

MENA Higher Education Pedagogy, Technology and the Refugee Experience

Sustainable Learning Pathways to
Teacher Digital Fluency

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Table of Contents

Acknowledgements	3
I. Introduction	5
II. A Call for New Teaching Paradigms	6
III. Sustainable Learning Pathways to Digital Fluency	8
IV. In the Crucible of COVID: Faculty on the Front Line	12
An Education Ecosystem Unprepared	12
The Need for Learning Design	13
Teaching Refugee Students in MENA Higher Education	20
V. Putting Faculty Professional Development First	25
VI. Faculty Plan for Action	29
Egypt	29
Jordan	31
Lebanon	33
VII. Teaching in Higher Education 4.0 (THE4.0): Refugees, the “Canary in the Coal Mine”	35
Appendices	36
A. Methods	36
B. Digital Tools	41
References	45



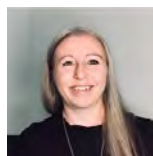
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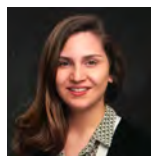
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I. Introduction

Learning can occur without teaching—and often does—but teaching cannot occur without learning; teaching without learning is just talking.

Dr. K. Patricia Cross

In this report we share the project findings of the *Higher Education Pedagogy and Technology in the Refugee Context: The State of Play and Paths Forward in the MENA Region*. What we discovered, above all, was the almost ubiquitous absence of policies, resources, guidance, and incentives to support teachers of refugees in some of their most fundamental work: course design, student assessment, student engagement, digital pedagogies, the time and tools for self-reflection, communities of practice, and data-informed teaching.

The project began before COVID-19, when the importance of digital pedagogies, particularly as a strategy of inclusion for displaced learners in higher education in the Middle East, was yet to be fully appreciated. COVID dramatically made the case. The need for a coherent set of policies, funding strategies, and programming options in every part of the higher education ecosystem to enable digital fluency become painfully apparent. Cultivating faculty capacity both inside the classroom and out will be a hallmark of post-COVID higher education. Without faculty, all other initiatives to improve student outcomes are hobbled.

The project's overall goal is to foster access, inclusion, and academic success for higher education learners in the Middle East, particularly refugees and other displaced persons, through the effective combination of pedagogy and technology. We use the term “digital fluency”¹ as our working definition of the competencies required for combining the two. To understand teachers’ current practice, skill gaps, resource needs, and preparation for working with refugee students, we convened a leadership team of faculty committed to these goals, focused in three countries: Egypt, Jordan, and Lebanon. Together, we developed a survey and conducted 15 workshop/focus groups (in Arabic) that included over 200 people to accomplish our key goals:

- ▶ a situation analysis
- ▶ a framework for faculty development
- ▶ a blueprint for action

¹Digital Fluency -Teachers and students confidently and effectively use digital technologies to enhance teaching and learning outcomes, are producers of digital content, understanding the social costs and benefits associated with digital technologies, including issues of access and equity, develop skills in critical literacy in digital contexts, and recognize how language, symbol and text affect understanding and communications <https://elearning.tki.org.nz/Teaching/Digital-fluency>

Even before COVID, faculty were largely ill-prepared to meet the challenges they now face in the changing landscape of higher education. This is not because they do not want to improve their teaching, but because there are few resources in place to help them to do so. Global forces are pressuring higher education overall to become more efficient, effective, adaptable, and scalable. Specifically, there are calls for new teaching and learning paradigms, yet few incentives are in place for faculty to up-skill to meet the increased complexity of teaching.

This combination of factors particularly disadvantages refugee and displaced learners, limiting their chances of successful entry to and persistence in higher education. Nowhere is this set of conditions more acutely felt than in the MENA region, host to the largest number of refugees in the world.

We look at digital fluency in the higher education ecosystem through the eyes of the teacher. There are many actors and factors in the higher education ecosystem that facilitate or inhibit effective teaching. Our focus here is the teacher, what is needed by them and for them, with the understanding that the goal is always improved student outcomes.

II. A Call for New Teaching Paradigms

We used a range of studies and reports to frame the work (Appendix A). In response to COVID-19, much is now written about online, blended, emergency, and remote learning. Yet, actionable teacher-focused pedagogical support remains sorely lacking. There is no more apparent indicator of this vacuum than the near-universal absence of policy throughout the higher education ecosystem to inspire, guide, support, or resource the faculty professional development essential for digitally-mediated teaching in the refugee context.

The case for a paradigm shift is more than a decade in the making. In the November 2015 issue of *International Higher Education*, twenty-five experts responded to the question: What will be the most important challenge facing higher education in the coming two decades? They identified shortages of qualified academic staff as one of two. The Organisation for Economic Cooperation and Development (OECD) and the Institute for Health Metrics and Evaluation (IMHE)² report, *Fostering Quality Teaching in Higher Education: Policies and Practices* and *An IMHE Guide for Higher Education Institution*, called for new paradigms for quality teaching and support for it at the institution, program, and individual levels. Specifically the report recommends:

² Hénard, F., & Roseveare, D. (2012)

- ▶ *continuous upgrading in pedagogy, use of technologies, assessment models aligned with student-centered learning*
- ▶ *assessing impacts and documenting effectiveness of the teaching delivered*
- ▶ *a wider range of communication and collaborative working through learning platforms*
- ▶ *redesigning of curricula*
- ▶ *creating innovative learning platforms*

However, there continues to be a worldwide scarcity of faculty learning opportunities. Faculty training institutes that are nimble enough to adapt to rapidly changing contexts and technologies and provide competency-based practice development are rare.

“Few instructors in higher education have completed a formal teaching program and, therefore, rely on informal professional development opportunities to enhance their teaching practice.”³

Quality teaching is necessary online and offline, and while the objectives of both may be the same, the methods are not. COVID-19 was a harsh wake-up call, exposing the limitations of higher education in offering quality learning opportunities in an era of distance education; indeed, it has been a shock to the entire higher education ecosystem. Additionally, the newly articulated cognitive, affective, and practical overload of teachers and students further complicates the achievement of desired education outcomes and calls for new paradigms.

³ See Dyjur, P., & Lindstrom, G. (2017)

III. Sustainable Learning Pathways to Digital Fluency

In this section of the report, we look at the data from our research through the lens of Sustainable Learning. We begin with the reality that, unlike other professions such as medicine or architecture, teaching in higher education does not require faculty to maintain a level of knowledge and expertise about teaching. Its culture and practice presume that content expertise is a sufficient representation of quality teaching. But the data do not bear this out. Given the changing landscape of higher education and the growing options students have for learning, faculty must be able to effectively manage the shifting dynamics of teaching and learning. COVID-19 has made this abundantly clear. Faculty need to lead, together, on shaping the future of higher education. Doing so requires action from across the learning ecosystem.

In this project, the faculty leaders surfaced five pathways that can be taken in MENA Higher Education to improve digital fluency in the refugee context. These pathways were identified within the overall framework of Sustainable Learning.

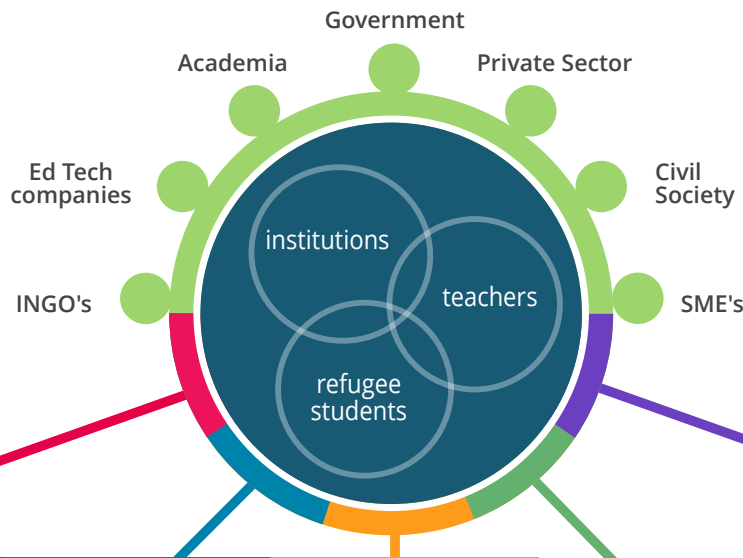
Sustainable Learning is a set of applied disciplines and the practices that make them actionable. It provides a guide for focusing attention and taking action to improve teaching and learning. Sustainable Learning contributes to a resilient learning ecosystem that is evidence-based, collaborative, and adaptive and in which all stakeholders, at every level are digitally fluent and self-reflective. In a healthy learning ecosystem, learning addresses immediate needs and provides for the emergence of transformative insights and actions. Sustainability refers to a method of learning that is adaptive to the context and conditions of both teacher and learner. This project revealed five action pathways in the MENA region to promote effective integration of pedagogy and technology at the country, institution, program and individual levels.






