The Modern Effects of Teacher Education on the Arab World

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Abstract

The Arab world contains one of the greatest cultures and histories of any ethnic group in the world. However, since the 1980s, the education of this region has plummeted despite increases in school enrollers. This is prominently seen in the illiteracy rate of 30% throughout the Arab world. Furthermore, with a high unemployment rate of 14%, which is second only to sub-Saharan Africa, the struggles of this society are prominent. Additionally, this is of particular concern due to the majority of the population of Arab nations being under the age of 30 years. A dominant reason for this problem is the heavy reliance on rote learning and memorization of definitions, facts and concepts in student education. This decreases the ability for students to learn decision-making, problem-solving and critical thinking. This is further exacerbated by teacher-student interaction. If a teacher only promotes rote learning, students become disinterested in the courses that they take. Only by promoting these interests can the Arab world find its place on an internationally stage academically and economically. This insures learning not only for students at present, but in their ability to apply their learning on a national and international level in their professional careers. This will provide economic growth and technological advances for their nation, providing the UAE with the ability to become an international leader. This research project delves into the education methods, economic values, interaction between the economy and education, teaching methods, and learning outcomes that are provided within the Arab world. It details the beneficial and disadvantageous parts of the economy and education system, as well as those factors that will increase and promote education within the Arab world. This is a prominent and important evaluation on the subject of education within the Arab world, its future and what must be done at present to insure the economic stability and academic abilities of this region of the world internationally.

The greatness of a nation is directly related to those basic provisions that the government provides to insure the stability and growth of its peoples. These provisions include access to health care, education, and sanitation. Education is arguably the most important provision listed due to its long-term effects. Through the provision of education to the individual, that individual is given the tools to create a better, more stable life situation for himself or herself. Instead of being a low-paying technician or an uneducated farm laborer, this individual will become a member of the intellectual strata. Therefore generating wealth, improvement within the national economic infrastructure, and becoming a productive member of society. It is only through education that any individual is able to improve themselves, irrespective of circumstances, to become an authoritative scholar in his or her chosen field. Unfortunately, despite improvements in its education system, the Arab World is far behind other nations in regards to education. With a significant part of its population plagued by illiteracy, in order to become a definite economic power the Arab World must implement various changes. One of these changes includes, but is not limited to, teacher education. This paper researches into the education profile of the Arab World, the benefits that education will provide to this global region, and the possible benefits of improved teacher education.

As members of one of the oldest civilizations in the world, Arab people are endowed with a rich history, language, and culture. However, recently the World Bank stated that the quality of education within the region was inadequate. This was concluded due to poor rates in literacy (30% within the Arab world population) and school enrollment in secondary and tertiary schools, despite increased accessibility and gender equality to education. It hardly compares to the educational advances made in Asia and Latin America. Despite the high levels of educational

prowess in nations such as Jordan and Kuwait, this region still retains some of the worst educational providers in the world, such as Djibouti, Iraq, Morocco, and Yemen.

As stated previously, education is the key to the economic viability of a nation. For the past 20 years, the economic growth in Arab and African nations has been relatively low largely due to high population growth rates; informal and unskilled labor markets; and a large dependence on low-priced oil exports. This contrasts greatly with the characteristics of the East Asian and Latin American economies, which focuses on national infrastructure, especially governmental investment into secondary and tertiary education.

The proposed economic benefits of education allow individuals to earn a higher salary and on average attain better jobs. This is the reason why some nations are particular interested in schooling, as it provides increased productivity, improved job quality and, of course, enhance economic growth. Based on some economic theories, education was believed to be an integral part to improve the worker job training experience. Thus, this would shorten the training experience time, improved work habits, heightened time management and dependability, progression in company growth, and insure that workers would be able to learn complex tasks. Though it is not known if education directly improves economic growth or exactly the type of education that improves growth the most (primary, secondary, or tertiary); nevertheless those developing nations who have provided higher levels of schooling to its peoples have dramatically improved their economies. Instead of having a national economy directly influenced by agriculture or unskilled labor; new and innovative technology is created or attained, which increases demand from developed nations. This relates to the new global economy, which focuses on the import and export of international goods at cheaper prices and higher income. This in turn increases the modernization of third-world nations. Instead of depending on

agricultural crops, which may fail due to drought, by modernization and globalization, these nations increase their economic viability. Furthermore, by dealing in business ventures with stronger economies, the foreign monetary currency earned increases company income and provides that company the ability to attain more skilled or semi-skilled employees. Therefore, education improves labor quality and improves the economic growth of all labor sectors. Additionally, by promoting employee training on the job, employees become independent decision makers who increase productivity, innovation, and employee participation. By earning higher salaries, educated employees feel rewarded for their efforts and for the work they input into their company. This alludes to the communist economic state in Eastern Europe, which experience a flagging economy due to poor economic initiative provided by the state. As all individuals were earning equally, irrelevant to the effort they placed in their work, most individuals did not provide any effort or chose to immigrate to capitalist domains. This can be shown in the literary propositions provided by Ayn Rand in her book, Atlas Shrugged. Studies that show a positive and direct correlation between education and economic growth are education with productivity and education with earnings.

