WOMEN'S ACCESS TO EDUCATION IN THE MIDDLE EAST

Christine M. Ostrosky
Faculty Advisor: Dr. Mark Peterson

Table of Contents

Christine Ostrosky
Dr. Mark Peterson
USS Research Project
8 August 2015

<div align="center">Women's Access to Education in the Middle East</div>

I.   Introduction

Education is one of the most vital and useful investments that a country can make in its own

people, and future. It increases the available labor force while making it more skilled and

valuable. It aids in eradicating poverty and hunger. It provides opportunities for personal and

professional development, and creates teaching, administrative, and other infrastructural jobs. It

also reduces child mortality; a child whose mother is literate is 50 percent more likely to live past

age five, and "each extra year of a mother's schooling reduces the probability of infant mortality

by five to ten percent" (UNESCO). Education is a fundamental human right, according to the

United Nations, and should contribute to "the full development of the human personality and to

the strengthening of respect for human rights and fundamental freedoms. It shall promote

understanding, tolerance and friendship among all nations, racial or religious groups, and shall

further the activities of the United Nations for the maintenance of peace" (The Universal

Declaration of Human Rights). All women have the right to such an education.

Promoting educational equity for women in the Middle East benefits not only those directly

affected, but also the nations themselves on a macroeconomic level and the region as a whole.

Many studies have evaluated the effects of subsidizing early childhood through secondary

education in the Middle East, and the consensus has been that "education, in general, has a

positive effect on economic growth," and that "the investments in all levels of education

contribute the economic development in the MENA region" (Deniz 13, 18). Furthermore, a

"recent study of 19 developing countries, including Egypt, Jordan, and Tunisia, concluded that a country's long-term economic growth increases by 3.7 percent for every year the adult population's average level of schooling rises" (Roudi-Fahimi 4).

However, there is even more compelling evidence about the need for, and the benefits of, educating female populations equally with male populations. Female students in the Middle East "show higher performance and more ambition than their male counterparts—as measured by exam results, school completion rates, and willingness to move into new job fields" (Bernard 39). This educational aptitude provides a clear reason to promote women's access to education on an individual level, but there are also macroeconomic benefits which are specifically related to educating female populations. Equal education for females ought to, in turn, increase female participation in the labor force, and:

> [f]emale employment delays the age of marriage and child-bearing, which […] improves the health of the mother and child, reducing public health care costs. It also lowers fertility rates and reduces the cost of welfare. Higher levels of female education, higher female employment, and a later age of marriage each contribute to smaller family sizes. (Bernard 39)

Formal schooling is a right that should be distributed fairly wherever possible. Not only must it provide knowledge, skills, and information, but it has always acted as a relevant social and cultural force as well. Therefore, denying access to available education to any person is to deny them not only the knowledge and skills that they need, but would also deny them equal status in an educated society. In some places in the Middle East, the unavailability of schooling for women perpetuates the cultural idea that women cannot be equal to men. However, in other places where women can access formal schooling, the various regulations, reactions, and rules on it serve as another form of obstacle to true equality of education. The region's history of societal and cultural restrictions on girls' schooling have influenced not only the availability of education, but also the curriculum. Consequently:

> [w]hen scarce resources are used in the provision of education, who pays for and who benefits from this public service becomes an important question. Educational policies affect access to schooling and consequently determine jobs and income, both of which in turn affect the distribution of income and wealth in the society. Therefore equitable distribution of educational benefits is important. (Tansel 75)

Equitable distribution of educational benefits is necessary to create a generation where men and women see each other as equals, and treat all people in this way, whether in hiring decisions, the family environment, or the legislature.

II.   Purposes of this study, and definitions

The ultimate goal of this study is threefold. The first is to establish a clear understanding of the current situation of the availability of education to women in the Middle East. The second is to identify the nature of obstacles to women's education, and the third is to recommend possible solutions or policy initiatives to overcome these obstacles. With these goals in mind, the research will include both quantitative and qualitative data, in three parts. The first part of the research will establish the historical and statistical context of the obstacles that have been, and are today, influencing women's access to education in the Middle East region as a whole. The second part, in order to evaluate these obstacles more closely, will be a close study of these issues in just three nations: Egypt, Saudi Arabia, and Syria. Finally, the third part of the study will be an analysis of policy initiatives and suggestions that could combat these obstacles effectively.

