning:

We always assume in connected learning that we will do online courses for refugees, but we forget one point, how would we do that? We need access to laptops and computers...many of them [refugees] live in a small house with for instance five other people and have access to internet only on their mobiles.

Opportunities

Connected learning programs become quite appealing to students who are interested to learn about a new topic or a skill not found in their context. This was clearly communicated by Lebanese and Syrian students who stated that by putting effort and time to attain this knowledge or skill it would place them at a competitive advantage over others for employment. These programs are easily accessible through the internet and can encourage students to get immersed in self-directed learning. Other benefits of connected learning programs include an easy enrollment process, an increase in job opportunities, less commuting and flexibility in time, and easy access to nonacademic services and academic experts in the field.

Easy Enrollment

Connected learning programs have an easy enrollment process. "The admission is quite easy and does not require high grades," stated the director at USEK, "requiring only that students fill out an application online." At ProGreen, students sometimes enroll to enjoy learning about issues unique to the Middle East region such as global warming and renewable energies. For these students, this is life-long learning. The average age of students is in the 30s but there are students who are also in their 60s. Moreover, fully online programs do not need legal residential papers for enrollment that would benefit Syrian refugees and allow them to attain skills they can use in the informal labor market. However, for blended learning programs that offer an official bachelor or master degree (USEK Master's degree, LU Master's in Science degree, etc.) upon completion, residential papers from Syrian refugees would still be needed.

Flexible Timing and Less Commuting

Another benefit to connected learning programs is that it is convenient for students who have a busy schedule, live in remote areas or in another country. Syrian students have complained about the traffic in Lebanon and the difficulty in commuting to class since many of them

live outside the city of Beirut. Transportation is also a major issue for girls who come from a conservative family or are married and have children. One of the girls interviewed stated "For me, I couldn't leave the house, so it was convenient for me to access it [AOU Microfinance program] online. There are many girls I know, for instance, that registered in this [AOU Microfinance program] because they could not leave the house."

High Quality of Education and Services Offered with Low Cost

These programs are opening opportunities for students to receive quality education for free or at a low cost. For example, the ProGreen diploma is cheap and affordable, costing students only \$3,000. It is offered at two prestigious universities in Lebanon making it attractive to potential students. Another example is the Geopolitical program offered at USEK for \$300. Students get access to advanced technology and exceptional local and international faculty members. With all the services offered and faculty training, there is an increase of expenses on organizations at the development stage. but it becomes less expensive to maintain afterwards (Interviews with Dr. Maha Shuayb and Dr. Nesreen Ghaddar). Other Bridging Programs (Kiron, PADILEIA, HEEAP, etc.) and programs in Building Skills to Manage Conflicts in Crisis (competency-based degrees), are free and provide other support options such as learning centers, nonacademic support, counseling services, and sometimes stipends to their students.

Impact

The long-term impact of connected learning programs have not been conclusive as of yet since some programs have not been launched and others have been newly implemented. USEK have showed students' feedback in 22 online courses in the 2018 spring semester that revealed students' satisfaction with content and delivery and improvement in their analytical and observational skills.

SCALE 5 TO 1 (5=STRONGLY AGREE, 4=AGREE, 3=NEITHER AGREE OR DISAGREE, 2=DISAGREE, 1=STRONGLY DISAGREE)		SCALE OVER 100
The course helped me to gain a good understanding of the topics		82%
The online material contributed to my understanding of the course	4.13	83%
Instructions were clear, and navigation within the course environment was easy (being able to find resources, instructions easily)	4.23	85%
The assignments were clearly explained and relevant to the course	4.27	85%
I was encouraged to actively participate in online discussions	4.08	82%
I was encouraged to work cooperatively with other students	3.97	79%
I received helpful and timely feedback during the course	4.10	82%
There was opportunity for individual consultation with the instructor	4.10	82%
The workload was appropriate for the course	4.11	82%
My observational and analytical skills were improved	4.10	82%
Overall quality of teaching in this course was good	4.24	85%

Table 3

USEK Spring 2018 Survey of Student Perceptions of Online Course (participation rate of 95% and average class size = 22)

