

Dialogue Snapshot Bridging the Disconnect between Education and the Economy March 2015



Library at Mohammed V University at Agdal, Rabat. Photo: Arne Hoel / World Bank

Six years following the onset of the global economic crisis of 2008, national economies have struggled to make up lost gains. Unemployment remains above pre-crisis levels in many countries, particularly among vouth. Throughout Muslim-majority countries, such as Egypt, Jordan, Tunisia, and Libya, the high rate of youth unemployment has led to multi-faceted negative consequences. For some countries, the problem has been "brain drain," as welltrained, educated nationals have left for better economic prospects abroad. In other cases, due to a vastly growing labor force coupled with mismatched skills, product market limitations, and a large public sector,

there has been economic stagnation and growing instability with no outlook for positive future changes. Likewise in the West, increased pressure has been placed upon higher education institutions to act as engines of economic growth and career preparation. Western governments have increasingly called for career-based outcomes as conditions for funding, while rising college education costs have led parents and students to question the value of degrees. In both these regions, the current conditions are symptoms of a much larger set of problems, signifying a disconnection between the education and the economy.

There has been the tendency globally to see higher education as the "silver bullet" to the socio-economic problems faced by a society. Education, of course, provides far more than just personal and societal economic benefit. The higher education systems do and will play a large role in the economic development of countries. Governments and civil society will continue to place significant pressure on higher education institutions to play this role. And as such, the disconnection between higher education and the economy is a critical problem to address across the board. To discuss these concerns and generate ideas for resolving the gap, the Hollings Center convened a dialogue conference that brought together academics, higher education professionals, economists, private sector representatives, and policy makers to analyze the prospects for cooperation in addressing concerns.

Economic Forces & Realities

The need for economic reform in the Middle East and North Africa is often stated. National and local markets remain rigid, with an oft cited need for openness and economic diversification usually met with institutional resistance. Often, the burden has been placed on the need for educational reform, as it could

provide not only for vocational training, but also construct an entrepreneurial class that would diversify the economy and provide much needed internal research and development and jobs.

The responses by governments and the private sector to calls for economic and educational reform in the region varies, depending on whether or not the country is resource rich or poor. In the oil rich economies in the MENA region, governments have traditionally had the financial resources to engage in educational reform efforts. However, this resource wealth has been as much of a curse as a blessing. While the economy in these states may be growing at annual rates of 4-6%, that is still not fast enough to produce jobs for tertiary level graduates. A participant noted most of the growth in the labor market is for unskilled, low paying jobs, and these jobs are typically being filled by migrant labor. The recent drop in oil prices have made the problem worse, contracting national budgets and labor participation.

The challenges are more pronounced in the resource poor, oil-importing economies of the MENA region. There, the challenge lies in the heavy reliance on government subsidies. Many of these countries run

significant deficits, yet only manage 2% growth at best, negative growth at worst. Attempts at privatization reforms in these countries have bred corruption, resulting in declining bond ratings and a reluctance on the part of foreign companies to consider direct investment. Employment has become heavily reliant on public sector jobs as growth rates are too slow to create both skilled labor and knowledge economies. The education sector mirrors this reliance on the public sector, with faculty and degree programs heavily tilted toward public sector positions. This creates a cycle that oversaturates the public sector labor market, resulting in demands to create more public sector jobs. Rather than diversifying those economies, they are instead becoming more sclerotic.

Youth Unemployment Rate by Country Compared to National Rate (2013 data)		
	Total	Youth (15-24)
United States	7.4%	15.8%
Canada	7.08%	13.8%
United Kingdom	7.5%	20.3%
France	10.41%	23.7%
Germany	5.28%	7.8%
Turkey	9.97%	20.4%
Tunisia	13.26%	31.2%
Saudi Arabia	5.67%	28.7%
Egypt	12.7%	38.9%
Libya	19.42%	50.8%
Iran	N/A	29.7%
Iraq	16.01%	34.2%

Developed Western economies are also not immune to the economic conditions that have placed strain and demands on the higher education systems. In the United States, higher education access has risen with undergraduate enrollments rising by 48% in the past two decades.¹ However, this has not directly translated into improved economic conditions for all citizens. This increased access has come at significant costs to individuals and the larger economy. Recent reports have stated U.S. student loan debt now tops \$1.2 trillion.² And yet, disturbingly, a study cited by one dialogue participant noted that 46% of youth in America are underemployed, taking jobs below the skill and value that their degrees are supposed to confer. High levels of debt and poor job prospects combine to be a significant weight on the U.S. economy. U.S. growth rates, even prior to the 2007-09 recession, are at historic lows due in part to this cycle.