For the purposes of this study, the region of the Middle East will be defined as these nations: Bahrain, Cyprus, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, Turkey, the United Arab Emirates, and Yemen. The term "education" here primarily refers to schooling, and means the process of being taught and learning vital information, skills, and experiences in a formal environment, with the express goal of increasing

knowledge and abilities. Pre-primary education is early childhood education, such as preschool

or kindergarten, or other forms of early childhood care and learning. Primary education begins

in the first year of official or regulated schooling, until about grade five, or age ten, and

secondary education is throughout middle and high school, or until about age 17. Tertiary

education refers to anything beyond high school education, including undergraduate and

graduate studies, vocational or trade training, certificate programs, associate's degrees, and the

like.

Access to education is trickier to define. Here, accessibility will mean the ease with which a

woman can find, and reasonably obtain, an acceptable or high-quality schooling, considering its

cost, location, social acceptance or barriers, as well as legal, social, and personal incentives.

Obstacles to accessing education are any person, thing, process, place, phenomenon, or

organization that prevents or decreases access to education by any means, or decreases the

quality of the schooling.

Accordingly, education can be assessed by how well it achieves its goals, as well as by the

quality of how it achieves them. David Chapman, of the International Review of Education,

defines the quality of education as "the extent [to which] an education system is able to achieve

the generally accepted goals of education, central to which are cognitive knowledge and skills

development. For the most part, education systems are deemed to be of higher quality when

students demonstrate higher levels of learning" (314). For the purposes of this study, educational

quality will also be assessed on how applicable the skills are to the students. This means that

though students may reach a technically high level of learning in a particular area of study

through memorization, if they are not taught information or skills that increase their overall

abilities and understanding, it is a lower quality of education. This can be assessed for students

mostly at the secondary and tertiary levels of education, however, it can also be assessed at the primary level in terms of literacy.

Therefore, an "acceptable" quality of education in this study will provide students with the knowledge and skills to be considered as a reasonable candidate for a job in their field after completion. This is a broad definition that could mean simply the ability to read, but more often in modern times means an understanding of multiple languages, critical thinking abilities, basic mathematical skills, and familiarity with technology. A low quality of education, one that relies solely upon memorization and busywork, will be considered as a barrier to accessibility, since this study evaluates access specifically to an acceptable or high-quality education.

However, many Middle Eastern nations have high unemployment rates for both genders. Therefore, there is a void of what skills are actually useful or employable. Many graduates of tertiary-level education have skills for jobs that are not available, or do not exist in their countries. This impacts the way education can be measured. The quality of education cannot be assessed through analysis of job growth, or amount of graduates who become employed in their fields; instead, it must be assessed by the school's curriculums and the teaching strategies used in the classroom.

III.   Regional overview

First, the region as whole must be considered. From this broad perspective, it is possible to recognize large trends in the region, as well as identify outliers and countries that lead, or fall behind, in women's access to education. It is also interesting to evaluate the role that a country's level of wealth has in women's access to education, since there are large variations throughout

the region. The region as a whole has made considerable progress in the last two decades in

regards to female access to education. However, the gender gap still remains.

TABLE 1: MALE VS. FEMALE LITERACY (2015)

