مؤسسة عبدالله الغرير للتعليم
Abdulla Al Ghurair Foundation for Education

ONLINE LEARNING IN THE ARAB WORLD: AN EDUCATIONAL MODEL THAT NEEDS SUPPORT
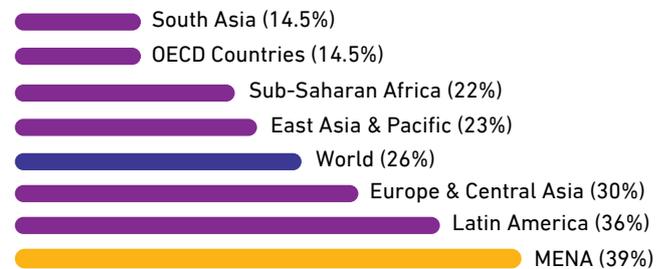
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EXECUTIVE SUMMARY

The Arab world is at a crossroads. With youth, the region's greatest asset, facing immense challenges, including low quality of education, high unemployment rates, and a changing employment landscape, governments need to rethink their approach to education and training. This includes considering innovative models to support youth's access to quality higher education that effectively prepares them for an unpredictable future. This policy brief presents the perspectives of Arab youth and employers on skills building, career readiness and the potential role that online and blended learning (a combination of face-to-face and online) can play in addressing these challenges. The brief concludes with recommendations that offer substantial promise for improving the educational experiences and career prospects of youth in the region.

THE PERSISTENT SKILLS GAP IN THE ARAB WORLD

There is evidence to suggest that youth across the Arab world are at a disadvantage compared to their global counterparts when it comes to obtaining a quality education that effectively prepares them for the world of work. Although enrollment rates in higher education have more than doubled in the last decade and will double again by 2030,[1] on average, fewer Arab youth enroll in higher education compared to youth globally.

The latest regional enrollment rates are at 31%, which is six percentage points below the global average.[2] This, in addition to other factors, has resulted in a skills gap, higher than in any other region. According to the World Bank,[3] almost 40% of Arab employers[i] believe that the skills gap is a major impediment to business growth, compared to 26% globally and 14.5% across the Organisation for Economic Co-operation and Development (OECD), as shown in Figure 1.

Figure 1. Percentage of employers who believe that the skills gap a major impediment to business growth

- South Asia (14.5%)
- OECD Countries (14.5%)
- Sub-Saharan Africa (22%)
- East Asia & Pacific (23%)
- World (26%)
- Europe & Central Asia (30%)
- Latin America (36%)
- MENA (39%)

Source: World Bank, 2013

In addition, Arab youth face the highest unemployment rates in the world, with university graduates making up nearly 30% of the total unemployed pool in the region,[4] compared to 6% in the OECD[5] and 2.1% in the United States,[6] as shown in Figure 2. While many factors contribute to high unemployment rates, such as political instability and the labor markets' inability to generate enough skilled jobs,[7] the relatively low quality of higher education, which does not effectively prepare Arab graduates for employment, is no doubt compounding the broader challenges related to employment.[8]

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i. Average based on data for Egypt, Jordan, Lebanon, Morocco, Tunisia, Palestine, Yemen & Djibouti

Figure 2. University Graduate Unemployment Rate

- ▬ 2.1% United States (2018)
- ▬▬ 6% OECD (2017)
- ▬▬▬▬▬▬ 30% Arab World (2017)

Source: Bureau of Labor Statistics, 2018; World Bank, 2017; World Economic Forum, 2018

Labor markets are transforming worldwide, both in terms of the number and nature of jobs that are emerging. If not addressed, Arab youth's lack of readiness for the labor market may be further exacerbated in the medium or long term. It is estimated that on average 47% of work activities in the largest economies in the region[ii] are likely to become automated in the coming years.[9] This shift will require new skill sets, which will transform the way people work.[10] For example, in the Gulf Cooperation Council (GCC) countries alone, 21% of core skills that will be required by 2020 will be different to those that were needed in 2015.[11]

Although we cannot foresee the ways in which work will change beyond that, global trends indicate that people will not only be expected to be more educated, but they will need to study throughout their careers to adjust to more regular changes in labor market needs.[12]

These shifts require Arab countries to rethink their approach to education, and specifically higher education, to ensure that youth do not fall further behind the rest of the world. According to a recent regional World Bank report, higher education programs in the region are still "skewed toward theory over practice [and] tend to have outdated curricula focused on theory and memorization, as opposed to practical knowledge and analytical reasoning."[13] This is despite strong evidence suggesting that practical training and interactive learning approaches are more effective and help "graduates to broaden their perspectives and [equip] them with the skills to enter the labor market."[14]

The mismatch between the reality of education in the region and the changing world of work necessitates exploring new approaches to achieve both access at scale and quality education while preparing youth to thrive in their careers.