FIVE PATHWAYS to Achieving Digital Fluency

1. **Map Your System** for achieving teacher digital fluency in the context of the refugee learner
2. **Make Teaching Visible** to enable practice improvement
3. **Prioritize Professional Development** on core teaching competencies
4. **Create the Conditions for Engagement** by using tools and methods that promote openness and connection
5. **Require ed-tech functionality facilitate good pedagogy and reflective teaching**

Sustainable Learning and the MENA Higher Education Ecosystem

HIGHER-ED ECOSYSTEM



 Purposeful Pedagogy	 Systems Thinking	 Looped Learning	 Democratic Engagement	 Digital Geographies
WHAT'S NEEDED	WHAT'S NEEDED	WHAT'S NEEDED	WHAT'S NEEDED	WHAT'S NEEDED
Continuous, Practice-Based Professional Development	Collective planning and design to enable teaching that reflects the contexts	Feedback tools and protocols for faculty and institutions	Resources to Convene, Connect and Co-Create instructional Tools and Materials	Teaching and teacher-informed education technology
PATHWAY	PATHWAY	PATHWAY	PATHWAY	PATHWAY
Prioritize Professional Development <ul style="list-style-type: none"> online course design online assessment of student work getting and keeping students engaged selecting and integrating digital tools identifying and supporting displaced learners discipline-specific digital pedagogies and teaching 	Map Your System <ul style="list-style-type: none"> collectively define digital fluency establish the challenges and opportunities for achieving digital fluency identify leverage points to address opportunities and challenges 	Make Teaching Visible <ul style="list-style-type: none"> develop a theory of change provide mechanisms for reflection provide incentives for faculty for reflective activities 	Create the Conditions for Engagement <ul style="list-style-type: none"> create Arabic language open education resources (OER) assess faculty needs, behaviors, knowledge, and attitudes toward digital pedagogies convene focused, facilitated discussions on digital pedagogies 	Ed-tech functionality that facilitates good pedagogy and reflective teaching <ul style="list-style-type: none"> ed-tech selection and design includes teachers use ed-tech to connect content, people, and data use tech to verify efficacy of student work and student safety



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Purposeful Pedagogy



Learning design is driven by a teaching philosophy, a clear purpose, evidence-informed methods, and authentic assessment.

Practices: Project-based, evidence-informed, digitally curated, multi-modal

What's needed: Accessible, Continuous, Practice-Based Professional Development

Pathway: **Prioritize Professional Development** on core teaching competencies for all faculty and ensure that it is evidence-based and context-specific on-

- ▶ online course design
- ▶ techniques for online assessment of student work
- ▶ methods for getting and keeping students engaged
- ▶ selecting and integrating digital tools for teaching and student assessment
- ▶ methods for identifying and supporting displaced learners
- ▶ discipline-specific guidance on digital pedagogies and teaching online

In the words of faculty:

“Engagement and integration of refugees are major challenges as refugees suffer from social difficulties and the host academic community is not skilled to deal with their specific needs.”

Systems Thinking



Learning providers recognize and synthesize teaching and learning patterns, interactions, and interdependencies and use networks and communities to responsively design courses, programs, and policy.

Practices: Collective Impact, Distributed Leadership, Emergent and Adaptive Structures

What's needed: Collective planning and design for teaching that reflects the contexts, complexities, and interdependencies that impact tertiary teachers in the MENA region.

Pathway: **Map Your System**

Establish a shared understanding and vision of pedagogy, technology, and refugee learners, in your context. Your map should identify knowledge gaps, intervention points, connections, resources, and relationships that enable action and establish progress measures against clear goals.

- Action Steps:**
- ▶ Systems mapping to identify and analyze opportunities and challenges at the institutional and national levels for digital pedagogies for improving higher education, particularly for assuring inclusion of displaced learners
 - ▶ Financial support for refugee students
 - ▶ Engagement of faculty in developing a rubric on contextually-sensitive, effective digital pedagogies

In the words of faculty:

“Most universities do not have a clear policy regarding online teaching and learning. Faculty engage in informal communities of practice to stay up to date regarding the latest technologies available to teach and coach students online.”

Looped Learning



Practitioners and systems use multiple feedback protocols for improving, reframing, and transforming practice and policy.

Practices: Theory of Change, Reflective Teaching, Analytics for Improvement Practices

What's needed: Feedback tools and protocols for faculty and institutions that distinguish signal from noise in data, make teaching and learning transparent, and provide actionable insights.

Pathway: **Make Teaching Visible** to inform practice improvement

- Action Steps:**
- ▶ Develop a theory of change for improving teaching and systems using digital pedagogies that result in inclusion and improved outcomes for refugee learners.
 - ▶ Provide mechanisms for reflection for improving practice, such as e-portfolios, that generate actionable insights.
 - ▶ Provide incentives for faculty, including time, recognition, or monetary compensation, for participating in reflective activities.

Democratic Engagement



Ensures every participant has the access, support, materials, and safety they need to be active learners; is provided opportunities for peer-to-peer learning; and is included in shaping the learning experience.

Practices: Facilitated Discourse, Open Education Resources, Learning in Communities

What's needed: Time, space, and resources for faculty to convene, connect and co-create instructional tools and materials

Pathway: **Create the Conditions for Engagement**

- Action Steps:**
- ▶ Use and develop Arabic language open education resources (OER) with teachers and students on digital pedagogies.
 - ▶ Assess faculty needs, behaviors, knowledge, and attitudes toward digital pedagogies in the context of refugee learners and continually feed that data in systems mapping.
 - ▶ Convene focused, facilitated discussion on topics of importance to teachers related to effective teaching using digital pedagogies in the refugee context.

Digital Geographies



Provides open systems for online teaching and learning.

Practices: Connected Knowledge, Generative Architectures, Secure Spaces

What's needed: Teaching and teacher-informed education technology

Pathway: Ed-tech Functionality that facilitates good pedagogy and reflective teaching

- Action Steps:**
- ▶ Design or adapt ed technologies with teachers to enable personalization of pedagogies.
 - ▶ Provide tools and methods for faculty to connect content, people, and data to improve their teaching and support their students.
 - ▶ Use technology to assure efficacy of student work and student safety.

IV. In the Crucible of COVID: Faculty on the Front Line

An Education Ecosystem Unprepared

The COVID-19 pandemic has had a massive, disruptive impact on education around the world, including in the MENA region. Worldwide, governments have shut down schools to contain the spread of the virus, impacting 94% of students globally.⁴ The shutdown has forced educators in primary, secondary, and higher education, to shift to distance learning, much of which involves teaching and learning online. This shift has been difficult for educators and learners. Educators generally have little to no formal training in teaching online while students often have limited to no experience learning online. And as is often the case, the challenges of education during this pandemic are felt the strongest by the world's most vulnerable students, including those living in poverty and those who are displaced and living as refugees.

The following summarizes the insights from the surveys and focus/work groups. Survey results, both qualitative and quantitative, were analyzed by faculty research teams in Jordan, Lebanon, and Egypt, and by an external evaluation team of researchers at RTI International. Focus group transcripts were analyzed independently by the RTI team as well, to assess agreement on emerging themes as a measure of reliability for these qualitative results.

⁴ United Nations Policy Brief: Education during COVID-19 and beyond, August, 2020, available at: https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf

The Need for Learning Design

In the survey and focus groups, respondents indicated a sudden, massive shift to online teaching and learning due to the COVID-19 pandemic. Common challenges included a lack of sufficient training in how to design and deliver online instruction and, also, that most faculty members were engaged in “emergency teaching,” which primarily involved shifting in-person practices online. This is a common problem worldwide as educators who are used to delivering instruction in-person are suddenly required to teach online. Yet, to teach effectively online involves different sets of competencies, including an awareness of available tools and understanding of how they can support and enhance learning.

Over 70% of survey respondents in Egypt, Jordan, and Lebanon received training in teaching online. By discipline, 92% of the respondents in teacher education received significantly more training in online teaching than the others. Yet focus groups indicate general dissatisfaction with available training, noting the lack of alignment with educators' and students' needs. For example, the Lebanese faculty leadership team reported the following:

The use of educational technology and LMS systems is widely accepted in Lebanese universities. However, due to the pandemic, the faculty was forced to transform many of the traditional face-to-face teaching and learning activities to online ... modes of delivery. As a result, many unforeseen challenges are brought to the fore, calling for allocation and development of extra resources, such as faculty skill development as well as IT infrastructure ... any innovative adoption of the LMS is curbed by the lack of strategic direction, sufficient technical support, availability of relevant technical skills, and reliable infrastructure.

