We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,900

185,000

200M

Downloads

154
Countries delivered to

Our authors are among the

 $\mathsf{TOP}\:1\%$

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index in Web of Science™ Core Collection (BKCI)

Interested in publishing with us? Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.

For more information visit www.intechopen.com





Democracy in the Middle East: The Educational Battle

Judith Cochran

Additional information is available at the end of the chapter

http://dx.doi.org/10.5772/intechopen.77581

Abstract

The unrest in the Middle East has created vacuums where authoritarian and democratic powers are in conflict. Education in all countries is at the heart of the challenges to leadership. In most Middle Eastern countries, graduates from middle school upward have been guaranteed employment in the government. Failure to meet this promise has left thousands of youth who are educated but unemployed. Further fueled by the overwhelming number of refugees, leaders in Jordan, Lebanon, and Israel are threatened by the unemployed and refugees' access to technology and their democratic demands. Authoritarian countries such as Iran and Turkey are emphasizing religious education in order to increase the control of their people. Research, on-site visits and media reports provide the basis for this study which identifies three forces of the educational conflict: religious education, informal education, and access to technology. The possible solutions for future educational directions provide a roadmap for the future.

Keywords: democracy, Middle East, education

1. Introduction

1.1. Historical causes of educational conflict

The people of the Middle East recognize the power shift taking place in the region. Democracy, after the events following the Arab Spring, seems to be in free fall. Structures which must be in place for democratic governance such as representative leadership, just elections, voter access without coercion, and leaders listening and taking action on the desires of the people, are not functioning in most Middle Eastern countries. The people are aware of their absence. Authoritarian leaders are battling democratic expectations with military force and arrests.



Informal education and technology through which citizens learn about democratic opportunities are a force in the shift of power in the region.

As a result of retaining the Ottoman educational goals, students in the Middle Eastern countries formerly ruled by the Empire expect employment in the government after graduation. Originally, the schools were constructed to educate native boys as religiously faithful bureaucrats who administered Ottoman rules and laws. Today, government schools continue to teach obedience to their religious, political rulers, memorization of government written textbooks, and tenants of Islam. Students are to accept the rewritten national narratives which are found in textbooks. In return, students only need to graduate to a secure government position. In contrast, democratic education prepares citizens to take on the responsibilities of citizenship, integrate with efficiency into the marketplace and prepare for upward mobility [1]. These principles are in place in private and informal educational systems. Today, the large number of refugees in throughout the Middle East wants citizenship and its rights, the opportunity to earn a living and a future for themselves and their families. These needs are forcing a shift in current political structures toward democracy as refugee's informal education is reshaping formal government-controlled education. Host countries with refugees cannot afford to support thousands of unemployed youth and adults. They must prepare them to work through informal, technological, and formal education.

Informal education does not necessarily take place in a classroom and can be delivered through means other than a textbook or teacher. As such, it is more accessible to students who want to acquire training or information. They can get instruction through social media, the Internet, on-line universities, and external agencies. Government schools are either accepting informal education for refugees and native youth or limiting access and forcing enrollment in religious schools as in Turkey, Iran, and Saudi Arabia. There, religious education is being used to control the thoughts of the people.

In the past, political leaders would meet with parliaments or other leaders in closed rooms to discuss individual needs with the leaders of factions or organizations. Power was built upon personal relationships and certainly not transparent. Now with the access to the internet, the power is shifting from government control of classroom education, television, and newspapers to informal educational forces speaking democratically through the representative voices of the people.

2. Maintaining authoritarian, religious education

2.1. Iran, Saudi Arabia, and Turkey

An example of authoritarian rulers' increase of power is the development of ruler's narratives while ignoring the needs of the people. In Iran and Saudi Arabia, the leaders are the political and Shi'ite (Iran) and Sunni (Saudi Arabia) religious leaders of their countries. In Turkey, the President is establishing himself as a religious leader. All have no mandate to serve their people and are responsible for representing Allah, continuing economic stability and exporting their

natural resources. As titular heads of their Islamic sects, they can command the obedience and loyalty of their citizens regardless of their actions. The current Iranian Ayatollah, Sayyid Ali Hosseini Khamenei, has also maintained his power through the Revolutionary Guard whose Commanders he appoints and dismisses as the military leader who directed the Iraq Iran war. Furthermore, according to a 6-month study by Reuters, he has amassed a 95 billion dollar fortune which gives him financial means to operate independently from the parliament and national budget without the construction of a heroic personal narrative. As the religious head of the Shi'ites, he expects the loyalty and obedience of the people. He operates his fortune through the company of the Headquarters for Executive Order of Imam, called "Setad" [2].