UNESCO Institute for Statistics. UNESCO Institute for Statistics Database. 2014. Raw data. Quebec, Montreal.
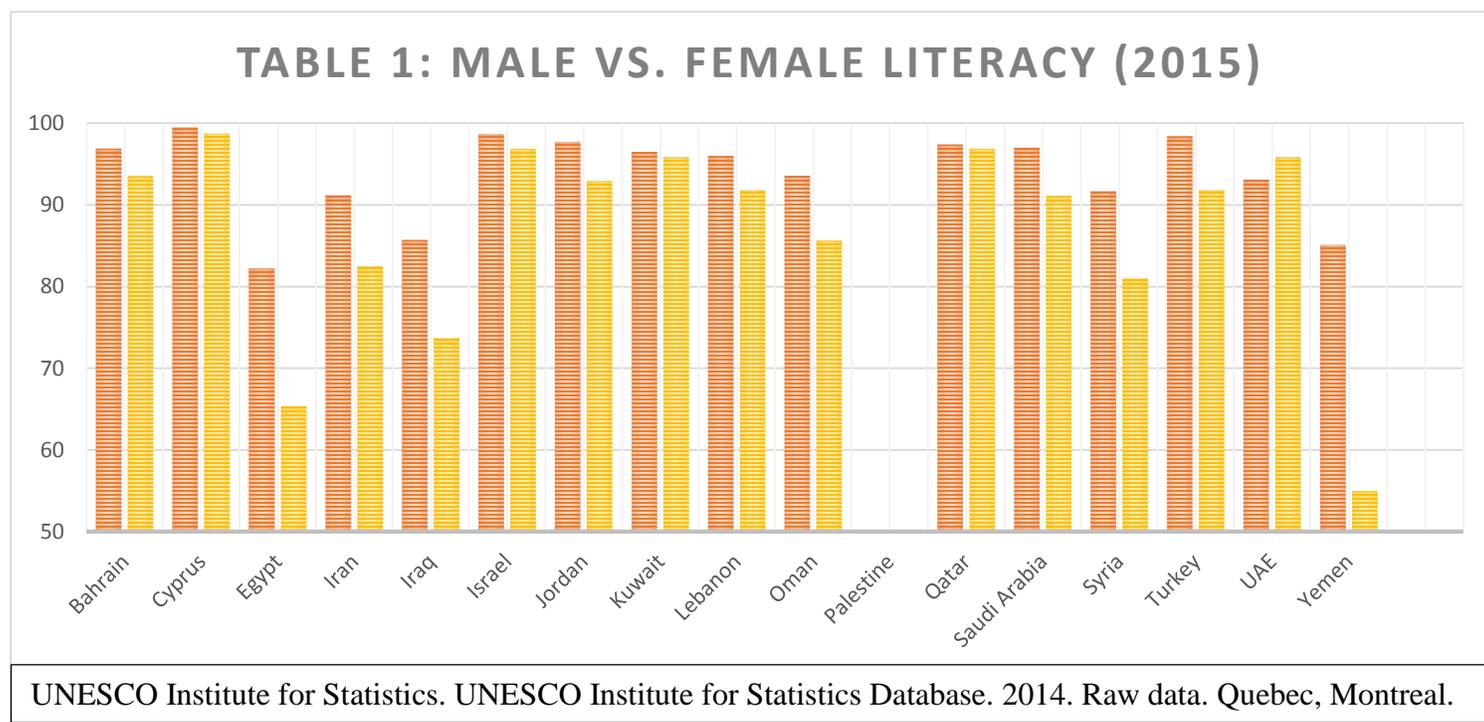
Table 1 shows the discrepancy between male and female literacy rates across the Middle East

in 2015 for the total population. Worldwide, female literacy rates lag behind those of males, but

the global average for this discrepancy is about five percent for youths and nine percent for

adults (International Literacy Data). In every Middle East nation evaluated here, female literacy

follows this trend. However, there are wide differences in Yemen, Egypt, Iraq, and Syria, which

all have female literacy rate at least ten percent below their male counterparts. This exceeds the

global average, meaning that female literacy in these countries is a more substantial issue than in

most countries. Egypt and Syria will be examined more closely later in the study.