Employability

Syrian students who have completed online programs are finding employment as freelancers (PADILEIA, LIU) despite lack of recognition of online degrees. An AUB CEC student explained, "One can apply for online freelancing such as web-design, graphic design, programming, digital marketing... these things don't need a degree". He relied on himself and learned these skills online through MOOCs. Moving into the new digital labor market has implications for practice. "Maybe, when I finish studying, I am going to need to be trained how to work online. My field of work is freelancing, graphic design and motion graphic and videos" an AUB CEC student stated. Indeed, job opportunities are beginning to open up in the digital market for Syrians, which is seen as an alternative to avoid creating competition in the local market. Ms. Batal shared that Kiron and GIZ have piloted an online job market for Syrian refugees using a platform

developed by Imtiyaz. Connected learning is also about productivity and opening employment opportunities and so if the digital market can be developed in Lebanon, it would help Syrian refugees and also Lebanese people.

Connected learning programs assist in developing skills such as writing applications for scholarships, doing scholarship interviews in English, learning English for employability, writing a resume, doing an interview, writing simple emails, giving simple instructions, taking part in a meeting at a high level, and getting the key points from the meeting (Interview with Harry Haynes). Other skills attained are connectivity, creativity, collaborative learning, culture (Interview with Dr. Anwar Kawtharani), time management, autonomous learning (Interview with Mr. Rayan Fayed), soft skills (Interview with Ms. Lea Batal), and conflict resolution skills (Interview with Dr. Maha Shuayb).

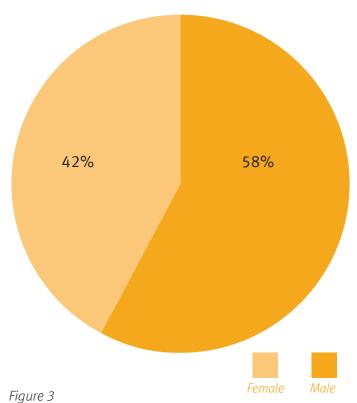
Gender Equity

Most connected learning programs have a nondiscriminatory approach specifically for gender in the selection process of students. So far, classrooms are reflecting mixed results in regard to gender equity. At USEK, the director of quality assurance and institutional effectiveness communicated that gender equity is achieved in all of its programs. For example, in one online course called Religious Sciences, the number of females almost equals that of males.

Similarly, at ProGreen around 40% of its students are females. On the other hand, some programs have shown a dominance in male numbers. Kiron revealed that only about 28% of its members are female. This result comes as a surprise since the method used in connected learning programs makes it easily accessible and should supposedly increase participation of females. Conversely, the Lebanese University and PADILEIA have more females than males. Dr. Kazpard from the Lebanese University remarked:

If you get into our big classrooms, that can accommodate 500 to 600 students, you see more than 70% are girls...wherever you go the campuses in Fanar, North, and South, it is the same.

The outcome demonstrates that organizers must pay more attention to program outreach. Although most of the organizers use social media to advertise their programs, women who are not allowed to access internet might not receive the information. So how can the program reach married women and girls in conservative families who are unable to leave the house or access internet? One of the best methods is word-of-mouth especially through women who have participated in these programs and have been in similar situations. Men can also play an important role in sharing their experience with their community. Thus, encouraging students to be active in their community could result in achieving gender equity.



Student Participation in an Online Learning Course at USEK in Fall 2017

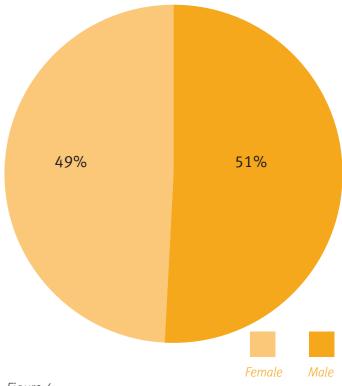


Figure 4
Student Participation in an Online Learning Course at USEK in Spring 2018

IV) CONCLUSIONS AND RECOMMENDATIONS

This study presents the connected learning programs implemented in the context of Lebanon and describes their curriculum design, pedagogy, enrollment process, and assessment. Then, it introduces the challenges and support of connected learning programs. Finally, this study shows the impact of connected learning programs on students and society. It is important to note that the effectiveness of the different kinds of connected learning programs is vet to be supported. However, there are a number of studies that have shown that students engaged in online learning had higher average score than those engaged in the traditional learning environment (Kintu, 2016; US Department of Educaiton, 2010). It is also important to note that the effectiveness of connected learning is dependent on many factors, among which the backgrounds of the students enrolled and their readiness to engage in such programs, design features and learning outcomes (Kintu, 2016).