THE GLOBAL RISE OF ONLINE AND BLENDED LEARNING

One relatively new model that holds promise for addressing some of the current challenges facing universities in the Arab world is online learning. This model is more flexible, scalable, and potentially more affordable while maintaining quality, when delivered effectively.

In particular, it provides new educational opportunities for those who are currently not well served in the face-to-face model, such as students trying to juggle family, work and studies. For example, data shows that 80% of students enrolled in online learning in 2014 were either working full-time (60%) or part-time (20%).[15] More recent studies from five American universities providing both online and face-to-face programs similarly showed that online learning can increase access to higher education for certain groups of students, including women and older students, with data revealing that on average, females were 21% more likely than males to take their courses online than face-to-face at four-year institutions, and the average age of an online student was seven years older than that of someone studying in-person.[16]

There is also evidence that online learning can reduce costs while increasing reach. For example, Georgia Institute of Technology, the online education platform Udacity and telecommunications company AT&T joined forces to create an online master's degree in computer science that is cheaper and more scalable than the on-campus model. Not only does the online program cost one-third of the price, but it has also served three times more students within three years,[17] increasing the capacity of the program by 97%.[18]

ii. Average based on data for Saudi Arabia, Bahrain, the UAE, Qatar, Kuwait, Egypt and Morocco

Finally, and perhaps most importantly, growing evidence points to the similar educational outcomes in online and face-to-face instruction, with blended learning being seen as having the greatest impact on student learning.[19][20]

A study that compared the performance of undergraduate university students studying the same discipline online and face-to-face found "no significant differences in test performance whether class material, and the subsequent test, was presented face-to-face or online".[21]

Similarly, another study that compared the outcomes of two groups of health professionals studying the same 18-month-long course, one online and one face-to-face, found that "both groups completed the course with similar academic performance".[22]

Across the globe, online learning is gaining traction as a new pathway or as a supplement to traditional education. According to data from 2018,[23] online education platforms, such as Coursera or EdX, offering open access courses online from hundreds of the leading universities and colleges across the world, also known as Massive Open Online Courses (MOOCs), reached 101 million enrollees across the world. In the United States (U.S.), more than 30% of on-campus students are taking at least one online course as part of their higher education.[24] As students begin to turn to online learning, universities too are investing more heavily in the model. Data collected from 1,844 higher education institutions in the U.S. found that 60% were already offering at least one online degree in 2014, an increase of 12 percentage points since 2012.[25]

Other players, in particular the private sector, have also begun to partner with education providers and institutions to capitalize on workforce development opportunities emerging from online learning. In 2013, leading technology companies such as Amazon, AT&T and Google, teamed up with Udacity to develop project-based training programs.[26]

Other companies have relied on MOOCs to train their employees at a lower cost than traditional in-person trainings. Examples range from Google, which enrolled around 80,000 employees in a Udacity course, to Boeing, which enrolled up to 1,500 engineers in advanced MIT courses online.[27]

In the Arab world, where online learning is lagging behind, interest has been growing mostly through global and regional education platforms rather than universities. Although regional platforms, which have been offering MOOCs or other short training and soft skills courses since 2012, have attracted millions of users across the region,[28][29] completion rates have remained low which, according to global data, were less than 4% in the academic year 2017-2018.[30] Despite these developments, the limited number of fully online degrees in the region suggests that most universities and governments are still reluctant to invest in online education.

## PERSPECTIVES ON ONLINE LEARNING IN THE ARAB WORLD

Although student engagement in online learning has been growing in the Arab region, data on the trends around it remains scarce. In particular, little is known about the perspectives of youth and their prospective employers on the role online learning can play in addressing the educational and employment challenges facing the region. This pilot study aimed to better understand three key questions:

1. According to employers and university students, how prepared are Arab youth for their careers?
2. How are Arab youth adapting to new models of learning?
3. What are Arab youth and employers' perceptions of online learning?

To address these questions, two online surveys were administered to youth and employers between October 2018 and January 2019. Over 1,000 Arab university students (70% undergraduates and 30% graduates) were asked closed-ended questions revolving around six themes: study habits, learning preferences, experience with online learning, university experiences, post-graduation plans and career aspirations.

In addition, 57 human resource departments of companies based in the region, consisting mostly of multinational (56%) and regional companies (28%), were asked about the skills and competencies they are looking for in prospective candidates, their attitudes towards skills building, their experiences hiring and training young Arabs, and their perceptions of online learning.[iii] Figure 3 and 4 present the sample demographics of the two surveys.