In Saudi Arabia, there are three branches of segregated education: general education for boys, education for girls, and traditional Islamic education to prepare male students to become religious ulema. Secular Western education was added to religious education after WWII. Religious subjects remain central in the curriculum: memorizing the Koran, understanding the Koran, and application of its principles to daily lives [3]. However, the quality of the education has been viewed as below average when high quality and low quality schools' student scores on the TIMSS are compared. Both groups of schools' average scores in math and science are below the international average for all 61 countries tested [4]. The poor quality of the Saudi educational system is unexpected given that 25% of total Saudi GNP is spent on education with a total of 14 billion in U.S. dollars spent on primary education and research [5].

In Saudi Arabia, the people are learning that the King has heard their complaints. The arrests of over 200 members of the royal family and business leaders on charges of corruption demonstrate concern about maintaining his power. According to King Salman, all arrested will be tried on charges of abusive behavior toward Saudi citizens which demonstrates a democratic principle. The King's son, Crown Prince Mohammed bin Salman, has also presented plans for constructing a new business center build upon the most advanced concepts of technology.

The Saudi educational system has educated religious students who are loyal to the King. At the elementary-school level, an average of nine periods a week is devoted to religious subjects and eight per week at the intermediate-school level. This concentration on religious subjects is substantial when compared with the time devoted to other subjects: 9 periods for Arabic language and 12 for geography, history, mathematics, science, art, and physical education combined at the elementary level; 6 for Arabic language and 19 for all other subjects at the intermediate level. At the secondary level, the required periods of religious study were reduced, although an option remained for a concentration in religious studies. For women, the goal of education as stated in official policy was ideologically tied to religion: "the purpose of educating a girl is to bring her up in a proper Islamic way so as to perform her duty in life, be an ideal and successful housewife and a good mother, ready to do things which suit her nature such as teaching, nursing and medical treatment" [2].

All Saudis receive a free education through the doctorate. Doctoral students are provided with a monthly stipend. Private schools also receive government funds for administrators, educational supplies, and teachers. The internet is available and like books, TV, and films, it is censored by the Kingdom.

In Jordan, which has long stood out as a model of relative Internet freedom in the region, journalists recently voiced concerns when the government passed amendments in which it can censor content and hold journalists liable for what they write. New amendments not only require the country's 220 news websites to obtain licenses by the government but also state that the website chief editors must be members of the Jordan Press Association, which is threatening the freedom of speech particularly in the online media [5].

All authoritarian Middle Eastern countries rely upon obedience and loyalty to the King, President or Ayatollah as political and religious leaders. When citizens have access to knowledge and information which is not censored or controlled, they develop skills necessary for democracy; critical thinking, how others have access to economic empowerment and achievement of personal goals. While the media and Internet are censored in these regimes, such censorship has been circumvented [6].

For example, in Iran, individuals with access to technology are creating their Personal Video Networks (PVNs). They have forced the country to develop its own PVN. This is supposed to satisfy those with individual PVN's. It is a short-term fix in order to establish control over a single aspect of social media where Iran lost authoritarian power.

Access to major Personal Video Networks, international news sites and social-networking sites such as Facebook and Twitter are blocked by the country's (Iran) government, which has been waging a battle against what it calls "inappropriate" content on the Internet. After blocking access to Google's search engine and YouTube in September, Iran's government launched its own video-sharing site [6].