Survey and focus group respondents noted areas in which online teaching and learning needed supports and resources in their institutions of higher education:

- ▶ Shifting educators from ‘sage on the stage’ to ‘guide on the side’ (teacher vs. student-centered approach, respectively) in an online learning environment
- ▶ Students taking responsibility for their own learning
- ▶ Training and time to prepare courses for online instruction
- ▶ Need for instructional design training to ensure instructors are integrating ed tech effectively and supporting students' learning needs
- ▶ Cultural resistance to online teaching and learning, by educators as well as students
- ▶ Assessing students online in a way that is meaningful and avoids cheating
- ▶ Designing online teaching and learning for courses that traditionally require in-person observation and mentoring and/or hands-on experiences (e.g., nursing clinical practice, engineering projects)

Many of the concerns are related to instructional design (ID). Instructional design involves the creation of learning materials and experiences that enhance the learner’s acquisition of knowledge and skills. Effective instructional design involves a continuous improvement process starting with the assessment of learning needs, designing the learning materials and experiences, and evaluating their impact on learners. From the focus groups, it became clear that instructional design (ID) is not generally available in institutions of higher education in Egypt, Jordan, or Lebanon. The faculty leadership teams in each country indicated that the use of ID for designing online teaching and learning is not a widespread practice in higher education, as exemplified by the following faculty team analyses for each country:

Table 1. Status of Instructional Design in Higher Education

Egypt	Most universities do not have a clear policy regarding online teaching and learning. Faculty engage in informal communities of practice to stay up to date regarding the latest technologies available to teach and coach students online.
Jordan	Most faculty agree that they are specialized in their fields, however, they haven’t received training on designing and planning the educational content, choosing the relevant strategies for teaching, and assessing students whether in an online or face-to-face setting. Many faculty members were not familiar with the concept of ID. There is a clear shortage in the employment of instructional designers in Jordanian universities. The majority of people hired in e-learning centers at Jordanian universities have computer science or software engineering background, and their roles are mainly focused on the development and training of faculty members on the use of online learning management systems.
Lebanon	The role of instructional designer doesn’t exist in Lebanon: no university programs exist to develop instructional designers.

Survey results are consistent with these focus group results. When asked if they had ever heard of or worked with an instructional designer, less than 1 in 4 of the respondents indicated so. Lebanon showed a noticeably lower familiarity (only 6%) compared to Egypt and Jordan (at 19% and 22%, respectively).⁵ It appears that the discipline in which faculty worked had an impact on their awareness of ID.⁶

- The highest proportion of those unfamiliar with ID was in the health-related fields (70.3%)
- Faculty in teacher education had the highest proportion of those who were familiar with ID (56%)
- Faculty in teacher education had the highest proportion of those who worked with an instructional designer (24%)

A key area of instructional design is student assessment. Focus group and survey responses indicated concerns by educators across the 3 countries about designing useful assessments for online learning and/or preventing cheating. The following highlights those results:

⁵ Although noticeably lower, the difference between Lebanon vs. Egypt and Jordan is not statistically significant.

⁶ The only statistically significant comparisons were those by discipline, as reported here.

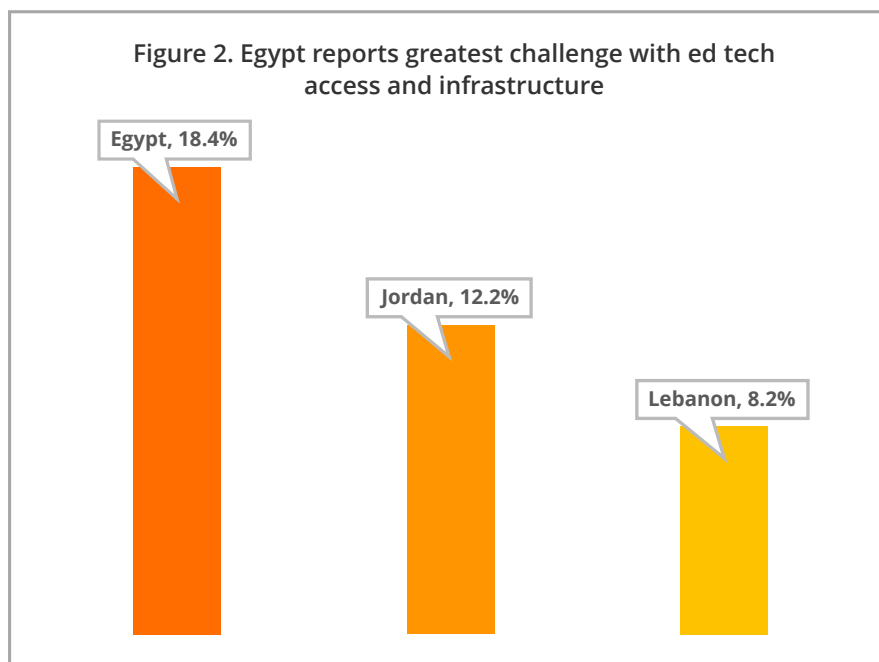
Table 2. Concerns about assessing students online

Cheating	<p>EGYPT: "When we assess or grade exams online, we were surprised that the students' responses were exactly as it appears in the book... A high number of students' answers were copied exactly from the textbook."</p> <p>JORDAN: "There were many students who were paying others to take the exams for them. There is no proctoring, and to ask students to turn on their cameras, this could be considered a violation of privacy, not only for them but for their families..."</p> <p>LEBANON: "In fact, we are very concerned about assessment. Our (Engineering faculty's) way of assessing is really, before [assessing] what the student learned, is to check if he cheated... I have experience with European institutions, they don't have this concern. They consider the student is more autonomous and he will not [cheat]. But, I am sure that every student in the world tries to cheat, and as instructors, we are very concerned with this issue [for online student assessment]."</p>
Quality/validity of online assessment	<p>EGYPT: "I work in a medical college and we cannot do all assessments online for practical and clinical exams which should be done on patients."</p> <p>JORDAN: "To do [online] assessment objectively is almost impossible, so what I did was I uploaded my lectures, sometimes I would talk to them [students] on the phone or talk to someone else who can reach them...and then I did the exam open-book."</p> <p>LEBANON: "Usually we give an exam, they'll take the exam and the student knows that the main objective is to get a grade. But now with this new movement [to online teaching and learning] and a lot of research happening about [digital] renewable assessment, students will know that whatever they're doing will be available for other students to view and benefit from. So, I advise you to look into renewable assessment."</p>

The discussion of instructional design and assessment also moved focus group participants in Lebanon and Egypt to discuss the purpose and impact of education. Participants were especially concerned that students were not learning valuable knowledge and skills but were instead

focused on “getting a good grade.” That focus on reassessing the curriculum extended to the purpose of educating refugee students and re-thinking higher education’s objectives for those students, e.g., workforce preparation, remediating lost educational opportunities.

Survey and focus group results also indicated several themes around the use of **education technology** (ed tech) in the MENA region. The most consistent theme was the challenge of infrastructure and access to the internet and to adequate technology tools. From the survey, 40% reported these challenges. As one survey respondent indicated, “students do not often have a reliable internet connection and/or proper devices to actively interact with the adopted digital [tools].” In Lebanon, poor infrastructure is nationwide, e.g., as noted by the Lebanese focus group research team, “resources such as electricity and connectivity will continue to be an issue in Lebanon in the forthcoming years.” Similar issues were reported in low-wealth areas of Egypt and Jordan, including in refugee communities. Figure 2 compares the 3 countries regarding these challenges.



Another consistent theme was the challenge of sufficient training in the use of education technologies. Most survey respondents focused on training for instructors, but some also indicated the need for student training. The training needs ranged across a variety of domains, including:

- Training in the use of specific ed tech tools, for educators as well as students
- Training for educators in how to integrate ed tech tools effectively to meet student learning needs
- Training in how to use ed tech to assess students effectively and to avoid cheating

- The need for institutional policies around training faculty and students in online teaching and learning

A key theme in all 3 countries was how to optimize the use of education technologies for online teaching and learning. Focus group respondents shared concerns about selecting tools that enhanced student learning, especially when content appeared to require in-person instruction. As the focus group research team from Lebanon noted:

- Some of the face-to-face teaching skills are not transferable to the online teaching model.
- Some of the limitations are attributed to the features and constraints posed by technology.
- Some of the issues are related to the nature and content of the subject taught.
- The transformation issue becomes more pressing when it comes to transforming the content and activities of the practical and lab-based subjects to an online mode of delivery.
- The survey and focus groups asked the educators which ed tech tools they used.

Survey results indicated that the use of two tools—video conferencing and synchronous discussion—were used more frequently by those who reported more teaching experience, a result that was statistically significant.⁷ Additionally, Engineering, Agriculture, Business, and IT educators were more likely to use video conferencing than the other disciplines, while Teacher Education faculty were more likely to use curriculum mapping and gamification, although the numbers of faculty who used these tools were relatively low. Survey results indicate the following differences in the use of these supplemental ed tech tools by country:

⁷ Relationships between teaching experience, field of discipline, and country (Egypt, Jordan, Lebanon) with ed tech tools were tested using t-tests or Chi-Square. Statistical results are shared in the Appendix.

Table 3. Statistically significant differential use of ed tech tools by country

Egypt	<ul style="list-style-type: none"> ▶ More use of WhatsApp ▶ No use of Wikis
Jordan	<ul style="list-style-type: none"> ▶ More use of Facebook ▶ Least use of online surveys & polling ▶ Least use of asynchronous discussion ▶ No use of Wikis
Lebanon	<ul style="list-style-type: none"> ▶ Some use of Wikis (15% endorsed)

A list of discipline-specific ed tech tools used by survey respondents is in the Appendix.