While the causes and effects differ from country to country, there are several outcomes, challenges, and roadblocks that result from the disconnection between higher education and the economy. As a result,

¹ https://nces.ed.gov/programs/coe/indicator_cha.asp

² http://www.cnbc.com/id/102028451

there is a unique opportunity for the sharing of best practices and for cooperation on reform efforts between the MENA region and Western countries. Those common outcomes and challenges include:

- <u>High Youth Unemployment</u>: Youth unemployment (ages 15-24) is disproportionately higher than the national unemployment average in all these countries. Even in well-developed or diversified economies like the US and Turkey, youth are losing out. The disproportionality is even more severe in some of the MENA countries like Egypt and Libya. This lack of opportunity contributes to social unrest.
- <u>Demographics Challenges</u>: The MENA region and the developed Western economies are both undergoing pressing demographics problems, but the problems are mirror images, with the MENA region coping with a baby boom while the West deals with aging populations. In MENA, some estimates place the population under the age of 30 at 30%, ballooning enrollments at some higher education institutions to 100,000 or more. The aging population in the West has led to job stagnation and declining labor rates (from 64% pre-recession to 59% today) have strained governments' ability to support their welfare states.
- <u>Challenge of Unrealistic Expectations</u>: Expectations about the benefits of higher education are too high. The perceived improvements in employability prospects are unrealistic, as many employers are not satisfied with the quality of graduates being produced. This is a global perception problem. Participants cited examples like Qatari students demanding direct employment in upper management positions upon graduation and American students expecting immediate placement and high salaries not commensurate with their actual level of experience. These expectations are dangerous and can be very damaging to the education sector in the coming decades if the employability situation does not improve.
- <u>The Stigma of Failure</u>: The price of failure in academic systems is too high and the stigma associated with it permeates many societies to varying degrees. This roadblock to reform has led to an educational culture where failure is not only not tolerated, but completely derided. To successfully diversify an economy, however, failure needs to be accepted so that there is a willingness by some to take risk. Most business ventures will experience failure at some point and students are not being taught how to handle those failings.

"We have to not just think about employability of youth, but 'entrepreneurability' of youth."

A dialogue participant

- <u>Long-term Planning Challenges</u>: It is extraordinarily difficult to forecast the economic outlook and needs of a country into the next fiscal quarter, let alone what the economy will look like five to ten years into the future. Participants noted that the speed in which economies can change is much faster than in previous generations, with one even noting that "the jobs of the next five to ten years have not even been created yet." As such, it is difficult to predict what changes need to be made to the curricula in higher education programs to prepare students to enter these fields at the right time.
- <u>Skills Mismatch and Communication Failures</u>: There is a mismatch between the skills institutions are teaching and the skills employers and the general economy need. These entities are not communicating with each other. And the most likely interlocutors, the government and

economists, are not effectively connecting them. Employers are looking for demonstrations by graduates that they have soft skills, skills that transfer to multiple career possibilities.

Overeducation, Degree Devaluation, and Academic Roadblocks

Participants spent significant time discussing the effects of overeducation, degree devaluation, and the structures of institutions and how they stifle efforts at educational reform. Overeducation is a problem first identified in the 1970s that appears to be increasing in recent years. By definition, it refers to one's education level exceeding the qualifications for one's job. This rise has led to the perception that degrees are being devalued. In some countries like Egypt, a degree can now actually be a detriment to employability prospects. In others, like the US, some students and parents are now beginning to openly question the value of going to college or graduate school due to underemployment prospects.