Figure 3. Sample Demographics - Student Survey

N = 1034
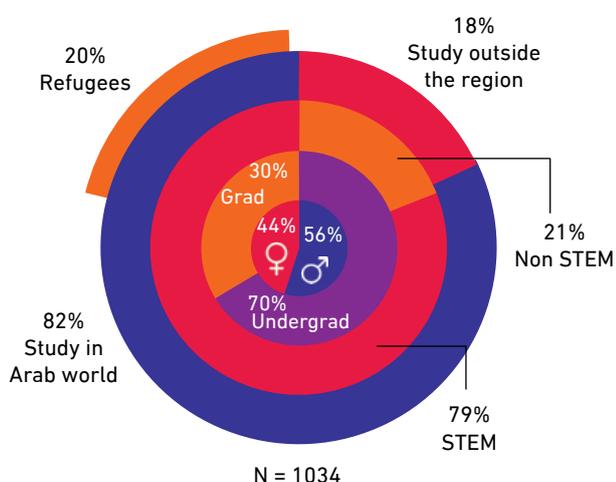
Figure 4. Sample Demographics - Employer Survey

Respondent Location
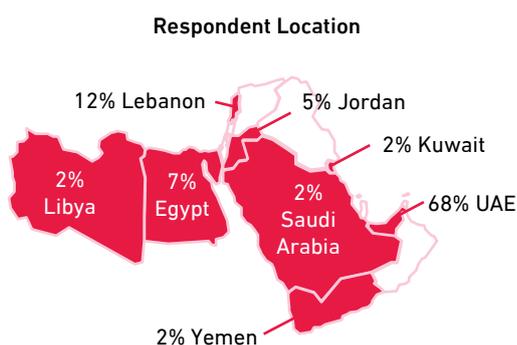
FINDINGS

1. There is a mistmatch between the skills employers value and those students want to develop.

The study found that over one third of surveyed employers are unable to find graduates with the skills required for their jobs. When asked what they believed to be the main reason for the skills gap among youth in the region, employers primarily referred to deficiencies in the education system, with "schools and universities [not providing] sufficient training" (58%). It was followed by students' "lack of awareness of required skills" (46%) and students "not taking additional courses outside education/work" (42%).

This reinforces previous studies in which private sector employers reported that Arab graduates are missing a combination of hard and soft skills needed to qualify for jobs[31] and that they do not know what employers are looking for.[32] These studies have also found that employers believe the education system is the main culprit behind the skills gaps and that higher education institutions are not effectively preparing students for a smooth transition to the job market.

Another discrepancy between employer and youth perspectives is related to the skills each believe will be needed in the future. When surveyed students were asked about the skills they hope to develop, they highlighted traditional skills such as leadership (46%), English writing (37%), research (35%), and time management (32%), as shown in Figure 5. While all of these skills are important and needed for success in the labor market, the responses shared by employers were more focused around analytical, technical and communication skills. More specifically, surveyed employers are looking for critical thinking skills (44%), digital skills (43%), and communication skills (42%).

iii. This is a pilot study and as such the samples in both surveys are not representative of the broader populations of youth and companies in the region, but rather present an indication of the perspectives of a subset of these groups.

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Interestingly, despite employers' emphasis on the lack of preparation of Arab graduates for work, when asked about the most important factors they consider when hiring, more than 80% identified attitude as being by far the most important characteristic. Employers stated that it was more important than their skills (32%) or work experience (53%). While the term could be interpreted in a number of different ways, research shows that one's attitude, which is typically described as having either a fixed or a growth mindset, is a better predictor of success than the Intelligence Quotient (IQ).[33]

In other words, students who have a more flexible attitude and believe that their abilities can be developed through hard work and perseverance (growth mindset), are more likely to be resilient and increase their chances of success as compared to those who believe that their basic abilities are fixed traits (fixed mindset).[34]

Figure 5. Mismatch between what employers value and what students want to develop
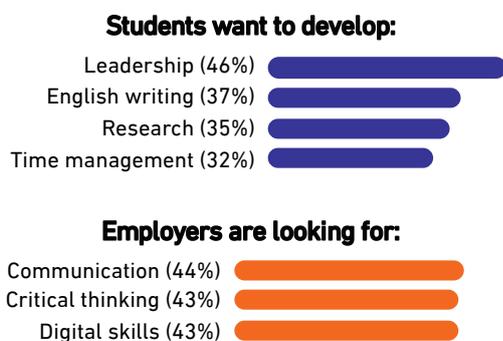
2. Arab youth view the continual pursuit of education as the main route to securing a better future.

When asked about their plans beyond graduation, the survey found that the top three preferences of Arab university students are: working and studying simultaneously (30.7%), finding a job (26%), and pursuing further studies (21%). This means that almost 52% of university students want to pursue masters, PhDs, or other advanced studies.

The most cited reasons for furthering their education included wanting to specialize (42%), wanting to have an advanced degree for the careers they want to pursue (23%) and the desire to go into academia (18%), as shown in Figure 6 below.

Figure 6. Main reasons why students want to pursue further education

The students' strong commitment to education seems to indicate that they believe in meritocracy, whereby higher qualifications should be associated with better jobs or a better future.

