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The Quality of Educational Performance of Students in The Middle East And North Africa Much Remains to Be Done

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In a nutshell

- The quality of education in the MENA region, as measured by the performance of students in international evaluations, is very low.
- Despite the massive expansion of education and all the attempts to democratize it over the past decades, MENA countries still face significant socioeconomic inequalities.
- There is a significant turnaround in gender differences, whereby boys have become educationally disadvantaged.
- Policy reform has to target the reduction of inequality in educational achievement along with raising overall performance.

Education is viewed as a value in itself and as a means towards growth and prosperity. As a value in itself, education plays an important role in shaping one's personality, in developing self-learning ability, in developing the willingness to participate actively in society and in preparing individuals to undertake their roles as citizens. As a means, education is a powerful instrument for achieving sustainable growth and development. The success of many nations is attributable to the rapidly expanding educational opportunities for their people. However, a large body of empirical evidence linking education to economic growth indicates that improved enrolment and completion rates are necessary but not sufficient conditions to enhance growth, alleviate poverty and reduce inequity. Instead, student's knowledge and cognitive skills are key factors in sustaining the gains achieved in access to education and in improving economic competitiveness. In other words, the quality of education is crucial to achieving economic growth.

The quality of education is becoming a central issue in debates at international organizations, such as the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Organization for Economic Cooperation and Development (OECD) the United Nations Development Program (UNDP) and the World Bank. In this context, the shift from quantitative educational aspects to qualitative educational aspects was



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In the fourth international assessment conducted by the International Association for the Evaluation of Educational Achievement (IEA) in 2007, 15 MENA countries, which include Algeria, Egypt, Morocco, Tunisia, Bahrain, Iran, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria and Dubai, took part in the mathematics and science evaluations, at the eighth grade. The results of these evaluations were disappointing for these countries because they showed that students in this region continue to lag behind their peers academically in other countries. Moreover, it is worthy to note that TIMSS (2007) describes the distribution of quality of education by identifying four benchmark levels: advanced, high, intermediate and low, which correspond to 625, 550, 475 and 400 points respectively. Regarding the share of students at the two extreme levels, the picture is gloomy. At the advanced benchmark, this share varied between 0% to 3%. For the low benchmark, it was not reached by more than half of the tested students in the majority of countries. This means that more than half of the tested students did not acquire basic cognitive skills.

Quality problems are more acute in Gulf countries, given their income levels. However, even in some middle-income countries, like Lebanon, Jordan and Iran, which are better performers relative to their income levels, the majority of the tested students perform at or below the low benchmark in mathematics and in science.

Students' low achievement is associated with high gaps in achievement between the socioeconomic groups and a rapidly shifting gap in achievement by gender in which females now tend to outperform males. A further salient problem is that, while access has expanded to near universality, the acquired skills which are meager throughout the region, cannot lead to developing entrepreneurial spirit or innovative skills. The policy of increasing resources should be combined with the efficiency of their use in order to attain the desired outcomes.

Inequalities in Socioeconomic Status of Students and Test Score Disparities

TIMSS and PISA reports reveal that students from disadvantaged socioeconomic backgrounds perform worse than their peers from advantaged backgrounds. MENA countries face significant socioeconomic inequalities despite the massive expansion of education and despite the democratization of education over the recent decades. Children from poorer families are more likely to acquire less literacy skills that are necessary for full participation in modern societies. Children from disadvantaged backgrounds struggle with reading and they are at risk of leaving school at an early age, without basic skills.

Additionally, there is a clear tendency for larger disparities among schools where students from disadvantaged socioeconomic status have lower quality schooling compared to their peers from an advantaged socioeconomic status. These disparities can deepen the inequality of educational opportunity in the future and the inequality of incomes leading to low intergenerational social mobility.

A Shifting Gap in Achievement in Favor of Girls

The issue of gender equality has long been a major goal for MENA countries. Since the early 1990s, MENA countries have made important progress in reducing the gap between girls and boys in access to education and healthcare. Indeed, almost all girls attend school and more women than men are enrolled in university. Though existing gender gaps exist in most countries when it comes to access to higher education and employment rates, international evaluations have shown that boys are more likely than girls to underperform academically. Though this gender gap, which favors girls, provides evidence that past policies aiming at increasing girls' access to and achievement in schooling have been successful; it raises alarms about boys' achievement crisis which is becoming significant and blatant. A plausible explanation for this is that the "desire to learn" or the "demand to learn" (concept invoked by Heyneman 2013) is decreasing among boys more than among girls, mainly in Gulf countries.

Literacy Skills in a Modern Economy

There is now a shift from the traditional understanding of literacy as the ability to read and write to a more evolved definition that reflects the ability of individuals to extract information from texts, analyze and process this information and use it in a variety of contexts in order to achieve certain objectives. This shift is deemed important following recent phenomena such as globalization, the emergence of a knowledge society and an information-based economy. In this sense, achieving national development goals depends on the level of competence of individuals.

Thus, it is clear that having a significant number of students with few or no basic skills is a thorny problem for this region. Changes in work organization have increased the demand for highly skilled workers. Moreover, the labor markets are now demanding flexibility, creativity, generalized problem–solving and complex communications that are associated with non-routine tasks. In the context of the MENA region, there is a mismatch between education and the labor market and this in part explains the high unemployment rates and low growth in the region. MENA countries with low levels of educational quality could remain trapped in technological stagnation and low growth due to the lack of 'expert thinking' and 'entrepreneurial skills.'