TABLE 2: PERCENT OF ILLITERATE FEMALES, AGES 15-24
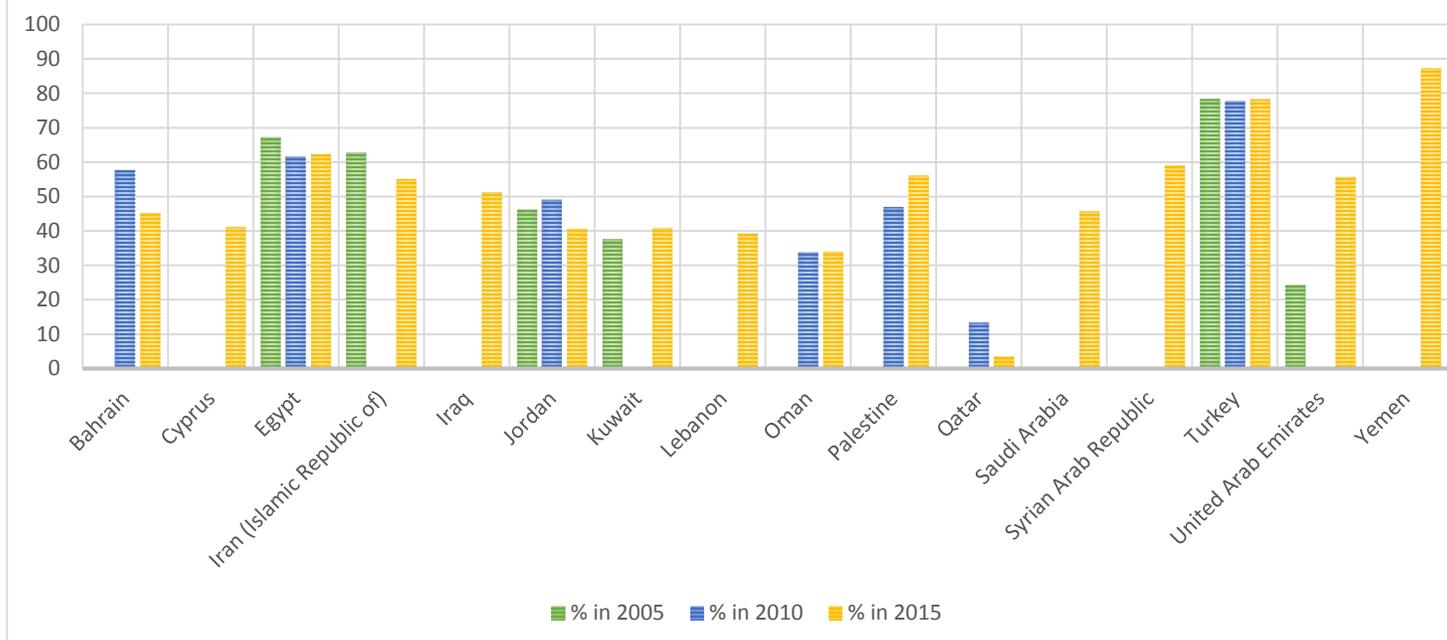
UNESCO Institute for Statistics. UNESCO Institute for Statistics Database. 2014. Raw data. Quebec, Montreal.

Table 2 more closely examines female illiteracy in women ages 15 to 24 across the Middle East. In every country except Qatar, the latest data shows that at least 40 percent of females are illiterate. Most countries have seen no major changes in female illiteracy since 2005, though Bahrain and Jordan have seen slight decreases. Troublingly, Palestine and the UAE have both seen substantial increases in illiteracy.

Investing in women's access to quality education should be a priority in order to lower this rate as much as possible in every country. In this graph, Qatar is an interesting example because of its already-low female illiteracy rate. This is because Qatar is a rich, oil-funded rentier state, and its expenditure on education in 2008 was 2.44 percent, which represented 7.35 percent of its total government expenditure (UIS). While these numbers are seemingly low, Qatar's vast resources and relatively small population mean that its GDP per capita is actually much higher

than other nations in the region. While Qatar could afford a GDP per capita of 84,628 USD in

2008, the next highest GDP per capita in the region was just 46,309 USD, in the also oil-rich

UAE (UIS). Even there, they only afford slightly more than half of Qatar's rich value. Because

Qatar's resources mean it can afford to invest in its people, female education and literacy are a

priority. Therefore, this graph indicates that one of the most important factors that contributes to

female literacy is government expenditure on education. Without priority status at the state

level, easy access to education for women cannot be achieved.