Turkey's President Erdoğan is another example of increasing emphasis on religious education. First, he arrested over 1300 teachers working in secular schools in his 2016 coup [10]. Secondly, he has doubled the enrollment of students by 60,000 in religious schools or hatips from 2016 to 2017. This has happened even though many parents have not wanted to enroll their children [7]. It is not surprising that this 1973 graduate of Istanbul Imam Hatip School, a religious vocational school, is trying to become Turkey's Islamic and political leader. He was imprisoned for 10 months for inciting religious hatred after publicly reading the following Islamic poem:

The mosques are our barracks,

The domes our helmets,

The minarets our bayonets,

and the faithful our soldiers...

As President for the past two years, Erdoğan has changed classroom instruction to emphasize his success in the 2016 coup. During that massive arrest of government, educational and political leaders, Erdoğan has built his narrative. The role of Ataturk, the historic father of the country, has been supplanted in the textbooks by President Erdoğan, the Islamic, political and military hero [7].

In such Middle Eastern countries as Saudi Arabia, Iran, Turkey, and Egypt, the rulers struggle to retain power through military strength and writing their own charismatic personal narratives. They also retain power by continuing the Ottoman Empire's guaranteed government

positions after graduation from all levels of education, free education through the doctorate and subsistence subsidies for food, housing, and transportation. In poorer countries such as Egypt, Jordan, and Lebanon, financial support from external sources is required to pay government salaries and stipends. The United States, World Bank, the EU and United Nations have been doing so in the past. Such financing is not guaranteed for the future.

2.2. Religious educational failures

In the legislature, social media, and in the streets, graduates of all levels of schooling are protesting for government employment which they are not getting. The social, economic, and educational quagmire that currently exists in the Middle East is the result of good intentions: free education for all citizens, guaranteed government jobs for all graduates, and economic subsidies for most who cannot survive on government salaries. These good intentions continued when most Middle Eastern countries, established after WWI, began governing themselves. This promise remains in effect in Egypt, Jordan, Syria, and Iraq.

This is not to say that the education received in national schools in these countries is inadequate for employment in the government. Its religious and procedural emphasis is not congruent with the needs of the marketplace. Egypt is an example of this poor fit. Although Egypt stopped guaranteeing government employment for its university graduates, the skills and competency of the yearly 750,000 university graduates has not greatly changed from when they were promised guaranteed government positions. As their skills are not those needed in the marketplace, the private sector is not eager to hire public school graduates. In the last 10 years, the unemployment rate for Egyptian youth has increased to 33%. Unemployment rates for youth throughout the region in the year 1991 are compared with that of youth in May 1, 2016 in **Table 1**.

Despite promises of government employment, unemployment rates have gotten worse rather than better in most countries. As **Table 1** demonstrates, with the exception of Qatar, unemployment of youth averages around 25% for all graduates. Qatar, however, only has 16% of its population in the labor force and has been blockaded by other Arab countries in the past year. Its unemployment rate has certainly changed. Other positions there are held by foreigners who are not citizens. According to economists, 6% unemployment is considered the highest rate for a healthy economy.

Israel's numbers, while close to acceptable, are questionable as they do not include the Hasidic and Ultra-Orthodox Jewish youth who do not seek employment. The exclusion of this population and the Arab Israeli from military service is another factor that skews their data. Also, there are 90,000 unfilled jobs in Israel [9]. Graduates of the Arab Israeli school systems are taught in Arabic limiting their ability to fill Hebrew language related positions. Graduates from the Hasidic religious schools are only taught religious subjects which do not include knowledge of social studies, science, math or computer science. They also do not have an appropriate educational background to be successful in the marketplace.

Education in Iraq, Egypt, Palestine (Gaza and the West Bank), and Jordan are examples of instruction established by British ruled countries after World War I. Their educational systems continue to be similar. The elementary and secondary education follows the textbook written by the Ministry of Education in each country. The teachers receive two years of pedagogical

	1991	2016
Egypt	24%	33.4%
Iran	21.9	26.2
Iraq	33.0	36.1
Israel	7.5	11.9
Jordan	30.7	34.0
Lebanon	21.5	21.3
Qatar	3.4	0.6
Saudi Arabia	27.1	31.2
Syria	13.2	31.5
Turkey	15.3	18.9
West Bank and Gaza	38.6	41.1
Yemen	21.7	33.8

Table 1. Word Bank Data on unemployment of youth 18-24 in Middle East countries [8].

training if they teach elementary school. Secondary school teachers are thought to be masters of their content area such as math or social studies. They take a limited number of courses in instructional delivery. As a result of this preparation, it can be predicted that most teachers instruct as they were taught.