However, that is not necessarily the case in the region. Studies find that the private returns to education in the Arab world are the "lowest compared to other regions, with an additional year of schooling adding around 5.4% to labor earnings compared to a world average of 7%".[35] In particular, the returns are the lowest at the tertiary level, with a rate of 8.9% versus 16.8% globally.[36]

This can be explained by a number of factors on the supply and demand sides, including the low quality of education, the skills gap previously discussed, the nature of local economies and the high supply of graduates seeking jobs.[37] While the pursuit of further studies is not a pathway that should be discouraged among Arab youth, it is important to ensure that they pursue them for the right reasons and are aware of alternative pathways they can embark on to achieve career success.

3. Arab youth are turning to online learning, but their misconceptions limit what they would use it for.

When it comes to their educational experiences at university, the survey revealed that online learning is relatively popular among Arab students, with more than half (55%) of surveyed university students having signed up for at least one online learning course. Among those, graduate students and students studying outside the Arab world reported rates that were 10% and 15% higher than their counterparts, respectively.

The survey also found that students use online learning for two primary reasons. The majority (47%) signed up for online courses because they were interested in a topic that was not offered at their university, while around 38% said that they did so to gain more knowledge about the content they learnt in class.

Despite this promising trend, the survey results illustrate that Arab youth still have misconceptions around online learning, which seem to limit their openness to pursuing it for traditional degrees. The top three concerns students have are that they will "not get support if they do not understand something" (63%), that it is "easier to pass than an in-person program" (61%), and that there is "no interaction with faculty and students" (46%).
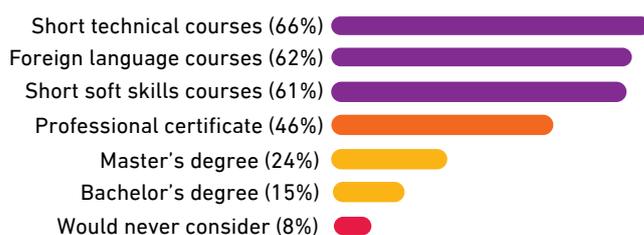
Given the lack of accreditation and that most surveyed youth completed individual courses, which do not provide as much engagement and support as degree programs online, these results are not surprising. Moreover, they reflect the same concerns students in the U.S. typically have of online learning.[38]

Given these misconceptions, reinforced by the fact that degree programs completed online are not accredited by Arab governments and are not yet widely recognized by employers, when asked

in which cases they would consider pursuing online learning, students showed a preference for enrolling in short courses, not full degrees.

In fact, their top three preferences are short technical courses (66%), foreign language courses (62%) and short soft skills courses (61%), as illustrated in Figure 7 below.

Figure 7. Reasons for pursuing online learning in the future

Short technical courses (66%)
Foreign language courses (62%)
Short soft skills courses (61%)
Professional certificate (46%)
Master's degree (24%)
Bachelor's degree (15%)
Would never consider (8%)

Only 8% of surveyed students said they would never consider online learning. This is also reflected in the choices made by those who had previous experiences with online learning. They mostly signed up for "technical skills" (63%), "soft skills" (53%) and "academic skills" (49%) courses, which were largely "individual certified courses (MOOCs)" (57%) and "individual uncertified courses" (40%). Around 30% reported that they also signed up for "professional certificates" and 18% for "other" types of courses or programs (not specified).

As this study only surveyed current university students enrolled in face-to-face programs, it did not capture the perspectives of non-traditional students,[iv] who according to research in the U.S. are the most likely to pursue online learning. Indeed, as shown in a recent study, students in the online programs were, on average, seven years older than those studying on campus.[39]

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iv. Non-traditional students are those who do not follow the traditional education journey (earn a high school diploma, immediately enroll full time at university, depend on parents for financial support, do not work full or part time while studying). They are usually low-income, first-generation, above the age of 23, financially independent, living off campus and attending part-time (National Center for Education Statistics, N.D).

## 4. Arab youth still prefer the blended model of learning.

The approximately 500 surveyed students who tried online learning are overall satisfied with their experience and those who have not are open to try it in the future. Of those who experienced studying online, only 1% reported that they would not recommend online courses to their friends, while 64% reported that they would recommend all or most of the courses to their friends.

Although the experiences and effectiveness of online learning can vary significantly depending on the quality of the course content and instructors, technology used, and the sense of online community,[40] the survey found that slightly more surveyed students reported learning more in their online classes (28%) than in their university classes (24%), whereas 36% reported that "they were not comparable." The differences were more significant among Al Ghurair Scholars who completed the MITx MicroMasters in Supply Chain Management, one of the top graduate certificates online recognized by industry leaders, equivalent to half of a master's degree at the Massachusetts Institute of Technology (MIT).

Around 46% of 52 surveyed Scholars considered the program better than their in-person experience during their undergraduate studies, and 100% stated that they would recommend the program to their friends or family.