As one participant noted, "We are observing an over-education trap. Parents calculate that even for low skilled jobs, a college graduate has a higher chance of getting that job. College graduates are replacing high school graduates for jobs, thus creating an increased demand for college graduates." This cycle is viciously distorting the demand, and the real losers are those who cannot attend college. As the trap deepens, graduate degrees may end up supplanting bachelor's degrees as the minimum entry-level requirement.

Part of the reason for this cycle of devaluation are the "policy traps" that governments have inadvertently created in the effort to improve educational prospects for their citizens. Pressure from the middle and lower classes has resulted in bad, rushed planning that further distorted demand. This distortion has become a cycle, particularly since popular protests in the MENA region in 2011 and the recession in the US from 2007-09, pushing even more demands upon governments and exacerbating the overeducation and degree devaluation problems. For example, in Iran, direct government policy led to the opening of approximately 1000 institutions in 40 years, many in recent decades. This resulted in enrollments growing from 500,000 students in 1996 to 2.4 million in 2013, with an estimated 1.3 million that will be soon attempting to enter the workforce. A similar building boom is taking place now in Turkey. Government policies set targets to open institutions in every Turkish city. In 2003, Turkey had 70 universities in operation and today, in 2015, there are 190.

The structures of institutions and educational systems also create roadblocks to effectively manage these issues in both MENA and the West. Most institutions are still structured in hierarchies—schools, departments, and faculty—many of which do not engage in true interdisciplinary study and often compete with each other in the system for resources and precedence. This leads to a "silo effect" that bars outside ideas and amplifies the assertions of those already a part of the flawed system. In the shared governance systems common in the US the result is, as one participant noted, "too many cooks in the kitchen." In the centralized systems more common in the MENA region, the result is top-down decision making that does not permit the permeation of new ideas and pedagogy from the bottom. Both types of systems result in stasis that can take years to institute meaningful changes to programs and curricula. However, economic changes happen at a significantly more rapid rate now and academic institutions are slow to adopt to this pace of change.

The methodology of academic instruction has also acted as a roadblock to meaningful reform. Currently, students are instructed using defined disciplines, which emphasize specificity over general knowledge or understanding. What is lacking are so-called "soft skills" – critical thinking, management, leadership, and communication skills that the business sector demands. In the West, these soft skills, while deemphasized over the selection of specializations or majors, come from inherent interaction with others while at the

university. In the MENA region, the pedagogical structure of curricula and instruction style results in the poor development of those soft skills. Companies want graduates to have better handle on these critical social and management skills. As one participant noted, "Companies want intraprenuership" – they want employees to have the skills to innovate and develop within the company. Current academic structures inhibit such intraprenuership.

Ongoing Solutions and Models

Recognizing some of the causes and challenges of the education-economy disconnection, participants began discussing some potential programs and initiatives that are already underway to attempt to address the problem. They also questioned whether some of these efforts could be copied and scaled to other countries or institutions.

A common example cited by participants included some programs in the West that already link the educational system to future workforce needs. In Canada and the United States, the program is called "Co-op" or Cooperative Model. In Germany it is a different type of model, known as the Dual Education Model. Both focus on different aspects of experiential learning.



Vocational education and training center; National Initiative for Human Development Support Project (INDH). Photo: © Dana Smillie / World Bank

- <u>Co-Op Model</u>: In cooperative model education, students are required to take an extra semester or year during which they work directly with an outside or affiliated company. The program is considered a "win-win" for all those involved. Businesses get additional labor with low training and maintenance costs, students get necessary credits while developing soft skills in an actual business setting, and universities get important connections to the business community that can serve as outlets to students and inroads to better information about economic needs that can improve curricular development. All lines of communication are improved. And, most importantly, these programs have led to better post-graduate job placement numbers. Established programs like the one at the University of Waterloo in Canada now have 18,000 enrolled in their co-op program, with connections to over 5,000 employers, making it one of the largest in the world. Northeastern University's program in the US, established in 1909, has connected students with many Fortune 500 companies.
- <u>Dual Education Model</u>: Germany has long employed a dual model that combines an "orientation" year following completion of secondary school when students can leave to enter the workforce to, in the words of one participant, "figure out what they want to do." Pending what the student chooses to do for study or future profession, Germany uses strongly established apprenticeship and vocational programs in which skilled trades and crafts are taught. Others can choose to enter the university. The government heavily supports the apprenticeship and vocational systems and it has shown results, as Germany has consistently had one of the lowest rates of unemployment in Europe. However, there is concern in recent years that Germany may step away from this system, focusing instead like other countries on placing more students into universities.