Year-end exams measure knowledge learned from textbooks under the direction of the teacher. If the answers to the questions are not stated in the exact wording from the text, they are marked incorrect. Furthermore, heating and cooling systems, water and electric systems are frequently not present or not operating in countries that are located mostly in desert climates. The teachers also are working in facilities that are in need of repair for their safety and that of the students. These conditions are found in public and UNWRA refugee schools and in many poorer Middle Eastern countries [10].

International tests, when administered, indicate a second area of decline in national and government schools. In Jordan, when 86% of the Jordanian students are tested on international achievement tests, they measure at the bottom of the 110 countries tested. On the Program for International Student Assessment (PISA) given to over 28 million 15 year olds in 2015, Jordan was 60 of the 69 countries tested. The tested subjects were science, math, reading, collaborative problem solving, and financial literacy. Jordan's average scores are compared to the mean of all countries in **Table 2**.

On the PISA and Trends of International Mathematics and Science Study (TIMSS), students in Egypt, Iraq, and Palestine (West Bank and Gaza) were not tested. When students in Jordan were tested, 3.1% of Jordanian students in 4th and 8th grade were reading above the average score of 500 in science and math. However, according to the test's technical manual, the curriculum of Jordanian schools was not examined as it was in most other countries that were assessed to determine if the content was taught in classes the same year as it was tested [12].

	Jordan	All other OECD countries
Science	409	493
Math	380	490
Reading	408	493

Table 2. PISA scores [11].

2.3. Democratic changes to government education

Democratic education promises to meet the needs of the people, prepare for the employment in the marketplace, and develop the skills necessary for upward mobility. These objectives are in place in Jordan, Lebanon, and Israel in order to meet the needs of the people. Their delivery is through informal education taught by external agencies and technology. With no capacity in facilities, resources or teachers to educate the refugees who have been in their countries for years, unique and formalized democratic changes have been implemented. King Abdullah II, President Netanyahu, and President Anou are demonstrating their concern for meeting refugee and citizen needs.

2.4. Jordan

King Abdullah II witnesses frequent protests in the street, media, and universities over terrorist attacks, state gas agreements, and discrimination against Palestinians. Unemployment data, when averaged for youth in Jordan, are 34%. The unemployment data, when separated by gender, result in 50% for females and 30% for males. Furthermore, 60% of the most educated women are unemployed [13]. These numbers for women speak to the security and benefits of employment in the government. Many graduates are willing to wait as long as 63 months after graduation to be hired into a secure position. The problem is how can the King satisfy and sustain the unemployed?

His power to address this and other social problems are based upon democratic tribal representation of 110 pro government members in the parliament. The Senate's 65 seats are appointed by the King. In 2008, an election was held for the 130 seat House of Representative members including positions for Christians, Chechen, and Circassians with 15 for women. During the election, the streets were filled with posters of candidates, tents of campaign workers, and loud speakers mounted on trucks and cars shouting support for over 800 candidates. Schools were closed for voting. The people participated in election process and voting. The King then closed parliament on November 23, 2009. A new parliament was elected for four subsequent years and closed again by the King on September 2016. It remains closed as of 2017.

While his appointed and elected parliament is closed, King Abdullah II is preparing Jordanians to enter the marketplace. He has implemented two 5 year programs with funding from the United States and Canada. Called Educational Reform for the Knowledge Economy (ERfKE I and II), these programs were implemented from 2004 to 2009 and 2010 to 2015. The first plan provided US 380 million dollars to develop educational programs in early childhood, youth, technology, and careers in the Shorouq Area (tribal area) of Southern Jordan. The knowledge

economy program places a particular emphasis on tribal Jordanians. This program also meets the second goal of democratic education to integrate with efficiency into the marketplace. Results seem positive according to the final report from one of the largest educational reform programs in the Middle East [13]. Results available from ERfKE II, which focused upon developing a national school based program teaching young adults the abilities, skills, attitudes, and values associated indicate bureaucracy has kept funding at 6.3% of funds allocated [14]. Youth were to learn employment skills but projects have not been completed.