Yet, while surveyed students have largely benefited from studying online, the majority (63%) reported that their preferred model for studying is the blended option, as show in Figure 8. It is followed by "a classroom setting" (28%) and "online" (9%).[v] Similar results were found in the United States where almost 80% of 35,000 surveyed university students prefer the hybrid, or blended, model of learning. [41]

Figure 8. Surveyed students' preferred model for studying
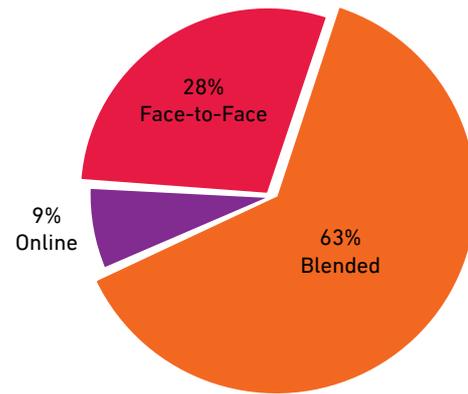
This preference reflects the growing global evidence illustrating that blended learning is one of the most effective educational models.

Indeed, studies have demonstrated the positive effects of blended learning on student interest in the topic, attendance,[42] and performance.[43] In a pilot study conducted at San Jose State University, it was found that 91% of the students in the blended course passed the final exam, compared to 59% in the face-to-face lecture class.[44] The study concluded that the combination of high-quality online courses and highly structured in-class instruction can positively transform student learning and increase success.

5. Arab employers are becoming more open to online models of education and training.

Finally, this study wanted to test employers' openness to online learning. Interestingly, through a series of scenario questions, the results found that the 57 surveyed employers are relatively open to the online model of education and training. This was illustrated by the fact that only one in four said they would prefer to hire someone who had completed a face-to-face bachelor's degree over someone who had earned the same degree from the same institution online. Others said they would not differentiate between the two potential hires.

v. No differences in preferences were observed among students based on their location, except for students based in the Gulf countries, who were around 8% more likely to prefer studying online as compared to studying face-to-face.

In addition, over 80% of surveyed employers stated that they would be open to hiring someone with a master's degree online from a good quality international university, and over 30% would pay a higher salary for an employee with an online credential (i.e. not a full degree) compared to one without such a credential.

Finally, when asked what matters most when hiring employees with online credentials, the respondents ranked the quality and reputation of the institution from which the potential employees secured their credentials highest (68%), followed by the accreditation of the university providing the degree (60%) and only then the accreditation of the degree by the local government (47%), as shown in Figure 9 below.

Given how recently online credentials emerged in the Arab world, these responses are a positive indication that employers are becoming more open to conducting education and training online, following similar trends seen internationally.

Figure 9. What matters most when hiring employees with online credentials according to surveyed employers

60%
Accreditation by the institution

68%
Reputation of the institution

47%
Accreditation by the government
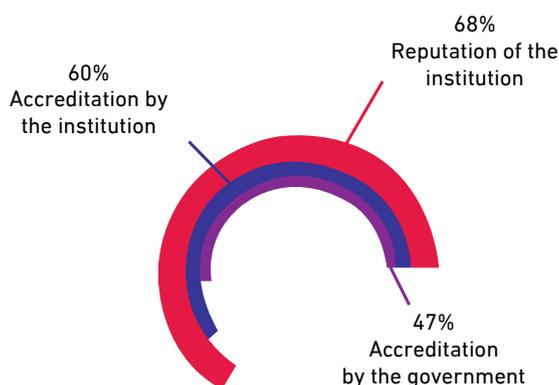
CONCLUSION

This pilot study provides initial evidence that perceptions around online learning in the region are positive, with youth open to adopting it as a way to complement and/or supplement traditional education, which they do not feel is preparing them well for their careers. However,

given the lack of exposure to high quality programs online, some misconceptions around the quality of online learning exist that require debunking.

In the case of employers, surveyed companies do not seem driven by local government policies but are more focused on the quality and reputation of the qualifications gained by potential employees. Nevertheless, the lack of government accreditation is likely a strong factor limiting the broader acceptance of online learning among all stakeholders.

RECOMMENDATIONS

Two policy recommendations offer substantial promise for addressing the skills gap in the Arab world. Although it is difficult to predict the future of labor market trends in the region, relevant stakeholders in education and employment should adapt to provide and recognize more flexible educational opportunities that offer youth transferable and practical skills needed upon graduation. In particular, this involves:

1. Building stronger links between higher education and employment by:

a. Ensuring higher education programs and specializations in the region are regularly reviewed and relevant to the needs of the labor market. This would require education providers and employers to work closely together, such as coordinating on or jointly designing program curricula and course content, jointly delivering specialized courses or programs, industry offering on-the-job trainings to students, exchanges or joint projects between faculty and industry professionals.[45]

b. Encouraging early exposure to the workplace for university students by promoting experiential learning. Commonly defined as a form of learning based on direct life experiences aimed at adding "a direct experience component to (...) traditional academic studies",[46]

experiential learning encompasses structured activities such as field projects, internships or professional work experience.