Some educational institutions are constructing new laboratories and innovation spaces with the hope of creating "sandboxes" – places where innovators, entrepreneurs, researchers, and educators can collaborate. An example cited by a participant was the iLabs at the Massachusetts Institute of Technology (MIT) in the US. Other examples included "hack-a-thon" and "make-a-thon" competitions at universities that encourage students to design and build innovative products and services. But as several participants noted, it is not enough to build a lab or to host a competition. There has to be incentives for use of these facilities, a culture of support for these spaces within and outside of institutions, and support from education oversight agencies and companies to help in their maintenance. These criteria are not always present, but the construction of these "sandboxes" are important infrastructural steps in addressing the problem.

Another highlighted example of reform is the shift by some institutions and faculty toward project-based learning models. These types of models employ using real-world situations as teaching opportunities that are designed to foster collaboration and communication with others. This is a departure from more traditional methods of instruction that focus on rote memorization. By grouping students and assigning projects, learning outcomes are also more tangible. As some participants noted, this model is not without its problem as it relies on the talents and willingness of all participants. But, such methods are more applicable to current business community standards, and successful students would be better prepared for entry into the workforce.

Creating an Environment for Entrepreneurship

As the dialogue progressed, participants began to realize that the solution was to find a way to create a viable environment to foster economic entrepreneurship directly at universities. The participants felt that this was the key to bridging the disconnection and bringing all the economic stakeholders better together. There has been experience in supporting such development. A Bahraini participant cited successful entrepreneurship educational programs as potential models. Participants conceived of different methods to achieve this, but there were some common suggestions among them. "An entrepreneur is a person who is able to identify business opportunities and implement solutions to take advantage of this opportunity."

A dialogue participant

<u>Link the Stakeholders</u>: There was general agreement that communication between the stakeholders (students, faculty, administration, employers, and government) was very poor. This will have to improve if there are to be any successful planning initiatives. Universities have been unfairly blamed for this communication failure, but it is ultimately the responsibility of all stakeholders to better communicate. Creating a space for this communication, whether physical or virtual, is critical. This is the best way, as one participant stated, "to build program coherence."

<u>Activate the "Champions"</u>: There are proponents of new ideas and models, but it is important to find the right combination of proponents in order to build sustained momentum for change. This includes getting buy-in from key individuals within:

- *Government*: Particularly in highly centralized systems in the MENA region, getting the support of the right Ministry officials can make a huge difference in whether any reform takes place.
- *Institutions*: Certain institutions are considered global, regional, or local leaders. Getting support from these "leader" institutions will result in other schools following that lead. This would result in faster adoption of new methods and protocols.

- *Businesses*: A coalition of key business leaders, including local entrepreneurs, would have significant impact on driving change. Leaders in the business community can rally others to those causes.
- *Faculty*: Faculty need to be identified and empowered to innovate curriculum and pedagogy.
- *Alumni*: By creating or activating alumni networks, connections between universities, businesses, and recent graduates can be made. These connections already exist in some instances, but are underutilized.

<u>Celebrate Failure</u>: There needs to be a change of culture in which failure is not derided, but celebrated. Universities can provide a safe place for students in which to fail. It is the perfect place for experimentation. Since engaging in entrepreneurial activity requires the assumption of risk and the realization of possible failure, it is necessary that students start adjusting to those riskier environments. The university can be a place where this risk is slightly mitigated, therefore permitting more entrants to the entrepreneurial class.

<u>Adopt and Adapt New Models</u>: During the breakout sessions, participants considered multiple different systems and tools that could be developed to aid in creating a more cohesive entrepreneurial culture in many countries. Two specific models were devised, one more aligned to centralized systems and another designed to adapt to multiple integrative models.