SUMMARY

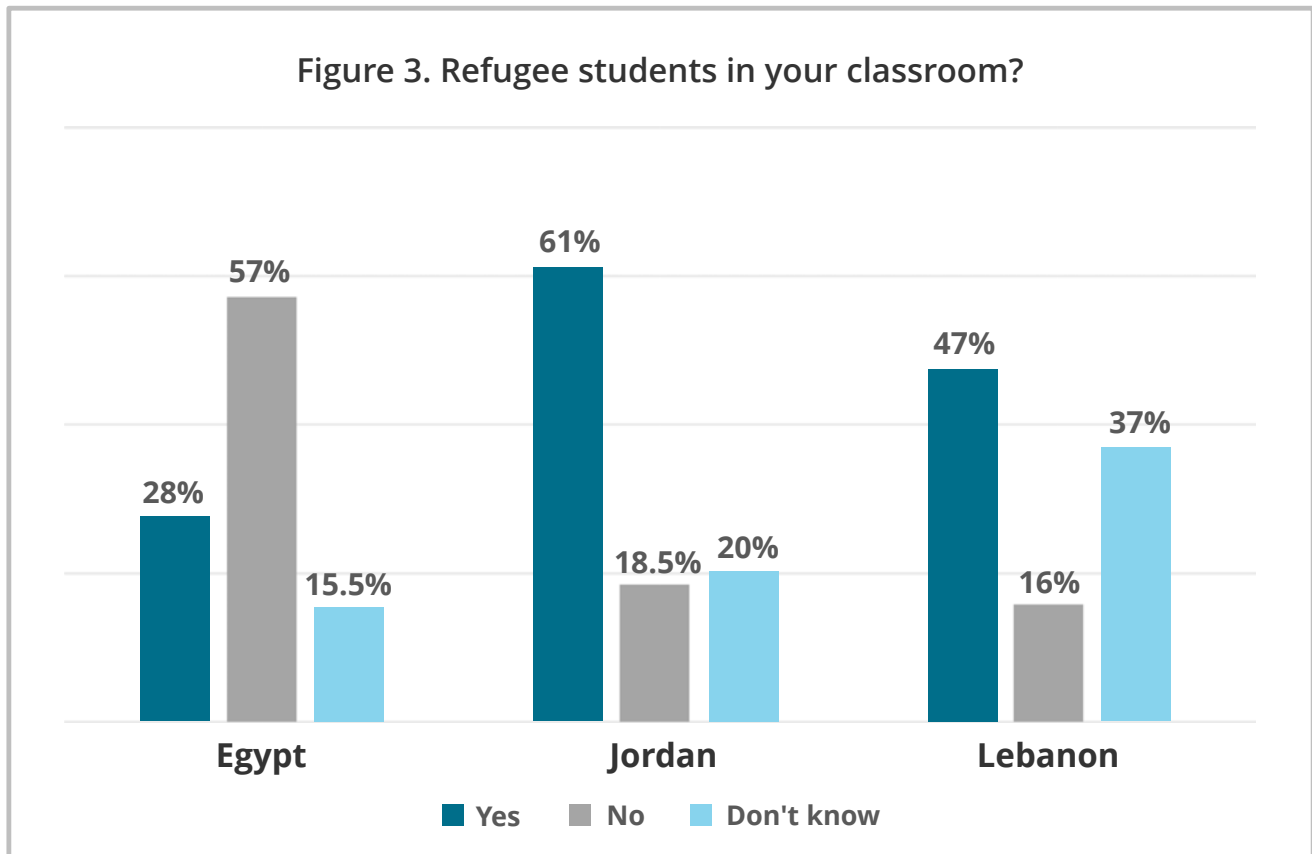
Survey and focus group participants were simultaneously aware of the benefits of technology for teaching and learning, as well as the pitfalls. Benefits included the flexibility and efficiencies technology can provide, e.g., reaching more students; allowing for self-pacing of learning; and improving content for learning (e.g., interactive videos, online platforms to interact). Pitfalls included difficulties engaging students when learning remotely; difficulties accessing the Internet; lack of familiarity with digital tools and how to use them; and lack of educators' understanding of how to integrate technology effectively for teaching and learning. As some focus group members observed, online education should be focused more on the learning objectives and students' learning needs, than on selecting the digital tools to meet those needs, rather than focusing solely on the use of digital tools. They also emphasized the importance of learning communities and sharing digital tools to improve online teaching, especially those that are freely available to the public, i.e., Open Educational Resources or OER.

Overall, results indicated a struggle among faculty members to provide effective teaching and learning in an online environment. Common concerns involved how best to engage students in online learning while dealing with technology barriers, language barriers (especially when content is taught in English), lack of digital skills for students and educators, and lack of experience with instructional design. Some viewed the COVID-19 pandemic as an opportunity to review the purpose of education, existing curricula, and teaching practices, with the goal of generating sustainable improvements.

Teaching Refugee Students in MENA Higher Education

The overall objective of this MENA region project was to foster access, inclusion, and academic success of higher education learners, particularly refugees and other displaced persons. With the COVID-19 pandemic, concerns about serving the most vulnerable students, especially refugees, came to the forefront. The survey and focus groups addressed how educators identified whether they had refugee students in their classrooms, which is critical for identifying the resources they needed and what was available for supporting these students.

From the survey data, when comparing the countries, there were interesting differences in proportions of educators who were aware of having refugee students in their classrooms (those who said 'yes' or 'no') and those who were not (those who indicated 'don't know'), as shown in Figure 3. **By discipline, both the health-related fields and arts and sciences reported the highest proportion with refugee students in their classrooms ('yes' = 53%), and teacher education reported the lowest proportion ('no' = 48%).**



These differences between countries in awareness of refugee status may reflect the policies of their institutions for identifying them. From the survey, 3 primary themes emerged regarding how refugee students are identified:

Table 4. Survey themes regarding how refugee students are identified

Primary Themes	Sample Quotes
Students told educator their refugee status	<p>“Through talking and interacting with them”</p> <p>“(The) students told me in the first meeting”</p> <p>“If s/he identifies him or herself”</p>
Educator inferred refugee status from nationality, accent, etc.	<p>“(The student’s) facial features and looks”</p> <p>“If he/she was from another country with political problems”</p> <p>“Sometimes from the Arabic dialect and surname”</p>
Educator was provided official documentation	<p>“Through nationality and they have a passport or a yellow card”</p> <p>“The data and documents that are provided for us from the university”</p> <p>“I know from the university’s’ administration”</p>

Comparing these themes across the 3 main countries surveyed indicates interesting differences: Lebanon had the highest proportion of educators who were not aware of student refugee status (see Figure 3) and the lowest proportion of those receiving official documentation of that status (see Table 5).

Table 5. Lebanon with lowest proportion of official documentation for refugee status

Theme	Egypt	Jordan	Lebanon
Teacher asked or student told	7.5	17.0	3.4
Assuming/infering refugee status	8.8	5.4	3.4
Official documentation	8.8	6.1	1.4

Note: All values reported in percent

PERSPECTIVES FROM JORDAN

In the focus groups, faculty members in Jordan indicated that they were unable to identify refugee students unless the students told them, which is consistent with survey results. The team from Jordan indicated that this could imply that refugees are integrated into Jordanian society, speaking the same language and dialect. They added, “there might be a fear among refugee students of being labelled, which will prevent them from disclosing their status unless specific assistance is required.”

...there needs to be initiative from refugee centers at the universities. We want to make refugee voices heard...this needs to be done officially through the Commission and the Ministry.

– University Educator, Jordan

Faculty also mentioned they lacked the necessary skills to address the diverse social, psychological, and academic needs of refugee students. Survey results indicated that when asked to rank 9 workshop topics from highest (1) to lowest (9) priority, the **Jordanian educators showed the highest proportion (45%) of educators ranking refugee education as one of the top 3 priorities.**

The team from Jordan indicated that several of their universities offer specialized courses to provide education to refugees. They also identified a number of challenges to educating refugees in Jordan’s higher education institutions:

- ▶ providing education that best suits the workforce needs
- ▶ providing sustainable financial support for refugee students
- ▶ enabling refugee students to integrate into host communities
- ▶ need for institutionalization of resources allocated to support refugee students
- ▶ access to adequate technology infrastructure ⁸

The external evaluation team from RTI International identified similar themes from the focus group transcripts. In addition to the above, other challenges they identified included:

- ▶ promoting and replicating programs focused on refugee students to help with integration and psychological adjustment
- ▶ re-evaluating existing programs for their impact on refugee students

⁸ The Jordanian team cited UNHCR website data indicated that 23% of Syrian refugee students have access to the Internet at home, and 2/3 rely on limited data packages.

PERSPECTIVES FROM EGYPT

The focus group team from Egypt indicated that “engagement and integration of refugees are major challenges as refugees suffer from social difficulties and the host academic community is not skilled to deal with their specific needs. In addition to their limited financial resources, their socio-economic needs and backgrounds play a significant role in limiting their access to quality learning. For this reason, online learning seems to be an opportunity for refugees to overcome several challenges.” Yet, they note, at Egyptian higher education institutions, the lack of professional training, online pedagogical skills, and technological tools stand as barriers against producing high-quality and learner-centric content.