c. Building transferable skills among university students to ensure they can succeed post-graduation, regardless of labor market conditions and changes. A special focus should be placed on helping students develop a growth mindset, which is the most demanded characteristic by prospective employers and is associated with lifelong learning and career success.[4748] These include emphasizing the learning process rather than individual attributes such as skill or intelligence among students, building a community based on a culture of cooperation rather than of competition, and providing mentoring opportunities.[49]

2. Recognizing new models of learning and investing in online and blended education and training solutions:

a. Producing and sharing evidence of the impact of quality online programs and certifications that can address key national educational and workforce development challenges.

b. Accrediting high quality online education programs by recognized universities or providers that address government concerns around quality, student engagement, and security.[vi] Such opportunities can not only serve as workforce development programs but can provide non-traditional students alternative pathways to accessing and completing higher education qualifications.

c. Investing in online and blended learning models. Given the growing evidence around the effectiveness of these models globally, educational institutions across the region should prioritize developing digital learning strategies that include incorporating more digital tools in their classrooms (virtual reality, real-time collaboration applications, adaptive learning

technology, etc.) and identifying relevant opportunities where learning can best be achieved in an online environment. This would involve learning from institutions that have successfully implemented such models as well as investing in the technology, human resources, and support services to provide more engaging, flexible and accessible learning opportunities for a wider set of learners across the region.

vi. Further information can be found in the Foundation's study Investing in Tomorrow's Talent: A Study on the College and Career Readiness of Arab Youth.

ENDNOTES

1   World Economic Forum. (2017). The Future of Jobs and Skills in the Middle East and North Africa. Retrieved from http://www3.weforum.org/docs/WEF_EGW_FOJ_MENA.pdf.

2   World Bank. (2018). Data bank, Gross enrolment ratio,tertiary, both sexes (%). Retrieved from https://data.worldbank.org/indicator/SE.TER.ENRR..

3   Gatti, R., Morgandi, M., Brodmann, S., Angel-Urdinola, D., Moreno, J.M., Marotta, D., Schiff Bauer, M., Mata Lorenzo, E. (2013). Jobs for Shared Prosperity Jobs for Shared Prosperity, Time for Action in the Middle East and North Africa. World Bank. Retrieved from cuments.worldbank.org/curated/en/540401468051871415/pdf/724690v40Full00Prosperity0full0book.pdf

4   World Economic Forum. (2018). The Future of Jobs Report 2018. Retrieved from http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf

5   World Bank. (2017). Unemployment with advanced education (% of total labor force with advanced education). Retrieved from https://data.worldbank.org/indicator/SL.UEM.ADVN.ZS?view=chart.

6   Bureau of Labor Statistics. (2018, September 22). Unemployment rate 2.1 percent for college grads, 3.9 percent for high school grads in August 2018. Retrieved from https://www.bls.gov/opub/ted/2018/unemployment-rate-2-1-percent-for-college-grads-3-9-percent-for-high-school-grads-in-august-2018.htm?view_full

7   Dalling, E., Mendonca, V., Duehring, M., van Diesen, A., Beise, J., Lee, S., Lian, B, Mshvidobadze, A., You, D. (2019). Investing in children and youth today to secure a prosperous region tomorrow, Generation 2030. UNICEF. Retrieved from https://www.unicef.org/mena/reports/mena-generation-2030

8   Ibid

9   Manyika, J., Chui, M., Miremadi, M., Budhin, J., George, K., Willmott, P., Dewhurst, M. (2017). A future that works: AI automation employment and productivity, Executive Summary. Mckinsey. Retrieved from https://www.mckinsey.com/~/media/mckinsey/featured%20insights/Digital%20Disruption/Harnessing%20automation%20for%20a%20future%20that%20works/MGI-A-future-that-works-Executive-summary.ashx

10   World Economic Forum. (2017). The Future of Jobs and Skills in the Middle East and North Africa. Retrieved from http://www3.weforum.org/docs/WEF_EGW_FOJ_MENA.pdf.

11   Ibid

12   Abdulla Al Ghurair Foundation for Education. (2019). Foundations and the Future of Higher Education: Achieving impact at scale in the Arab world, Post-forum report. Retrieved from http://www.alghurairfoundation.org/en/content/foundations-future-higher-education-highlights-our-forum

13   World Bank. (2019). Expectations and Aspirations A New Framework for Education in the Middle East and North Africa. Retrieved from http://documents.worldbank.org/curated/en/527931542039352771/pdf/131974-WP-v1-PUBLIC-nov13-6am-33255cmp-eproof.pdf. p. 8

14   Ibid

15   Smith, F. (2014, May 22). What is the average online college student? Retrieved from https://edtechmagazine.com/higher/article/2014/05/who-average-online-college-student-infographic