According to USAID and the World Bank, ERfKE II school based programs are in half the schools in Northern Jordan. The guidelines but not the programs aligned with vocational and technical education are 70% completed. Lastly, eight community-based Parent Child Centers have opened to support parent education and health of early childhood needs [15]. These nationally adopted projects will move the schools and centers toward democratic goals of preparing youth for the responsibilities of citizenship through teaching the skills not currently taught in the government schools.

It is not that Jordan made the conscious change to implement informal education on a massive scale. The economic and social needs of the country, altered by the large influx of refugees and their need to develop human capital for the marketplace, caused the shift toward democratic education. The influx of refugees may bring external funding for reform. In Jordan, Iraq, and new Syrian refugees numbered 660,315 as of June 1, 2015 [15]. Jordan closed its borders in 2014 and is now vetting another 60,000 Syrian refugees living in the desert no man's land along its border with Syria. Fifteen years ago, 5% of Jordan's GDP was allocated to education [15]. In 2015, according to the World Bank Databank, Jordan allocates 3.6% of its GNP to education [16].

2.5. Lebanon

As a Confessional Republic, Lebanon has assigned each major religious group democratic representation in political leadership. The President since October 31, 2016, Mr. Michel Aoun, must be Maronite Christian. The Vice President must be Sunni Muslim and the Speaker of the House, Mr. Nabih Berri, must be a Shi'ite. The most recent Vice President, Saad Hariri, resigned November, 2017 while visiting his Sunni supporters in Saudi Arabia. Michael Young states, "He is the Saudis' guy... his margin of maneuver against the Saudis is very limited indeed. He's a de facto hostage all the time." [16]. Lebanon's parliament is elected from the various Islamic and Christian portions of the population. In this way, the religious groups are democratically represented in Lebanon's legislation. The members of Christian, Sunni, Shi'ite, Druze, and other religious groups vote and participate in an elected legislature.

Religious representation is also the basis of the Lebanese educational system which began, like the Ottoman educational system, funded and attended according to religious sects. Without government intervention providing portions of salaries to their employees, the Minister of Education estimates 60% of Lebanese youth would be unemployed [19]. Today, two-thirds of Lebanese children attend private mostly religious schools. However, when some of the population could not afford tuition, the government expanded public schools which are considered inferior to the private schools. Part of the basis for this belief is that private schools require two

years of pre-kindergarten which better prepares children for school. Language differentiation is another result of religious influence. The French Jesuits arrived 1500 and restarted their French language educational system in 1830. Most private protestant and Maronite Christian schools are taught in English, the Armenian schools taught in Armenian, and the government schools taught in Arabic.

Refugees are also overwhelming the Lebanese public and private schools. In Lebanon, 1.4 million Syrian refugees are living among the 4.5 million Lebanese. This number does not include the 450,000 registered Palestinian refugees living in 12 camps throughout the country. Most of the refugees are Arabic speaking. For ease of transition, most refugee children are attending camp Arabic language government or United Nations Relief and Works Association schools (UNRWA). The UNRWA schools only go through 8th grade. And as most Lebanese high schools charge tuition and expect fluency in French or English, transferring from UNRWA elementary schools to high school is unlikely for refugee students.

Lebanese government schools are attended by refugees and Lebanese with limited incomes. Employment in Lebanon is linked to citizenship. Since most refugees are not citizens, they are unable to work in twenty professions listed by the Lebanese government. If all Lebanese children went to public schools, there would be more refugee children than Lebanese. Currently, the majority of the Lebanese children go to private and/or religious schools which do not guarantee employment. As noted in the unemployment numbers, the increase in unemployment is stable at 21% for youth throughout the country.