TABLE 3A: Percent of Female Pre-Primary Teachers

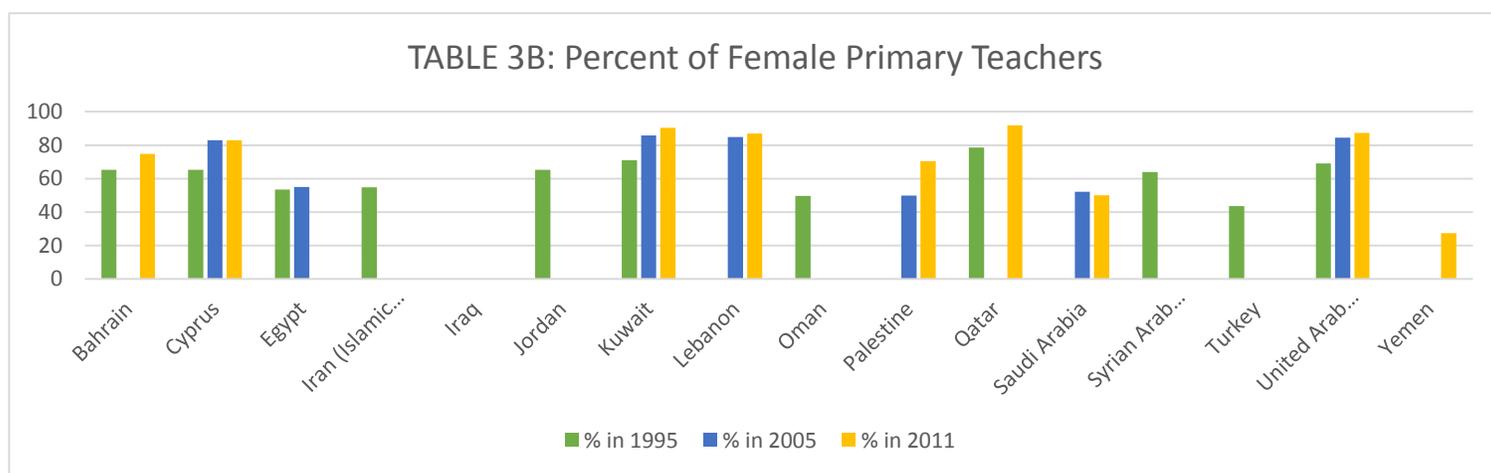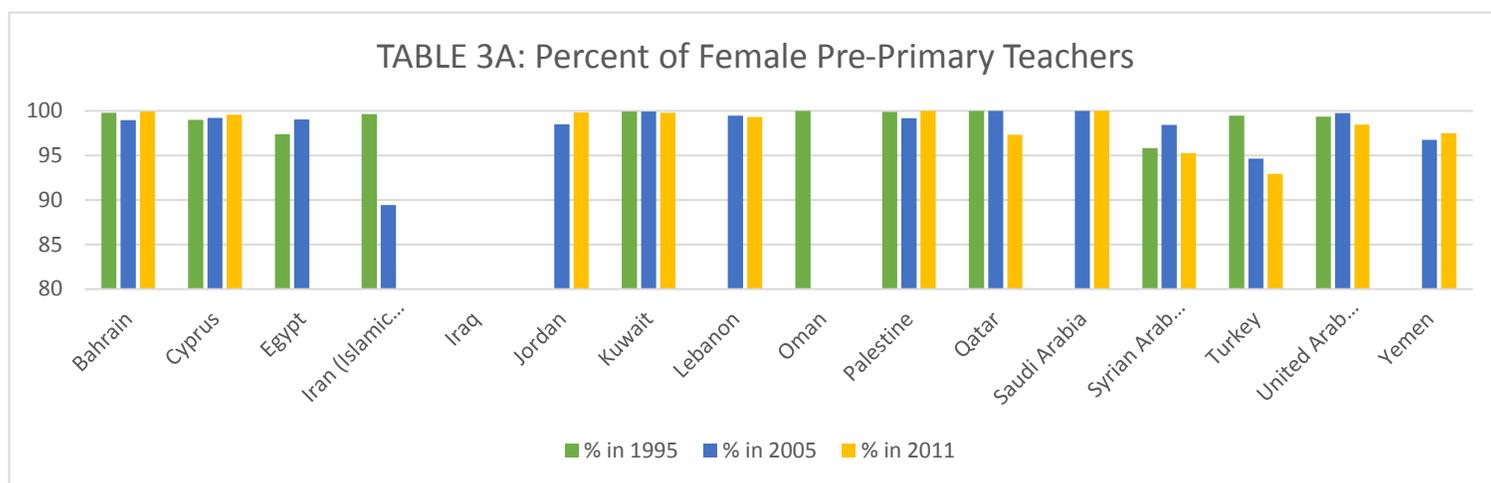TABLE 3B: Percent of Female Primary Teachers

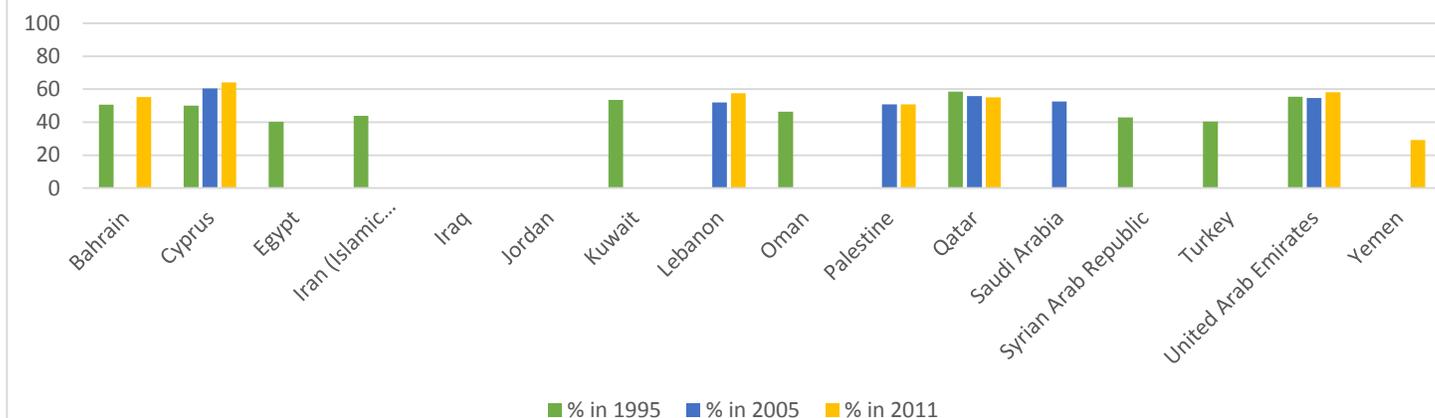TABLE 3C: Percent of Female Secondary Teachers