16   Bailey, A., Vaduganathan, N., Henry, T., Laverdiere, R., & Pugliese, L. (2018). Making Digital Learning Work—Success Strategies from Six Leading Universities and Community Colleges. Retrieved from https://edplus.asu.edu/sites/default/files/BCG-Making-Digital-Learning-Work-Apr-2018%20.pdf

17   Rivard, R. (2013, May 2014). Massive (But not Open). Inside Higher Ed. Retrieved from https://www.insidehighered.com/news/2013/05/14/georgia-tech-and-udacity-roll-out-massive-new-low-cost-degree-program

18   Goodman, J., Melkers, J., & Pallais, A. (2016). Can online delivery increase access to education? HKS Faculty Research Working Paper Series. (RWP16-035). Retrieved from https://research.hks.harvard.edu/publications/getFile.aspx?Id=1435

19   Means, B., Toyama, Y., Murphy, R., & Baki, M. (2013). The effectiveness of online and blended learning: A meta-analysis of the empirical literature. Teachers College. (Record Volume 115, 030303). Retrieved from https://www.sri.com/sites/default/files/publications/effectiveness_of_online_and_blended_learning.pdf

20   Busteed, B. (2019, March 5). Online Education: From Good to Better to Best? Forbes. Retrieved from https://www.forbes.com/sites/brandonbusteed/2019/03/05/online-education-from-good-to-better-to-best/#26af71576912

21   Kemp, N. & Grieve, R. (2014). Face-to-face or face-to-screen? Undergraduates' opinions and test performance in classroom vs. online learning. Frontiers in Psychology. (Volume 5, p1278). https://doi.org/10.3389/fpsyg.2014.01278. Retrieved from https://www.frontiersin.org/articles/10.3389/fpsyg.2014.01278/full

22   Souza Carmem L. E., Mattos Luciana B., Stein Airton T., Rosário Pedro, Magalhães Cleidilene R. (2018). Face-to-Face and Distance Education Modalities in the Training of Healthcare Professionals: A Quasi-Experimental Study. Frontiers in Psychology. (Volume 9, 1557). DOI=10.3389/fpsyg.2018.01557. Retrieved from https://www.frontiersin.org/articles/10.3389/fpsyg.2018.01557/full#B25

23   Shah, D. (2018, December 11). By the Numbers: MOOCs in 2018. Retrieved from https://www.classcentral.com/report/mooc-stats-2018/

24   Allen, I. E., & Seaman, J. (2017). Digital Compass Learning: Distance Education Enrollment Report 2017. Babson survey research group. Retrieved from https://onlinelearningsurvey.com/reports/digtiallearningcompassenrollment2017.pdf

25   Center for Online Education. (2014). The Rise of the Online Degree at Public and Nonprofit Universities. Retrieved from https://www.onlinecolleges.net/for-students/online-degrees-at-nonprofit-universities/

26   Bogdan, R., Holotescu, C., & D., Grosseck, G. (2017). How MOOCS are Being Used for Corporate Training. DOI: 10.12753/2066-026X-17-000. Retrieved from https://www.researchgate.net/publication/316076362_HOW_MOOCS_ARE_BEING_USED_FOR_CORPORATE_TRAINING

27   Ibid

28   Farhat, R. (2017, December 11) The rise of the Arab MOOCs. Will education in the Arab world ever be the same? Retrieved from https://www.wamda.com/2017/12/rise-moocs-education

29   Pickard, L. (2019, February 5). Edraak, MOOC Platform for the Arabic-Speaking World, Crosses 2M Users. Retrieved from https://www.classcentral.com/report/edraak-crosses-2m-users/

30   Lederman, D. (2019, January 16). Why MOOCS Didn't Work, In Three Data Points. Inside Higher Ed. Retrieved from https://www.insidehighered.com/digital-learning/article/2019/01/16/study-offers-data-show-moocs-didnt-achieve-their-goals

31   International Finance Corporation (IFC) & Islamic Development Bank (IDB). (2011). Education for Employment: Realizing Arab Youth Potential. Retrieved from https://www.ifc.org/wps/wcm/connect/1a854480482cc759a513edd1c8896efa/e4eReportFinal.pdf?MOD=AJPERES

32   YouGov & Bayt (2016). The Skills Gap in the Middle East and North Africa A real Problem or a Mere Trifle. Retrieved from https://img0bm.b8cdn.com/images/uploads/article_docs/bayt.com-skills-gap-in-the-mena-whitepaper-2016_29942_EN.pdf

33 Dweck, C. S., Walton, G. M., & Cohen, G. L. (2014). Academic Tenacity: Mindsets and Skills that Promote Long-Term Learning. Bill & Melinda Gates Foundation. Retrieved from https://ed.stanford.edu/sites/default/files/manual/dweck-walton-cohen-2014.pdf