...there needs to be a way of classifying expatriate students to be able to design programs that meet the learning and socio-emotional needs of the diverse categories of expatriates, e.g., refugees.

Similar challenges to those cited in Jordan were reported in the Egyptian focus groups, including:

- ▶ No information on refugee status of students, which means faculty generally infer their status, e.g., by accent, surname, etc. (see Table 1 above).
- ▶ Inadequate access to technology and the internet
- ▶ Gaps in refugees’ educational background and preparation, including the language of instruction and how specific subjects are taught
- ▶ Difficulty affording tuition fees
- ▶ Need for coaching and mentoring to integrate into the new education system
- ▶ Need for policies and professional training to support online shift and design of online pedagogical strategies, including for refugee students

PERSPECTIVES FROM LEBANON

The research team from Lebanon indicated that “the number of refugee students accessing higher education is declining due to increasing pressure and challenges on refugee youth in a host society that itself is in crisis.” Focus group themes about refugee students were like those in Egypt and Jordan:

...proportionately speaking, the majority of people who were displaced to Lebanon do not have [a sufficient level of] English...it's not their place of origin, it's what kind of opportunities they had—what social background they come from, what kind of learning they had previously.

- ▶ No training for the faculty to accommodate inclusiveness
- ▶ Need for programs to help refugees adjust, especially language courses for Syrian refugees in particular; higher ed courses are often taught in English in Lebanon
- ▶ Inequities that arise from differences in cultural and socio-economic background and educational preparation, including lack of technology literacy
- ▶ Refugee students have additional responsibilities, e.g., work, or cultural barriers, e.g., gender, that prevent them from optimizing educational opportunities
- ▶ Lack of access to adequate technology and the Internet, noting Syrian refugee students often must rely on outdated mobile phones to access the Internet

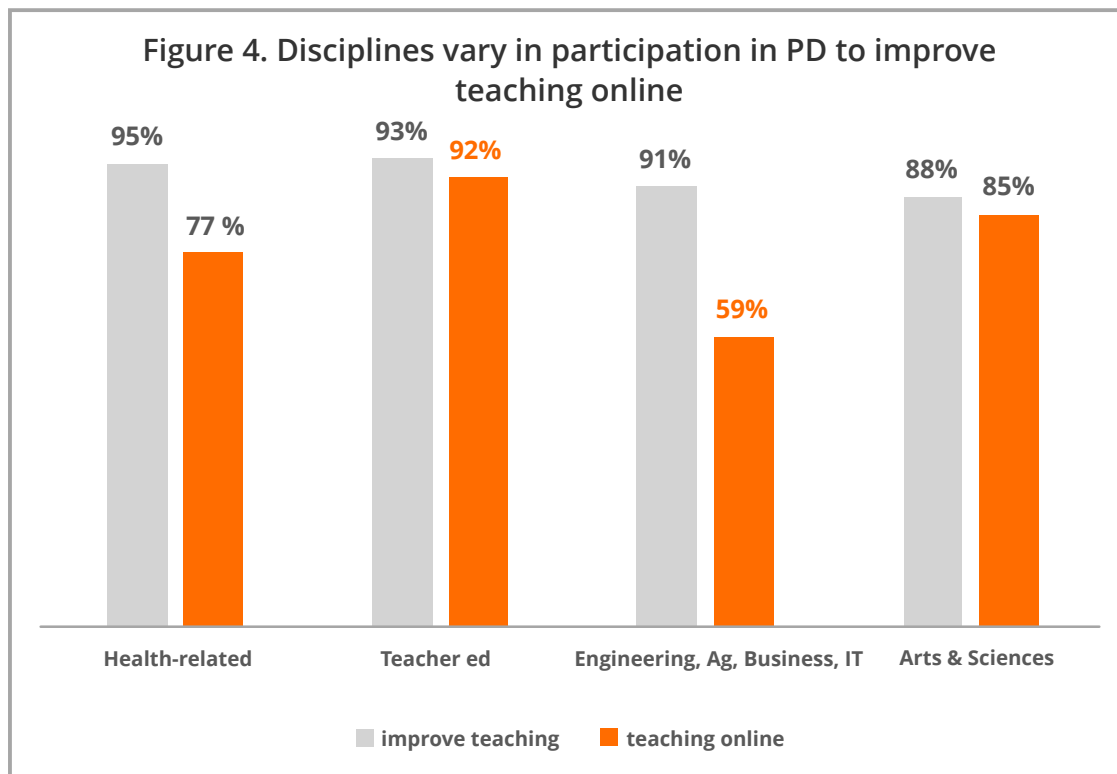
SUMMARY

Survey and focus group respondents in all 3 countries regarded their institutional policies, procedures, and resources as generally inadequate for meeting the psychosocial and academic needs of refugee students. Refugee students were rarely officially identified and designated as such in higher education, which made it more difficult to offer needed resources. This was exacerbated by inequalities that result from being displaced people, including cultural and socio-economic factors. Those who participated in the survey and/or the workshops and focus groups were sympathetic to the struggles of refugee students and their communities, and several indicated that online teaching and learning may provide effective ways to support these students academically and psychosocially and integrate them into the host country.

V. Putting Faculty Professional Development First

The massive shift to online education during the COVID-19 pandemic necessitates policy and practice changes to help ensure that distance education is effective and maximizes the affordances of educational technologies. Project participants agreed that for online education to be effective, instructors in higher education needed ongoing training and support in how to optimize technology for learning and how to engage learners successfully.

In the survey and focus groups, participants were asked about the types of professional development (PD) they had access to, including PD related to online teaching and learning, and the impact on educators and learners. Survey results show that a higher proportion of educators with more perceived experience (rated on a scale of 0 to 100) participated in trainings to improve teaching including to improve teaching online.⁹ Field of discipline had an impact on participation in PD varied, as shown in Figure 4. The Engineering, Agriculture, Business, and IT faculty on average



participated in less PD for teaching online than the other disciplines, while those in Teacher Education participated the most. Countries differed only slightly, with participation in all 3 countries above **84%** in PD aimed at improving teaching, and above **71%** for PD aimed at online teaching.

⁹ On this scale, 0 = no experience, and 100 = very experienced. Although the average experience ratings for those that did and did not participate in these trainings were at least 11 points apart, the results were not statistically significant. See the survey results brief in the Appendix.

When asked about training opportunities over the past 12 months, survey results show the following:¹⁰

- A larger proportion of Egyptian educators participated in trainings offered by institutions outside their own (55% compared to 24% in Jordan and 27% in Lebanon)
- Educators who participated in trainings offered by foreign institutions had greater perceived teaching experience than those who did not participate
- Faculty in Teacher Education (44%) and in Egypt (34.5%) had the highest proportion in professional certification programs compared to the other disciplines and countries, respectively
- Educators in Jordan had the lowest participation (50%) in online trainings compared to Egypt and Lebanon (74% and 68%, respectively)
- Overall, Egyptian educators had more participation in educator trainings (90%) than educators in Jordan and Lebanon (68.5% and 79%, respectively)

Focus groups discussed professional development for educators in each of the 3 countries, particularly as it applied to teaching online, and working with refugee students. As reported in Section A of this report, educators in all 3 countries believed that their institutions did not provide sufficient trainings in how to support refugee students, academically and psychosocially. In Sections B and C, we addressed professional development in the use of digital tools and in online teaching. Again, educators in all 3 countries reported that the professional development did not align well with their needs, nor those of their students. Research on educator professional development indicates that it must be viewed as relevant, directly addressing an instructional and/or learning need in their classrooms.¹¹ When PD is viewed as irrelevant, educators adopt a mindset of compliance vs. commitment, which does little to nothing to improve teaching and learning.

Additionally, there were concerns about incentives for educators to participate in PD, especially for teaching online. These concerns were discussed at length in Lebanon, where educators are primarily incentivized to add to their portfolios for promotion decisions. Participating in instructional professional development generally is not part of that portfolio. The Lebanese focus group team saw this lack of incentive as a barrier to improving instructional practice in higher education. Another cited barrier included lack of time to devote to PD, especially during the

¹⁰ All of these comparisons are statistically significant; more detailed quantitative survey results are found in the Appendix.

¹¹ For example, see Darling-Hammond, L., Hyster, M. E., Gardner, M. (2017). *Effective Teacher Professional Development*. Palo Alto, CA: Learning Policy Institute. Report accessed at: https://learningpolicyinstitute.org/sites/default/files/product-files/Effective_Teacher_Professional_Development_REPORT.pdf

pandemic, when educators were rapidly trying to shift their courses to online. Research indicates that educators need protected time for PD, and they need to regard PD as a critical part of their job, i.e., not as optional or an 'add-on' to their work.¹²

The following highlights focus group themes regarding educator PD from each country.

PERSPECTIVES FROM EGYPT

Focus group participants noted that PD offered by their institutions often failed to align with their needs, and therefore, they turned to resources outside of their universities. One participant, for example, reported training in Moodle at their university, but no availability to use the platform.