In the Middle East, the correlation between education and economic growth is questionable. In a 1996 article by Lant Pritchett entitled, 'Where has all the education gone?' education was shown to negatively impact economic growth. This compared to the positive impact that occurred in Latin America. In another study, published in 2000 by Zeki Fattah, Imed Liman, and Samir Makdisi, a thorough analysis on the factors affecting economic growth in 86 countries was attained. The study tested the following factors: external shocks; investment in human capital; investment in physical capital; openness to trade and investment; and overall institutional environment. The results of this study are shown below in Figure 1.

Sample/variable	Coefficient	t-statistic	
Large sample (panel of 86 countries)			
Constant	-1.844	-1.930	
Investment rate: INVY	0.132	3.798*	
Macro performance: INFL	-0.002	2.310*	
Initial wealth:Y60	-0.0003	-4.515	
Initial education: PESENR60	0.017	3.350*	
Natural resources: SXP	-2.880	-2.304*	
Openness: SOPEN	1.245	3.427*	
External shock: GPART	0.192	0.555	
Volatility: STDG	0.001	0.017	
MENA specific			
Investment rate: INVY•MENA	-0.152	-4.483 *	
Macro performance: INFL•MENA	-0.038	6.646*	
Initial wealth: Y60•MENA	0.001	21.908	
Initial education: PESENR60•MENA	0.004	0.569	
Natural resources: SXP•MENA	-5.010	-3.147*	
Openness: SOPEN•MENA	-1.135	-2.650	
External shock: GPART•MENA	1.750	4.871*	
Volatility: STDG•MENA	-0.220	-2.529	
N = 86 R2 = 0.67			
N2 - 0.07			

Source: Fattah, Limam, and Makdisi 2000.

Figure 1: Cross Country Growth Recession Results

Therefore, based on this data, it is shown that economic growth is affected negatively by openness, investment, and volatility, and positively by external shocks. However, the results for initial education are not significant (0.004) and are notably less than the average found for all 86 nations (0.017). This factor is perplexing due to what is thought to be the correlation between economic growth and education. However, further review of the data shows that despite high

levels of education in the Arab world in the 1960s and 1970s, its economic status decreased in the 1980s and 1990s. This can be seen in Figure 2 below.

		Growth of GDP per worker	Growth of physical capital per worker	Growth of human capital per worker	TFP growth
Sub-Saharan Africa	1960s	1.8	3.8	0.4	0.1
	1970s	0.6	4.2	0.3	-1.3
	1980s	-0.9	-0.1	0.7	-1.3
	1990s	0.3	0.0	0.5	0.0
East Asia and Pacific	1960s	2.1	1.1	0.8	1.2
	1970s	3.3	5.3	0.9	0.7
	1980s	5.6	6.7	1.0	2.3
	1990s	7.5	7.8	0.6	4.0
Latin America and the Caribbean	1960s	2.9	3.1	0.6	1.3
	1970s	2.9	4.3	0.6	8.0
	1980s	-1.7	0.2	0.9	-2.4
	1990s	0.6	0.6	0.8	-0.1
OECD	1960s	4.4	5.8	0.5	1.7
	1970s	1.8	3.6	1.4	-0.4
	1980s	1.8	2.3	0.3	0.7
	1990s	1.3	2.2	0.5	0.1
South Asia	1960s	2.2	4.0	0.6	0.2
	1970s	0.6	1.9	1.0	-0.7
	1980s	3.6	2.7	0.9	2.0
	1990s	2.9	2.1	0.8	1.6
MENA	1960s	4.6	4.9	0.5	2.4
	1970s	2.6	7.9	1.5	-1.4
	1980s	0.4	2.1	1.4	-1.3
	1990s	0.7	-0.3	1.2	0.0
World	1960s	2.7	3.2	0.6	1.1
	1970s	2.2	4.1	1.0	0.0
	1980s	3.2	3.8	0.8	1.2
	1990s	4.0	4.1	0.7	2.0

Source: Keller and Nabli 2002.

Figure 2: Total Factor Productivity Growth by Region, 1960s–1990s

Figure 2 details the total factor productivity growth throughout the world from 1960 – 1990. The total factor productivity growth details national growth that is dependent on technological advances, capital and labor implementation. In the Middle East, the TFP growth remained negative in the 1970s and 1980s, and remained relatively stable in the 1990s with a 0%

growth rate. This is reflected by a moderately positive per capita growth rate. However, what are the reasons for this weak association?

There are several proposed explanations for the weak association between education and economic growth. One of these explanations is the type of education provided amongst various nations. Just as you cannot compare the economic viability of Great Britain to South Africa, comparing one education system to another cannot be objectively considered. Each nation provides its own goals, education curriculum, education requirements; distribution of education within the population, available technology, and specifications for teachers. Furthermore, the allocation of those educated workers to different economic activities varies. Therefore, this produces a skewed comparison between various world nations and relies heavily upon the applications of education and not the presence of an education system.