Model 1: The Central Planning & Entrepreneurship Office

As noted throughout the conference, the ability to initiate significant reforms in many countries, specifically countries in the MENA region, can be hampered by the centralized and hierarchical nature of educational oversight entities. Any type of reform effort will likely require significant, high-level buy-in from multiple ministries. Often, these ministries compete with each other over priority and funding, leading to poor coordination of plans and resources. Realizing that many of the countries discussed lack overall strategic planning initiatives, one participant group proposed creating a Higher Education Planning Office (HEPO).



The mission of this office would be to coordinate all of the stakeholders in education at a high level, perhaps ministerial or higher. The office would communicate with industry to determine needs, other government officials to manage priorities, education providers to develop curriculum, and the larger community (students and job seekers) to gauge progress. The group also called for the creation of internal Strategic Planning Units within educational institutions to develop plans in line with national initiatives and to provide feedback to the HEPO. Each group has specific responsibilities, whether it is the private sector providing advice and avenues for apprenticeships, universities providing incubators and research and development, and the government developing policies and international outreach.

In addition to the HEPO, the group called for the creation of an Entrepreneurship Promotion Office (EPO), which would help to promote and develop an entrepreneurial class. Like the HEPO, the EPO acts as a body that coordinates meaningful efforts between universities and all other stakeholders. The objectives of the EPO include: establishing curriculum for entrepreneurship classes, coordination among government, private sector, and universities, identifying new fields for entrepreneurship, and proposing reforms and policies to promote entrepreneurship.



Model 2: The Guided Entrepreneurship Model

Entrepreneurship carries significant risk of failure, which bars entry for many into the economy. A second workgroup asked the question, what if the risk could be mitigated? To answer this question, the group devised what it called the "Guided Entrepreneurship" model that coordinates the efforts of stakeholders to directly diversify the economy. The proposed guided model aims to bring the strengths of stakeholders, such as companies, universities, students, alumni, and mid-career professionals together to create startups and new products. The group proposed the creation of entrepreneurial hubs (commonly known in the field as "sandboxes") to bring these groups together. The sandbox combines capital, experience, connections, facilities, and energy into a new startup. Over the proposed period of a year, the student will earn credit, the professional will train on new skills, alumni will grow their networks, schools will get needed economic insight, and companies will get R&D.

Each stakeholding group has strengths. Companies can provide capital. Mid-career professionals bring experience. Alumni networks can establish connections and act as economic interlocutors. Schools have facilities and interdisciplinary experience. Students bring new ideas and energy. But each one of these stakeholders also have deficiencies. Companies are often too engaged with current business to spend significant resources or manpower on research and development. Mid-career professionals could use retraining to modernize their skills. Schools need to improve curriculum and better prepare students for the job market. Students need credits to complete their coursework and jobs coming out of school. The model operates in a similar manner as the successful Co-Op programs, but on a larger scale with more actors. If the startup or resulting product is successful, each group will get a "piece of the cake" or a stake in the new venture. If the venture fails, however, everyone can return to their original posts. Students will get credit and needed experience. Professionals would be more enthused and better trained, companies will still have access to R&D, and schools will be better connected to economic engines. Even in failure, loss is minimized. But success leads to both a growth in entrepreneurial culture, as well as steps toward greater economic diversification. Participants noted the promise that such a model could bring,

but also considered several drawbacks, namely the difficulty in managing so many stakeholders and implementation in highly hierarchical structures.





the Hollings Center

The Hollings Center for International Dialogue is a non-profit, non-governmental organization dedicated to fostering dialogue between the United States and countries with predominantly Muslim populations in the Middle East, North Africa, South Asia, Eurasia and Europe. In pursuit of its mission, the Hollings Center convenes dialogue conferences that generate new thinking on important international issues and deepen channels of communication across opinion leaders and experts. The Hollings Center is headquartered in Washington, D.C. and maintains a representative office in Istanbul, Turkey. Its core programs take place in Istanbul—a city whose historic role as a crossroads makes it an ideal venue for multinational dialogue.

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