PERSPECTIVES FROM JORDAN

In Jordan, focus group participants understood that hybrid or blended learning is the future. And while there is a basic understanding of digital tools for blended learning, faculty are challenged with determining how to refine their online teaching. Participants acknowledged the need to equip faculty with IT support, hire a programmer to provide tools and platforms to help deliver content, and provide training in online course ethics for professors and students. The Jordanian focus group research team summarized their professional development in higher education in the following way:

In Jordan, focus group participants understood that hybrid or blended learning is the future. And while there is a basic understanding of digital tools for blended learning, faculty are challenged with determining how to refine their online teaching. Participants acknowledged the need to equip faculty with IT support, hire a programmer to provide tools and platforms to help deliver content, and provide training in online course ethics for professors and students. The Jordanian focus group research team summarized their professional development in higher education in the following way:

¹² E.g., see the Darling-Hammond, Hylar, & Gardner (2017) report.

Faculty were exposed to training opportunities on the use of educational technology...at their universities in how to use Zoom, Microsoft Teams, and Moodle. It was highlighted that additional training is required to integrate technology into teaching and learning in an online setting or blended learning. There is agreement on the need to provide continuing PD to faculty members. A limitation...is that provided PD courses do not address the need of faculty members and need to be relevant to the department and specialty. There needs to be a tailored orientation course for Junior Faculty upon joining the academic staff, in addition to providing professional training of trainers (TOT) to govern the quality of the PD provided to faculty members. To some participants PD meant also providing mentorship and psychological support to faculty members. They described being “burnt out” and “fatigued” and needed to feel supported by the system.

PERSPECTIVES FROM LEBANON

The Lebanese focus groups discussed how much of the response to the COVID-19 pandemic could be characterized as “emergency remote teaching” vs. online learning. They discussed the use of digital tools, e.g., Zoom or Microsoft Teams, to move in-person teaching online, which they agreed was not leveraging the capabilities of digital tools to enhance teaching and learning. They saw a gap between their training on how to use a variety of digital tools and their ability to take advantage of those tools to support learning. The focus group research team summarized professional development in higher education in Lebanon by focusing on policies and practices related to PD.

VI. Faculty Plan for Action

In focus groups and country specific workshops, faculty leaders asked participants to reflect on each of the 5 workshop topics as they applied to facilitating inclusive digital pedagogies in higher education in the MENA region. The following is a summary and synthesis by country faculty group leaders of insights and implications.

EGYPT

The workshops unveiled specific implications for various stakeholders in the Egyptian higher education system. Faculty members tried to introduce interactive teaching and learning some years ago. However, as the receivers of educational material, students were not found to be as integrated in the teaching process as they should be. Faculty in Egypt expressed that teachers and students still need to go beyond just hearing and seeing each other, since for the teachers it is crucial to feel their students are learning as intended. Faculty members stressed the importance of keeping students engaged via making sure students are following, understanding, discussing, and taking part. They see that frequently assessing students' learning and providing feedback is helpful for the students' educational journey, where the formative assessments build their learning. Considering technology, Egypt's faculty members need to improve knowledge and build skills gradually regarding the available educational tools and technologies and then find the best fitting ones, building on that with more exploration of these technologies to know more about their capabilities. Faculty members maintained that involving students in the process would be very useful since they can express their needs, use the technology, and can inspire faculty members. Students also wish to have access to learning materials at any point, asynchronously, to enable learning at their own pace.

Faculty members were trying their best to cope with the changing nature of teaching and learning online, given the sudden shift that happened due to COVID-19. However, they did not have enough resources available for learning how to teach online, and senior faculty members resisted change to new pedagogical practices. The issue with online education was that it just transferred the classroom online, but not the content. Hence, knowledge about online course design was needed before figuring out the technology for delivering those courses. In some universities in Egypt, there were some mandated professional development courses for promotion, which led faculty members to engage in professional learning opportunities related to digital pedagogy. However, most universities did not have a clear policy regarding online teaching and learning. As a result, faculty engage in informal communities of practice to stay up-to-date regarding the latest technologies available to teach and coach students online. Most faculty found communities of

practice to be very beneficial, along with reflective practices to continuously revisit their teaching and receive feedback. Eventually, Egypt's faculty members need to embrace and learn about pedagogical principles to adapt and use such tools for teaching and learning. The workshop series put together by this project resulted in a list of recommended workshop topics that would be helpful for faculty members to have more training in:

- ▶ ICT/ Digital Pedagogy (teaching and enhancing student learning)
- ▶ Online assessment workshops to ensure academic integrity and avoid plagiarism
- ▶ Enhancing 21st century learning skills (critical thinking, collaboration, creativity, etc.)
- ▶ Integration and supporting refugees in higher education
- ▶ Online instructional design
- ▶ Intergenerational collaboration among faculty members

Regarding refugees in Egypt, all students are treated as expatriates whether they are international students, refugees, or asylum seekers. Thus, there needs to be a policy for classifying expatriate students to be able to design programs to meet the specific academic and socio-emotional needs of these diverse groups. Faculty stated that programs need to be tailored to the context of the students, since some of them are refugees and working to support themselves and their families. Some displaced students could not afford the tuition fees (about \$3,000-\$4,000 a year). Many prioritize work over studying so they can survive. There were calls from faculty for NGOs to support refugees with funding and resources. Most of the refugee students need psychosocial support and specific coaching and mentoring to be able to integrate into the new education system. Faculty members provided some supports, e.g., during office hours to help students cope with the changes in the materials and language of instruction. For example, some Syrian students were transferring from their Junior year, in which the language of instruction was Arabic. In Egypt, the sciences are taught in English, so faculty needed to support those students. In Egypt, ministries and institutions need to work together to design and implement policies to support the shift to online teaching and learning, and design online pedagogical strategies that sustain beyond the pandemic.

JORDAN

This project shed light on the present reality of higher education in Jordan. The pandemic challenged the country's resources and governance aspects, including higher education, where human capital and therefore higher education is highly valued by the public as a main national asset. The public is aware of the threat to education posed by the pandemic, and more importantly, the quality of the delivered content and transparency of the assessment process.

Faculty members, administrative bodies of public and private higher education institutions, and the Ministry of Higher Education are often addressed as the stakeholders of higher education. Students' input in this discussion gets overlooked. The conversation focused on providing student-centered content, yet students' needs are not assessed. Students need to be invited to the conversation in a round table discussion to express their views on the reality of education in order to obtain a comprehensive view of the situation to inform decision-making.

The current situation necessitates a paradigm shift in the educational system, which will be focused on a "blended" framework focused on empowering the students to become innovative, independent learners. A priority will be to provide the proper training to faculty members and ensure that the infrastructure and resources will support this change.

The results of our analysis of the current situation and challenges in higher education institutions in Jordan show that current higher education strategies and regulations need to be revised. A comprehensive strategy needs to be properly laid out to ensure that higher education learners experience a high-quality learning journey. This requires active participation of all stakeholders, particularly the Ministry of Higher Education and Scientific Research, the Council for Higher Education, and the Accreditation and Quality Assurance Commission for Higher Education. The following are lists of priorities by stakeholders. Based on data from this project, the recommendation is to better align stakeholders' priorities and include students' perspective.

Governmental level:

- Ensure the continuation of higher education despite present challenges.
- Allocate funding, resources, and infrastructure to support higher education.
- Collaborate with the respective administrative bodies and assign the roles and tasks to all institutions involved in higher education.

The Ministry of Higher Education:

- Provide continuous support to all higher education institutions in Jordan, as it serves as an umbrella that governs and organizes the work among them.
- Collaborate with higher education institutions to develop guidelines for online education that align with Jordanian culture and the characteristics of teachers and students.
- Guidelines should specify the current and desired qualities for both teachers and students and specify required training and resources to reach high quality online education.
- Construct a well-designed strategy for informing best pedagogical practices in Jordanian universities and equip faculty members with the needed skills and resources.
- Ensure equal opportunity and accessibility to teaching and learning resources by creating an “accessibility” feature to the online learning management system (LMS) to provide support to displaced students and those with special needs.

Higher education institutions:

- Improve the digital infrastructure to digitize the course content.
- Identify long- and short-term strategies to plan for the shift into a student-centered, blended learning model addressing the infrastructure, policy, budget, and collaboration criteria.
- Emphasize the role of instructional designers by providing specialized training to e-learning center staff and hire professionals to support faculty members in high quality digital pedagogy transformation.
- Work on capacity building for both teachers and students by providing training opportunities and resources to acquire the desired qualities such as training on digital pedagogy, instructional design, technology, student engagement in the online classroom, and dealing with students who have special circumstances such as refugee students.
- Provide students with support in educational, technical, and psychological challenges by means of an online platform created for this purpose.
- Implement follow-up on training programs to measure the impact on online classrooms and reflect on improving training in the future.
- Recognize and reward teachers who take the initiative and seek professional development willingly so that others will be influenced to follow their steps.

Faculty members:

- Provide continuous feedback about training programs and challenges in the online classroom.
- Participate in professional development programs actively.
- Apply newly acquired skills such as digital pedagogy in the online classroom.