Lebanon's government education is delivered in Arabic which prevents its students from attending the two highest ranked universities in the country: American University in Beirut and St. Joseph's University. One teaches in English and the other teaches in French. Not only is the language of instruction an obstacle to personal advancement to government students, the curriculum itself in government schools needs modification. According to the country's constitution, the curriculum is updated every 4 years. Lebanon's curriculum has not been updated in all subjects since 2000. Its history books only cover as far as 1943. These conditions explain why Lebanese students are listed as 58 out of 61 countries tested on the International Test of Mathematics and Science (TIMSS). Furthermore, the students' consistently (2007, 2011 and 2015) score below average (449 of 500 average) on the Program for International Science and Mathematics (PISA).

2.6. Israel

The Declaration of Establishment of Israel declares it is a Jewish State which precludes it from being called a democracy. Its Knesset is an elected body where the people vote for a political party. The party then selects the representatives who serve. The most powerful forces are the labor unions and Orthodox Jews who are able to command voting by their member Israeli citizens [17]. Israel is home to 33,204 refugees, most of whom are Palestinians who did not move or change citizenship after Israel terminated England's rule and presented the Declaration of Establishment. Many live in 1 of the 12 refugee camps in Israel that are conducted by the Israeli ministries.

Israel's education has four separate branches which are not open to all citizens. However, Jewish citizens may select the branch they prefer. One system is taught in Arabic and serves Arab Israeli living in Israel. These students attend approximately 180 schools that teach the Jordanian curriculum in all but 10 schools [18]. The second branch is the Ultra-Orthodox schools that prepare male students for religious study and educate Haredi girls through the 8th grade. The third branch is the secular, Israeli schools where students follow the Israeli curriculum and receive religious education as selected by the family. The final branch is the vocational educational system which is entered after middle school and provides students with certificates in practical careers or technical studies. Secondary education in all schools is free but not mandatory. The Israeli Ministry of Education supervises all schools.

2.7. Possible solutions

Refugees are overwhelming educational systems in all host countries in the Middle East. If the countries have the economic ability to support refugees as in Turkey and Iran, they are still seeking outside funding. In 2016, Iran requested 19 billion dollars for refugee support from 12 countries in addition to the UN, EU and UNHCR [19]. Saudi Arabia has not accepted any refugees. Turkey has requested money from the EU, candidacy for membership and liberalization of Turkish passports for hosting refugees. As demonstrated by **Table 3**, UNRWA schools in refugee camps sometimes educate more students than the local government schools as in Jordan where enrollment numbers are available. These numbers indicate the importance of examining refugee education in considering how those inside and outside of these in schools are being educated [20].

Some 78% of children in Za'atari camp and 50–95% across host Jordanian communities are out of school. The key reasons include: lack of information about education services available; Syrians' belief that they will return home soon; violence and harassment en route to and from school; domestic or work commitments for children; long distances to school, especially for girls; and transportation costs.

For Syrian children who are in school, learning environments are compromised by: students' poor nutrition; crowded classrooms; inadequate school supplies; corporal punishment by teachers and principals; violence and harassment by students; discrimination in host

School authority	Elementary 1	Preparatory	Secondary
UNRWA School	86,931	54,283	0
Gov't. School	38,180	25,938	2943
Private School	2616	1347	18,488
Total	127,727	81,568	21,431

Table 3. UNRWA, government and private school enrollment in Jordan.

community schools; and inexperienced teachers in camp schools. With conditions such as these, it is not surprising that parents do not want to send their children to schools.

The first recommendation is to increase funding to UNWRA for education in refugee camps so that they may effectively educate refugee children and those who are not enrolled in schools. This possibility would centralize funding that now it is delivered to multiple countries through multiples sources. As an international agency for refugee education since 1949, UNWRA has been instructing increasing numbers of refugees with declining resources.

The second solution is to provide informal education through computers, ipads, and mobile phones. Currently, there are massive movements to offer internet courses and university degrees in the Middle East. There are courses provided at cost and free from prestigious universities like MIT, Oxford, and Open University. This author has offered university courses simultaneously and multiple times from the U.S. to South Korea and Russia. Distance education is enrolling students globally.