34 https://www.renaissance.com/edwords/growth-mindset/

35 Tzannatos, Z., Diwan, I., & Ahad, J. A. (2016, May). Rates of Return to Education in Twenty Two Arab Countries: An Update and Comparison Between MENA and the Rest of the World, Working Paper. Economic Research Forum. (No. 1007). Retrieved from https://erf.org.eg/wp-content/uploads/2016/06/1007.pdf

36 Tzannatos, Z. (2016) Employment and Rates of Return to Education in Arab Countries Gender and Public Sector Perspectives, Policy Brief. Economic Research Forum. (No. 13/June 2016). Retrieved from https://erf.org.eg/wp-content/uploads/2016/06/1007.pdf

37 Ibid

38 York, J. (2017, February 14). 10 Common Misconceptions about Online Learning. Retrieved from https://online.illinois.edu/articles/online-learning/item/2017/02/14/10-common-misconceptions-about-online-courses

39 Bailey, A., Vaduganathan, N., Henry, T., Laverdiere, R.,& Pugliese, L. (2018). Making Digital Learning Work—Success Strategies from Six Leading Universities and Community Colleges. Retrieved from https://edplus.asu.edu/sites/default/files/BCG-Making-Digital-Learning-Work-Apr-2018%20.pdf

40 Sun, A.,& Chen, X. (2016). Online education and its effective practice: A research review. Journal of Information Technology Education. (15). Retrieved from www.informingscience.org/Publications/3502

41 Brooks & Pomerantz (2017). ECAR Study of Undergraduate Students and Information Technology, 2017. Retrieved from https://www.educause.edu/ecar/research-publications/ecar-study-of-undergraduate-students-and-information-technology/2017/introduction-and-key-findings

42 Stockwell, B. R., Stockwell, M. S., Cennamo, M., & Jiang, E. (2015). Blended learning improves science education. Cell. (Volume 162, Issue 5, Pages 933-936). Doi https://doi.org/10.1016/j.cell.2015.08.009. Retrieved from https://www.sciencedirect.com/science/article/pii/S0092867415010223

43 Jee, Kian & Ng, Poh Kiat & Lim, Sin Ting & Har Lee, Chai. (2016). The Effectiveness of Blended Learning: A Case Study among Undergraduate Engineering Students in a Private University. Australian Journal of Basic and Applied Sciences. (10. 46-51). Retrieved from https://www.researchgate.net/publication/297549761_The_Effectiveness_of_Blended_Learning_A_Case_Study_among_Undergraduate_Engineering_Students_in_a_Private_University

44 Ghadiri, K., Qayoumi, M. H., Junn, E., Hsu, P., & Sujitparapitaya, S. (2013). The transformative Potential of Blended Learning using MIT edX's 6.002 x Online MOOC Content Combined with Student team-based Learning in Class. Retrieved from https://www.edx.org/sites/default/files/upload/ed-tech-paper.pdf

45 Tessema, B.S & Belay, S. (2017). University-Industry Collaboration in Curriculum Development: Analysis of Banking and Finance Graduates' Attributes from Educators and Industries Perspective. Education Journa.l (Vol. 6, No. 2, 2017, pp. 87-93). Retrieved from https://www.researchgate.net/publication/316655846_UniversityIndustry_Collaboration_in_Curriculum_Development_Analysis_of_Banking_and_Finance_Graduates'_Attributes_from_Educators_and_Industries_Perspective

46 A. Kolb, D. (2014). Experiential Learning: Experience as the Source of Learning and Development. Retrieved from https://books.google.ae/books?hl=en&lr=&id=jpbeBQAAQBAJ&oi=fnd&pg=PR7&dq=experiential+learning&ots=Vn8ToU-0Pc&sig=KMPsYFUIiqyGJvAZAR-wKywbrQs&redir_esc=y#v=onepage&q=experiential%20learning&f=false

47 Castrillon, C. (2019, July 9). Why a Growth Mindset is Essential for Career Success. Forbes. Retrieved from https://www.forbes.com/sites/carolinecastrillon/2019/07/09/why-a-growth-mindset-is-essential-for-career-success/#7c75199028b5

48 Shroeder, P. (2017, December 5). How Lifelong Learning and a Growth Mindset Can Propel Your Career. Retrieved from https://medium.com/startup-grind/how-lifelong-learning-and-a-growth-mindset-can-propel-your-career-c5fd680f4069

49 Hanover Research. (2015). Strategies for Promoting Student Growth Mindsets. Retrieved from http://www.drivelearning.org/uploads/4/4/1/1/44110523/strategies_for_promoting_student_growth_mindsets.pdf

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The Abdulla Al Ghurair Foundation for Education, founded in 2015 and based in Dubai, is the largest privately funded foundation in the Arab world focused exclusively on education. It aims to improve access to quality education for high-achieving, under-served Emirati and Arab youth. Abdulla Al Ghurair pledged one third of his wealth to the Foundation and set out a target of reaching 15,000 youth over the next 10 years via secondary and higher education programs and scholarships valued at over US$1 billion. For more information, please visit: www.alghurairfoundation.org.