LEBANON

In Lebanon, displaced learners are not only those coming from other countries; they also include a growing community of disadvantaged students from the Lebanese host community due to the current crisis. Institutions need to offer guidance and support to this broader community of displaced learners. The universities also need to recognize the value of professional development and provide faculty the time to properly engage in professional development opportunities, follow-up, and participate in evaluation mechanisms to help ensure training is effectively applied.

The Ministry of Education and Higher Education need to set plans for inclusive access, i.e., adapted admission processes, and encourage the institutions to take actions including training on SEL (social and emotional learning) and PSS (psycho-social support) for its faculty and staff who are most likely to be in contact with this specific audience. Such actions should mainly take place in the public university and the small private universities which are more affordable and attract the more disadvantaged student communities.

Given that Lebanon is a small country, adopting a country-level training strategy might support effective use of scarce resources, help to cultivate a community of practice among faculty in the same disciplines from the different universities, and connect those who tend to work in silos.

Resources such as electricity and connectivity will continue to be an issue in Lebanon in the forthcoming years. The Ministry of Education and Higher Education (MEHE) might lead the efforts to create a support structure for disadvantaged students to have access to reliable facilities to pursue their studies as long as programs are maintained online. A list of priorities was generated by faculty and participants of this project from Lebanon:

Faculty training in human centered design, instructional design and adapted delivery methods

There is a need to develop a training framework and make training mandatory by tying it to career growth incentives. Many of the private universities have professional development programs, but the faculty don't necessarily see the need to benefit from them unless they need them for promotion purposes (or if it is compulsory in doctoral school). Most importantly, they don't necessarily apply what they learn and there are no follow-up mechanisms. There is also a need to attain buy-in from universities.

Review curricula for burden, cut what is unnecessary for the transition to online and blended learning

Recommendations for the team highlighted the importance of having faculty work together to determine the change in content when moving online. For example, conversations about what needs to be cut from the curriculum and how much of it to change are important to be had. By collaborating, faculty would generate a condensed version of their curricula to be used in online learning.

Create a network platform for peer learning and best practices

Similarly to Egypt and Jordan, peer learning and communities of practice were also found to be beneficial. In the lack of a common approach by the ministry or universities, it is important for faculty to form communities of practice and learn from one another. In this process, expressly involving the public university in Lebanon is also crucial.

VII. Teaching in Higher Education 4.0 (THE4.0): Refugees, the “Canary in the Coal Mine”¹³

Higher Education 4.0 (HE4.0) encompasses the different ways and approaches that Higher Education institutions can, and are, aligning their services and curricula to prepare future graduates for work.¹⁴ HE4.0 is a response to and a result of the fusion of the digital, biological, and physical worlds, as well as the growing utilization of new technologies such as artificial intelligence, cloud computing, robotics, and 3D printing, among others.

The insights gained from the MENA region, particularly in the context of COVID, reveal higher education’s accelerated entry into the HE4.0 milieu and an education ecosystem wholly unprepared for the transition. The need for Teaching in HE.4.0 (THE4.0) was crystalized in this project. Refugee and displaced learners are the “canary in the coal mine.” That is to say, their experiences reveal the larger weaknesses across the education ecosystem. They are the harbinger of sustainable higher education teaching and learning. Reflecting on their experience, and building strategy that speaks to it, will serve all learners.

Those on the front line, teachers, need to be readied for the paradigm shift, from being a provider of knowledge to a designer of learning. THE.4.0 is a design science, fostering innovation, particularly in technology–enhanced learning. Re–framing teaching as design emphasizes the creative problem–solving needed to balance pedagogical, logistical and technical considerations within specific educational contexts, tailored to learners’ needs.¹⁵

*Teaching in higher education will necessarily shift the balance of its efforts towards a greater investment in design, as a way of coping with otherwise intolerable pressures on staff and resources.*¹⁶

A prepared professoriate must be a call to action. Our students are depending on them.

¹³ An allusion to caged canaries (birds) that miners would carry down into the mine tunnels with them. If dangerous gases such as carbon monoxide collected in the mine, the gases would kill the canary before killing the miners, thus providing a warning to exit the tunnels immediately.

¹⁴ <https://www.tandfonline.com/doi/full/10.1080/23752696.2020.1816847>

¹⁵ <https://bera-journals.onlinelibrary.wiley.com/doi/abs/10.1111/bjet.12683>

¹⁶ Teaching as design , Goodyear, Peter
HEDSA Review of Higher Education Vol. 2 2015 www.herdsa.org.au/herdsa-review-higher-education-vol-2/27-50

Appendices

A. Methods

The leadership teams in Egypt, Jordan, and Lebanon were asked to summarize the implications of their discussions in each of the 5 workshop topics, as they applied to facilitating inclusive digital pedagogies in higher education in the MENA region. The following summarizes their findings.



For me it was a pleasant experience. Meeting new people from different parts of the world and participating in discussions about higher education was very useful and enjoyable. Being part of a team working toward a common goal and taking different roles have taught me a lot on personal and professional levels.

- Rami Jaradat, Jordan Team



I enjoyed working with international project leads and faculty members from various countries in the MENA region. The amazing thing to me in this experience is working with Egyptian colleagues living in other countries with different time zones! [...] I wish to work on more of such noble projects again with such a wonderful team and hoping for newcomers.

- Rehab Rayan, Egypt Team



I also enjoyed working on an international project that comprised diverse faculty members from across a plethora of countries. For me, it has been the first time to engage in a project with such a flexible and collaborative project management approach. [...] There has been of course some challenges and obstacles, e.g. the low response rate at the start, the hard work to market and promote the workshops ...etc. However, all that paid off and we had a very good response rate at the end.

- Mona Younes, Subject Expert: Refugee Education



Collaborative research is a participatory research approach that enables researchers (as outsider and insiders) to have voice and agency through the writing process. I think this process adds to the authenticity of research results and recommendations.

- Amneh Al-Rawashdeh, Jordan Team



I'm just glad I'm being part of the change the whole world is going through now! A blended teaching and learning framework is the new reality of higher education.

- Lina Kasawneh, Jordan Team

Purpose of the Methodology

The methodological approach adopted for the study was designed to leverage the skills of the project team and available technology in order to collect multiple streams of data that could be used to examine the research objectives. Two secondary design principles taken into consideration when developing the methodology were:

1. Reinforcing democratic engagement and collaborative science values within the research team and with the research participants.
2. Creating opportunities for the project team to develop their qualitative research capabilities

Context

Prior to outlining the methodology of the project, it is essential to understand the context within which the study was completed. The study was intended to be a series of live JAM style focus groups in three MENA region countries (Egypt, Lebanon and Jordan) scheduled for Summer 2020. However, due to COVID-19 lockdowns and travel restrictions the research team had to re-design the research methodology to fit within the restrictions. This situation led to the establishment of a Project Team comprised of:

- Faculty within each of the three focus countries (Country Teams),
- Faculty outside of the region with expertise or a specialization in one of the focus areas (Domain Experts)
- A Project Team Leader and Support Team to provide direction, coaching and support to the research team.

This Research Team completed the following activities during the research process:

- Literature Review of existing research and reports
- A total of 15 faculty led virtual workshops across three countries (Egypt, Lebanon and Jordan)
- Distribution of a MENA region-wide survey to elicit data and insights from across the MENA region.

Virtual Workshops/Jams

The virtual workshops were designed to provide a comfortable environment where faculty were able to share openly about their experiences in a language they preferred. This necessitated the Country Team to be made up of faculty from the same or similar institutions to the workshop participants. The virtual workshops provided an opportunity to focus on each of the five topic areas while also illuminating the interconnectivity of the topics from the perspective of the faculty.

Sampling Strategy

Within each country, the Virtual Workshops were promoted as broadly as possible to ensure a diversity of perspectives from both public, private and not for profit institutions. The countries of focus have a large number of higher education institutions and faculty. As a result, it was not possible to organize participants from all institutions or organizational levels but effort was taken to make sure the sample was as representative as possible.

Project Team

The project team consisted of Country Team members, Domain Experts, a Project Leader and Project Support members. Each Country Team was responsible for facilitating five Virtual Workshops: Refugee Education, Education Technology, Instructional Design, Learning & Teaching and Faculty Development. Each of these five topic areas had a Domain Expert who moved around the country teams throughout the project to support the development and facilitation of that topic. The workshops were conducted bi-weekly to allow time for the Domain Experts and Country Teams to have time to prepare, debrief and write research notes. Figure one provides an overview of the workshop schedule, structure and roles.

Limitations

As mentioned above, the original intention of the research design was to host in-person 'JAM' sessions in the participating countries. However, due to COVID-19 restrictions and taking into consideration the safety of participating faculty and the project team, the new model was developed. Although the sessions did not happen in-person, the re-design paid special attention to maintaining the integrity of the research objective and research questions.

Sampling Strategy

The purpose of the survey was to collect data from a broadrange of faculty within the MENA Region and to ensure all faculty who were interested in sharing their experiences had the opportunity to do so. The survey was distributed throughout the region by the rcountry team leaders and within the three focus countries.

Survey Development

The survey was developed by a sub-group of the project team who had experience in survey development and an understanding of the MENA Region and the challenges faced by faculty. The survey was reviewed by the broader project team and revised based on feedback. The final version of the survey was written in both English and Arabic and participants were able to respond in the language they felt most comfortable using.