Elementary and secondary education is not as familiar to refugees and Middle Eastern instructors. Two useful examples of technology delivered informal education will be profiled. These programs can be offered as a supplement to classroom education, after school programs, or delivered in mosques, office buildings or in homes. Both are more effective if part-time tutors are available when students have questions about the content. However, full time teachers are not required.

A recommended prototype, Virtual Academy, currently instructs school dropouts, homeschooled, seriously ill and never attending youth throughout the Midwest United States. For the State of Missouri, this program is built upon the state core curriculum that is required for all middle and high school students. Students can access the program with mobile cell phones, ipad tablets or stand-alone computers. Virtual Academy delivers videos, study questions, and exams over math, science, literature, history, civics, and other required courses. The students can take the exams as many times as they want before they pass on to the next level of instruction. This is called mastery learning. Administrators are available at each centralized high school location with tutors. The tutors are college students hired and trained by the Regional Institute of Tutorial Education. The program is offered to students enrolled in different school districts across the region. It provides students who do not fit into school at this time with a pathway to graduation and to a future. Students do not without necessarily have to attend classes but they must be enrolled in a school district. In this way, student attendance and continuation are credited. Virtual Academy also enrolls students who have indicated by their grades that they are potential drop-outs even though they are enrolled in classes in school. The students can graduate by coming to school, working from home, or a combination. In all cases, the parents are informed regarding student attendance and academic success.

A second program, Stride Academy, is used in elementary schools to teach English language skills to French, Spanish, and Chinese speaking students. This program automatically adjusts to the language needs of the students. Students who learn English grammar or writing are rewarded with tokens that enable them to play different games at the end of the academic unit. With the aid of tutors, ESL students learning English have gained fluency in a year

of computerized instruction with tutor support accessible. In every Middle Eastern country, there are individuals with English fluency who would be able to assist citizens and refugees who need to learn English to facilitate marketplace employment. This is a second currently existing prototype.

Virtual Academy increases student access, individual achievement, and secondary graduation potential. It does not assign career paths. It does assist students in learning at their own speed. In the educational conditions existing in most of the refugee camps and remote locations, access to the internet, ipads, and electricity would be needed to operationalize such programs. However, the prototype, improvement of academic knowledge, and opportunity to increase student enrollment has educators encouraged with these multi-state and potentially multi-country opportunity for youth.

3. Conclusion

The academic achievement and learning conditions in most countries in the Middle East partially explain why unrest exists across the region. Failure to provide promised employment with a livable wage has frustrated thousands of government school graduates. They can see through media and technology how their lives might be. In order to supplement the low government salaries, most countries have solicited external funding from international organizations and other wealthy countries. Pacifying a large and growing population by paying salaries and subsidies from foreign funding is a precarious position at best. In order to control the unrest of the people, rulers have closed and censored internet access, maintained or expanded religious education, and solicited external funding.

Few countries have considered reorganizing their educational and economic systems in order to develop responsible citizens, prepare graduates to work in the marketplace, and prepare students with skills for upward mobility. This would mean a shift toward the democratic goals.

Instead, many are expanding government education in order to admit refugees with the knowledge that the results will be low academic achievement scores. The pressure in all Middle Eastern countries with the exception of Saudi Arabia is how to employ thousands of refugees, children, youth and adults, without the facilities, teachers, and resources to do so. No country can afford to feed, house, provide health care, and educate hundreds of thousands of refugees. Refugees must be able to earn their own living. However, the high unemployment rate of citizen graduate government schools has shown the disinterest of local and international businesses in hiring native graduates. Furthermore, they are even more reluctant to hire refugees, if the refugees are allowed to work. Fortunately, the democratic goal of preparing youth to prepare for upward mobility appears to be innate in the graduate and refugee populations. The unemployed graduates and refugees will try to not starve. Their numbers will increase and will require external financial support for their survival. Informal education through the Internet, non-government agencies, international organizations, and apprenticeships can meet their needs to expediently enter the marketplace. Religious and government education is failing to help them get employed.