Efficiency of Resource Allocation

Secondary education receives more than 35% of government expenditure on education. According to data from the UNESCO Institute for Statistics (UIS), Iran allocated 49.41% of government expenditure on education to its secondary sector in 2009. This share falls to 41.93%, 40.16% and 36.90% in Morocco, Oman and Syria respectively. Additionally, this share was 47.34% in Tunisia in 2008 and 36.23% in Kuwait in 2005. It is worthy to note that these shares are equivalent to what developed countries allocate to their secondary sector. For instance, according to UIS, this share was equal to 42.52% and 43.11% in Finland and Italy respectively in 2009; whereas Japan allocated 36.79% of its government expenditure on education to its secondary education sector in 2010. In MENA countries, the problem is not "by how much do they have to increase resources?" it is rather a problem of inefficiency of allocation of resources (Shafik, 1994). The inefficiencies of public spending on education are obviously observed at the student level when calculating the ratio of public expenditure per student in dollars to the proportion of students reaching the intermediate benchmark in TIMSS 2007 Mathematics evaluation. This simple calculus reveals that school systems in Gulf countries are the most inefficient. As an illustration of this, Jordan allocates \$US 0.904 per student and 35% of its students participating in TIMSS 2007 achieved a score of 475 points. On the contrary, Saudi Arabia spends \$US 7.184 per student and only 3% of its students achieved the same score. For Jordan, having 1% of students achieve this benchmark would require a total spending of \$US 2.2 per student; whereas in Saudi Arabia, it would require \$US 239.48. In Tunisia, the expenditure necessary to have an additional 1% achieve this benchmark would be \$US 8.78, the same as that in Japan, one of the top performing countries in TIMSS 2007 evaluations.

What Can Education Systems Do to Ensure Equity and Raise Performance Standards?

Improving performance of disadvantaged students attending low performing schools requires a strategy that targets these children and schools to ensure equity and fairness. A policy strategy has to focus on educational resources, teachers and the learning environment.

In accordance with the World Bank strategy, investing in early childhood is a priority. Based on Jean Piaget's (Swiss psychologist who devoted his entire life to the question of development of human knowledge) studies on cognitive development, children during their early years rapidly develop positive or negative experiences, which have implications for their well-being and the outcomes they achieve in school and later in life.

Low socioeconomic status children start off at a disadvantage with little or no access to early childhood programs. However, most children from privileged backgrounds take it for granted. The early gaps in cognitive skills that affect mostly the disadvantaged students mirror greater educational inequity and contribute to severe inefficiencies in the education system as for instance greater internal inefficiency. Furthermore, it brings the overall quality of education down, hurting the countries' ability to respond to economic demands and to grow to their full potential. Besides, extra resources are also needed to be channeled through schools to help disadvantaged students. As pointed out by OECD (2010), providing free transportation and free lunch programs for students from poor family in addition to transfer payments may enhance the academic performance of these students.

Moreover, public schools are now playing a certain role in magnifying differences between children from wealthy and impoverished backgrounds, since it is common that high socioeconomic status students attend better quality schools in terms of instructional materials, physical infrastructure and in terms of qualified teachers. To overcome these deficiencies, interventions must focus on providing schools in "difficulty" with adequate instructional materials, with adequate educational resources that respond to the specific needs of learning such as books, manuals and encyclopedias that have been proved to have a substantial impact on performance (Fuller and Clarke 1994: Hanushek 1995). Since national education resources are limited, governments need to ensure that they are being directed to poorer regions and schools so that minimum standards are met everywhere.

Teaching quality is also a serious issue. Disadvantaged schools have the greatest shortage of qualified and experienced teachers and they frequently suffer from teacher absenteeism, especially in rural and remote areas. Thus, there should be incentives and good working conditions to encourage competent teachers to work in such schools.

As for raising the overall performance of students in MENA, specific policies are needed. These policies

should involve curricular reforms, improving instructional techniques and increasing the time spent on language classes. Likewise, studies have emphasized the need for the accountability measure to be placed at the forefront of educational policy, along with external incentives to reward school performance. These external incentives may take the form of public recognition of schools or the selection of teachers to receive elite training. In conjunction with the previous policies, some strategies must focus on boosting the desire to learn among children. For instance, this can be done through the creation of an environment conducive to the fulfillment of students through extra-curricular activities inside the school and creating a sort of summer academic boot camp for those with meager skills.

Still, young people face a great deal of uncertainty about future returns to education investments, particularly the poor. As a consequence, they resent having to spend so much on studying and enhancing their skills. Policies such as school-based career counseling provide individuals with information about labor market opportunities and payoffs, allowing students to make better choices at different levels of education in accordance with their capabilities. Regarding Gulf countries, where boys tend to have a very low demand to learn compared to girls, for the simple reason that males are artificially covered by the extraordinary social safety nets and females are basically closed off from social participation and may thus see educational attainment as their escape, an option to consider in the future is to implement external disincentives that may take the form of reductions in social support for those with little to no

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