Other reasons for this great disparity in economics and education are related to the social and cultural aspects of nations. To compare the education of an economically and politically stable such as Jordan with the internal strife, war, economic blockade and dictatorship of Iraq would be grossly negligent of economists. Furthermore, to compare the liberal views of Turkey to the conservative beliefs of Afghanistan's Taliban government would be like comparing the Japan with India. Yes, though they are within the same region, their levels of development and culture are entirely varied. This directly affects access to education and the ability to apply that education.

As stated previously, one of the major reasons for the poor economic situation of the Middle East is the education quality received. This correlation is noted in the study *Education*, *Human Capital Development and Growth in the Arab Economies*, by El Erian, Helbling and Page, 1998. Here it was detailed that in Arab nations, education focuses on the repetition of

definitions, facts, and concepts. Therefore, decision-making, problem-solving and critical thinking are not fully developed. Hence, this resulted in a decrease in productivity and economic growth. Furthermore, it was shown that the Arab World has promoted high education standards and quality, with literacy rates increasing over the past thirty years. International test scores for Arab students are close to those found in other Latin American countries. Despite this, literacy rates are low in Arab nations, with focus primarily within the humanities and with test scores lower than comparator averages. Furthermore, Arab nations are greatly behind in their ability to provide innovative or create new technologies, even software in Arabic. However, perhaps the greatest influence on students is the teacher-student interaction.

Through research, it is widely known that students can be either positively or negatively influenced by their teachers. This is known as extrinsic motivation and includes rewards, such as grades, parent's praise, stickers and teacher's praise. This differs from intrinsic motivation, which is the will of the student to engage in an activity for his or her own sake. This involves personal concentration, contentment and pleasure in a learning task. It is through an interaction of both that a student will experience as subject positively or negatively.

In relation to his or her teacher, students are affected by his or her teaching style and interaction pattern. Therefore, the well-organized and enthusiastic instructor will provide a greater student response than the routine, reserved one. By interacting with students, teachers provide them with the interest that insures their educational prowess. This compares with what was noted previously in the Arab World – focus remains on the repetition of definitions, facts, and concepts, not decision-making, problem-solving and critical thinking. In most developed nations, focus on teaching has included various mediums of instruction. This includes the utilization of computers, computer software and other visual aids. By interacting text, visual aids

and practical work, learning is reinforced in students. Furthermore, by allowing students to utilize computer software at an early age in the schooling system, teachers provide students with the ability to remain in touch with modern technology and advances. Thus, indirectly, students are able to progress with this knowledge, which will greatly benefit them in future work. With many modern jobs focusing on computer usage and being solely Internet based, already teachers are providing students with the ability to earn and better their futures.

Fortunately, within the United Arab Emirates, the importance of teacher knowledge and education is fully understood. In the UAE Constitution, education is emphasized and is provided for free to students from elementary to post-secondary school. Education is supervised by the Ministry of Education and Youth, which provides a nationally equivalent curriculum. Though emphasis is placed on rote learning and memorization, teachers must have concise knowledge on cultural sensitivity, technology, and the outcomes-based approach of learning.

At one of the nations public schools, the female-only Zayed University, outcomes-based learning is particularly significant. Zayed's goal is to train students to excel in Arabic, English, computer literacy, academic principles, and leadership at a community and national level. The foundational curriculum formulates the General Education system and consists of five domains: creative expression, culture and society, humanities, language and communication, and science, mathematics and technology. The university believes that through proper interaction between the community, faculty, staff and students, the latter group will be able to reach its learning goals. Furthermore, they believe that each group learns from the other, increasing respect, support and trust between the groups. This delves into the vision of the university, which is to emphasize learning, not teaching; faculty and staff interaction; constructive student learning; increasing student responsibility for own learning; and the development of student knowledge and skills.

For Zayed University, the following learning outcomes were utilized for teacher in a graduate program: 1) information literacy and communication; 2) information technology; 3) critical thinking and reasoning; 4) teamwork; 5) globalism; and 6) leadership. This is particularly focused within the teaching curriculum, whose learning will provide greater education outcomes for those students they will teach.

Therefore, in conclusion, the Arab world retains one of the highest unemployment rates in the world (14%), which is second only to sub-Saharan Africa. This is of particular concern due to the majority of the population of Arab nations being under the age of 30 years. Despite the presence and growth of education in the Arab world, it is still to an insufficient degree. This is partly due to the route and method of training. In the Arab world, rote learning and memorization of definitions, facts and concepts are emphasized in student education. This decreases the ability for students to learn decision-making, problem-solving and critical thinking. Nevertheless, at institutions, such as Zayed University in the United Arab Emirates, focus on these points have provided greater understanding and learning for students. This insures learning not only for students at present, but in their ability to apply their learning on a national and international level in their professional careers. This will provide economic growth and technological advances for their nation, providing the UAE with the ability to become an international leader. Despite the internal strife through war, culture and ethnic differences that many Arab nations face, by moving away from these dilemmas they will be able to move past the developing stages of economic ability to international prowess.

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