The legal framework demonstrates so far there isn't any policy related to online learning in Lebanon, but rather a simple statement on the ministry website that explains that online learning is not recognized in Lebanon. The situation on the ground shows a slightly different picture due to many of the recent developments in the country's higher education sector that has led to the acceptance of some forms of online learning. A law has been drafted for this purpose, providing a reference for universities and organizations on the recognition of their blended learning courses and programs that have at least 40% face-to-face components. Online learning in Lebanon faces two main challenges, one of which is the lack of awareness of what online learning is and isn't, coupled with the absence of accreditation mechanisms for higher education in Lebanon. These challenges are impacting students' choice of tertiary education programs. In addition, for Syrian refugees, the recognition of degree studies inside Syria, the quality of the program, language proficiency, the financial situation, and securing legal residential and baccalaureate papers are among the factors that can prevent their access to regular tertiary education. Such challenges are usually overcome by online learning, with the exception of

the issue of recognition inside Syria. Organizations provide a lot of support to Syrian refugees including free tuition fees, English courses, and technology courses, all of which can help them overcome barriers to higher education. Finally, it is important to note that the impact of online learning programs is as of yet inconclusive. There are individual success stories that refer to employability and gender equity. A number of global practices have shown evidence of the impact of online learning, however local and contextualized evidence is still missing to help make a strong case for online learning in Lebanon. In conclusion, it is important to advocate for the introduction of online programs across all institutions of higher education in Lebanon, prioritizing blended learning engagement by the instructor.

Implications for Policy-makers

- ► There is a need to issue a law that would define the status of online learning in Lebanon offered by accredited institutions of higher education, taking into consideration all forms of online learning, including the blended learning form.
- ► Similar to the technical recognition committees established at the MEHE for licensing new programs in the various disciplines, it is critical that a similar technical committee is established for licensing online programs, in close collaboration with the other technical committees at the Ministry. Further quality assurance mechanisms for ensuring that these programs are well maintained is also necessary.

Implications for Institutions

- ► Institutions of higher education should reduce organizational bureaucracy and further collaborate with faculty members for the development and implementation of online programs. Investment in online programs is essential not only for the modernization of the institution, but also to cope with the increased completion of attracting students, as well as for keeping up with the fast-paced changes within the labor market. These connected learning programs need to be contextualized to be relevant for students and to be able to succeed.
- ► Increased coordination among institutions of higher education and other relevant stakeholders is essential for the efficient use of resources. Here, UNHCR can play a role in facilitating

- coordination between organizations through its Connected Learning Consortium, particularly with organizations that are beyond the context of Lebanon.
- ► There is a need to raise awareness among students and employers in Lebanon on what is online learning and what its benefits are. Changing the mindset of the community and employers is necessary so that online learning is not perceived as a lower tier form of education and one that is an easy way out of the regular education stream.
- ► A fast and secure connection is critical for a successful online program. Therefore, it is important for institutions of higher education to secure the appropriate infrastructure to ensure that online learning programs run smoothly. The availability of the needed equipment is also important for the successful implementation of online learning programs.
- ▶ Specific instructional planning and pedagogical skills are needed for faculty members and instructors engaged in online learning programs. It is important for institutions engaged in the provision of such programs that its staff are trained on the methods needed for a successful online program. Partnering with institutions that have already engaged its faculty members in online teaching will provide the opportunity to benefit from existing contextualized best practices. This can be particularly beneficial for institutions that lack the resources needed to train their facilitators to partner.
- ► It is important to also recognize the age group which may be attracted to and in need of online learning programs; a subsequent revision of the criteria for scholarships is then necessary. Many organizations supporting Syrian refugees to pursue their higher education through financial mechanisms currently have age restrictions for students to qualify for these scholarships. Therefore, there should be flexibility in the criteria for scholarship recipients in order to reach out to students in need.
- Mobile learning is one of the new trends in online learning, one which also has the capacity of reaching students who are already connected through this technology and may not otherwise

have any other means of getting online. Institutions offering online programs may opt to use mobile learning as a method of online learning, particularly when targeting refugees, as almost all Syrians have smartphones but not all of them have computers.



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