Education will move by the necessity from location specific classrooms with a teacher as deliverer of instruction to mobile transmission of knowledge with multiple individuals as teachers. This will be the new pathway to education. The knowledge in the past was found in books and textbooks. In the future, it will be transmitted in modules, videos, threads, and interactive connections from content hubs located at universities, public school administrative offices or television stations. Access to instruction will not be thwarted by facility space, number of qualified teachers, absence of transportation, and cost or dangerous routes to the school. Bullying, refugee discrimination will not be issues when on-line interaction can be monitored and edited. Learning will take place as rapidly or slowly as needed without classwide embarrassment or boredom. Student interaction can take place across disciplines or within discipline nationally or internationally. For those who need step, by step instruction, the mastery learning format can be an option.

This pathway is not accessible today in government schools and refugee camps. It could be. Tutoring is the third largest expenditure behind rent and food of most families in the Middle East. The children are tutored at home in groups or individually by professional tutors or by their classroom teachers who work as tutors in side jobs to supplement their wages. Tutoring is necessary for children to pass the national tests. These tests, as stated earlier, must be passed in order to advance to the next level in the current educational system. Those enrolled in religious schools are also required to pass these tests. If the household money spent on tutoring were allocated to individual or group licenses for informal educational programs, funding could be reallocated. Financing aside, all parents want their children to be happy and prosperous. Today, the expected reward for their children's long walk down the education pathway is not worth the trip.

Author details

Judith Cochran

Address all correspondence to: cochranju@msx.umsl.edu

University of Missouri, St. Louis, MO, United States of America

References

- [1] Labaree DF. Public goods, private goods; the American struggle over educational goals. American Educational Research Journal. Spring 1997;34(1):39-81
- [2] www.reuters.com/investigates/iran
- [3] Chapin H. Saudi Arabia, A Country Study. Washington: GPO for Library of Congress; 1992
- [4] World News and Education Reviews. Education in Saudi Arabia. New York, NY; Nov. 11, 2017. wenr.wes.org

- [5] www.cnn.com/2010/WORLD/meast/02/10/press.freedom. midest/Feb 09, 2010
- [6] Musil S. Government blocks use of popular tool used by many Iranians to circumvent internet restrictions and mask their activities. Filter. Qatar: World Digital Library; March 8, 2013
- [7] Akkoc R. Turkey's most powerful president since Ataturk: A profile of Recep Tayyip Erdoğan. In: Telegraph. London, England; April 20, 2015
- [8] World Bank. Unemployment rates for youth 18-24 in middle eastern countries. Geneva: The World Bank Group; www.worldbank.org/en/region/mena
- [9] Cochran J. Israel: Divided by religion and education. Digest of Middle East Studies. 2017;**23**(3):32-55
- [10] Alon Y. The Making of Jordan: Tribes, Colonialism and the Modern State. London: I.B. Tauris & Co. Ltd.; 2007. p. 154
- [11] Program for International Science Achievement. 2015. nces.ed.gov/survey/pisa
- [12] Trends in International Mathematics and Science Survey, TIMSSandPRLS.bc.edu/timss; 2015
- [13] Akour M, Shannah R. Jordan educational reform for the market economy-supplemental project. Microthink Institute, Journal of Management Research. 2009;4(4):4-8
- [14] Ii E. www.moe.gov.jo/uploads/ERfke/ERfKEII. Amman: The Hashemite Kingdom of Jordan; April 2013
- [15] Van Elsveld B. We are afraid for their future, barriers to education for Syrian refugee children in Jordan. In: Children's Division of Human Rights Watch Report. New York; August 16, 2016
- [16] World Bank Databank. New York; 2017
- [17] Akerman Lior, Is Israel a democracy, Jerusalem post, Israel, Jerusalem; May 15, 2014
- [18] Cochran J. Palestinian education throughout the Middle East. In: Democracy in the Middle East. Lanham, MD: Lexington Books; 2011
- [19] UNHRC. Global Focus. Islamic Republic of Iran; November 13, 2017. unhr.org/publications
- [20] UNWRA. Evaluation. unwra.org; November 17, 2017. unwra.org/publications/evaluation