Data Analysis Part I

All data from the virtual workshop recordings were cleaned and the data coding structure prepared. The project team was broken into sub-teams to code the virtual workshop transcripts with each sub-team responsible for having a primary coder and reviewer for each of the workshops, with the whole team having to be comfortable and in agreement with the coding before finalizing it.

The research data was organized into five 'parent' codes that aligned with the five virtual workshop topics and was broken down further into subcodes. The project team was also able to create 'emergent' codes if there were themes that sat outside of the analytical model.

Data Analysis Part II

RTI International was hired to analyze the qualitative and quantitative data from the online surveys, and the transcripts from each of the 5 workshops for each of the 3 countries: Egypt, Jordan, and Lebanon. For the surveys, we analyzed **quantitative data** using descriptive statistics (e.g., frequencies and means) and inferential statistics to assess relationships between variables. The primary relationships we analyzed were between study outcomes and (1) perceived level of teaching experience (rated on a scale of 0 ('no experience') to 100 ('very experienced' – see Figure 1); (2) field of discipline;¹⁷ and (3) country (focusing on Egypt, Jordan, and Lebanon, which comprised almost 90% of the responses). We tested these relationships depending on the type of variables involved, e.g., via Chi Square, t-tests, or ANOVA models. A more detailed report from the survey and focus group results is shared in the Appendix.

For the **qualitative survey items and focus group responses**, we had 2 independent researchers code them for recurring themes. The researchers met multiple times to review their codes and to gain consensus. For the survey items, initial agreement was about 50 percent. Differences occurred at the level of detail of the coding, with one researcher focused on coding more fine-grained details. When the level of detail was agreed upon, agreement rose to above 80 percent. Final review got agreement to above 95 percent.

¹⁷ We combined disciplines to create fewer categories for statistical comparisons: comparisons with small counts (e.g., < 5 individuals representing a specific discipline) result in uninterpretable or meaningless findings. An expert in the MENA region higher education system advised us to combine Engineering, agriculture, business, and IT, and to combine health sciences, nursing, dentistry, and veterinary into a category entitled 'health-related fields.'

The 2 independent researchers then reviewed their coding of focus group themes against the coding done by the country teams (Egypt, Jordan, and Lebanon). These teams were made up of faculty who participated in the workshops in which the focus groups were held. The coding was done at a more general level by these teams; however, their summary reports included finer grained themes, all of which were consistent with those identified by the 2 independent researchers. These results indicate **strong inter-rater agreement for the resulting themes presented in this report.**

Data Sources and Research Participants

RTI analyzed data from the survey responses of **148** postsecondary educators.¹⁸

¹⁸ 89% of the sample was from Egypt, Jordan, or Syria (see Figure 1). The other 12% were from countries in- and outside the MENA region, e.g., Turkey, Canada, Great Britain, and the United States, with few representatives from each (e.g., often only 1 person). Therefore, we focus on the 3 primary countries represented, throughout this report.

B. Digital Tools

The following is a list of digital tools that are being used in each country for teaching and learning that were mentioned in the focus groups.

Egypt	<ul style="list-style-type: none">▶ Acadox (platform for using internet, accessed offline)▶ Apple-fi▶ Moodle▶ Google Classroom▶ Blackboard▶ Facebook Live▶ Zoom▶ Microsoft Teams▶ WhatsApp▶ EduCreation (iPhone app)
Jordan	<ul style="list-style-type: none">▶ Moodle▶ Zoom▶ YouTube▶ Google Classroom▶ Blackboard▶ WhatsApp▶ Telegram
Lebanon	<ul style="list-style-type: none">▶ Blackboard▶ Moodle▶ Microsoft Teams▶ Microsoft Forms▶ Office 365▶ Zoom▶ Skype for Business▶ Google Hangouts▶ WhatsApp▶ OER Commons/OER Leb (http://fad.blogs.usj.edu.lb)

Survey

SECTION 1: GENERAL INFORMATION

1. What is your gender? (list)
2. Which country do you live/teach in? (list of MENA countries)
3. Which city do you live/teach in? (text)
4. What is your discipline?
 - a) Faculty of Business
 - b) Faculty of Medicine
 - c) Faculty of Arts and Sciences
 - d) Faculty of Health Sciences
 - e) Faculty of Engineering and Agriculture
 - f) Faculty of Nursing
 - g) Faculty of Information Technology
 - h) *Other*
5. Do you teach in the undergraduate or graduate level, or both? (list)
6. Which languages do you teach in?
 English Arabic French Other

SECTION 2: TEACHING AND LEARNING

1. How long have you been teaching? (less than 3yrs, 4-7yrs, 8-15yrs, 16+yrs)
2. What is the approximate size of the largest class you taught? (enter #)
3. What is the approximate size of the smallest class you taught? (enter #)
4. Have you had any university-level teaching experience in a national context outside of your own? (Yes/No)
5. (*if question above = Yes then...)
In what other countries have you had teaching experience? (text)

6. Please rate your skill level in each of the following: (Likert scale table format)
 - a) Communication skills
 - b) Technological literacy
 - c) Time management
 - d) Assessment and evaluation
 - e) Teaching students how to apply concepts
7. As a teacher, what is the biggest challenge you currently face? (text)
8. Name three things that would improve your teaching effectiveness? (text)
9. Rank the three things you mentioned above in order of importance? (text)

SECTION 3: DIGITAL LITERACY, FLUENCY AND ACCESS

1. How would you rate the quality of your past online teaching?
 - I did an excellent job
 - I did a good job
 - I did just fine
 - I did not do well
 - I did an awful job
2. Please rate your level of comfort with online teaching. (Likert scale)
3. What kinds of educational technology/tools are available to you as a faculty member at your institution? (text)
4. Have you experimented with any educational technologies? If so, which ones and what was your impression? (text)
5. How would you rate your knowledge of educational technology? (Likert scale - where 0 = nothing and 5 = expert)

Section 3 continued:

6. As a teacher, what is the biggest challenge you currently face when teaching with technology? (text)
7. Name three things that would improve your online teaching effectiveness? (text)
8. Rank the three things you mentioned above in order of importance? (text)

SECTION 4: INSTRUCTIONAL DESIGN

1. Have you heard of the term "Instructional Design"? (Yes/No)
2. (*if question above = Yes then...)
When was the first time you heard of the term "Instructional Design"?
3. (*if question above = Yes then...)
Have you attended any workshops or training related to instructional design? (Yes/No)
4. What resources are available to you, which might help you further your knowledge on instructional design and online teaching? What is the source of most of the resources? (text)
5. What kinds of resources do you believe you need in order to further your knowledge and skills in instructional design? (text)
6. As a teacher, what is the biggest challenge you currently face when planning (instructionally designing) your class/s? (text)
7. Name three things that would improve your instructional design effectiveness? (text)
8. Rank the three things you mentioned above in order of importance? (text)

SECTION 5: REFUGEE EDUCATION

1. Have you ever had any students from refugee backgrounds in your classroom? (Yes/No/Don't know)
2. Are you generally able to tell whether or not a student is of a refugee background or do you think it's possible that some blend in with the local students? (text)
3. Does the university you work for point out refugee student presence in your classroom or do you normally identify them (or perhaps not) yourself? (text)
4. Do you believe that students with refugee backgrounds need special accommodations in class? (Yes/No/Sometimes)
5. Does the university you work for provide any academic or social support for refugee students? If yes, please specify. (text)
6. Have you ever had to make special accommodations in class for a student due to their refugee background? If yes, could you please give an example? (text)
7. If you have had refugee students in your classroom, which factors, in your opinion, seem to most adversely affect these students' academic performance? (text)
8. As a teacher, what is the biggest challenge you currently face when supporting refugee students in your class/s? (text)
9. Name three things that would improve your effectiveness when supporting refugee students in your class/s? (text)
10. Rank the three things you mentioned above in order of importance? (text)

SECTION 6: PROFESSIONAL DEVELOPMENT

1. Does your institution offer training opportunities in any of the following domains:
 - a. Higher Ed Pedagogies
 - b. Digital Pedagogies
 - c. Higher Ed Management
 - d. Technical training
 - e. Research tools and methodologies in your domain
 - f. Advanced and recent trends in Domain-specific topics
2. When is the last time you attended a training availed by your institution? (text)
3. How many training sessions by your institution did you attend in the past year and what were the topics? (text)
4. Please indicate any other training opportunities you independently made use of in the past 12 months.
 - a. Training offered by other institutions in the country
 - b. Training offered by other foreign institutions
 - c. Professional Certification programs (e.g. Microsoft certification)
 - d. Online courses
 - e. Other. Please specify (*avail a field to fill)

5. As a teacher, what is the biggest challenge you currently face when it comes to professional development? (text)
6. Name three things that would improve your ability to access professional development opportunities? (text)
7. Rank the three things you mentioned above in order of importance? (text)

SECTION 7: OPTIONAL CONTACT INFORMATION

If you are interested in receiving further information and offers, provide contact information. (text)

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