TABLE 3D: Percent of Female Tertiary Teachers
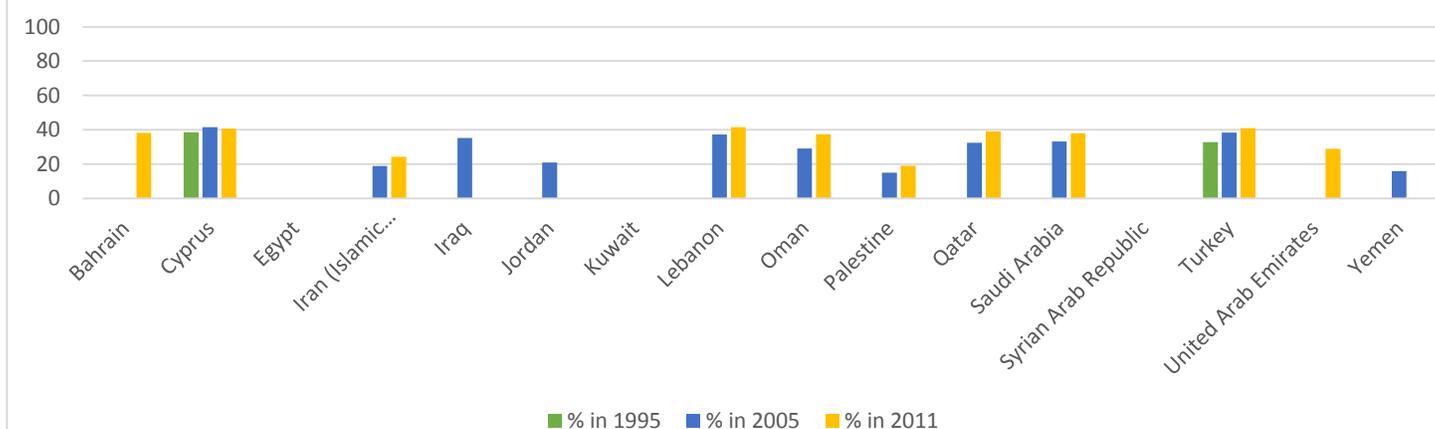
Tables 3A-3D: UNESCO Institute for Statistics. UNESCO Institute for Statistics Database. 2014. Raw data.

Tables 3A, 3B, 3C, and 3D show the overall inequity of teacher distribution by gender. Although in some countries women make up 50 percent of tertiary-level teachers, in other countries they make up only about 18 percent (UIS). Meanwhile, almost 100 percent of all pre-primary teachers are female. Ideally, each of these graphs would show an even 50 percent. Not only are females underrepresented as teaching level increases, but males are also vastly underrepresented in pre-primary and primary teaching positions. These graphs demonstrate the fact that in this region, it is much easier for women to be taught by women and receive the

education level of young children (through primary school). However, as they grow older, and education grows more complex, more of the teaching responsibility is shared by males. This is a problem in some Middle Eastern countries where cultural values make it inappropriate for females to be taught by male teachers. Thus, they cannot reach the secondary or tertiary level of education if there are no female teachers, and females are not widely assuming these high-level teaching positions. This could be due to lack of qualification, since they themselves have not reached a high enough level of education to teach. Another explanation could be due to gender discrimination on any number of levels (initial hiring, the work environment, wage differences, and the like) which prevents them from obtaining or keeping these jobs, despite equal qualifications.

TABLE 4 School Enrollment For Girls		
	Girls as percentage of total enrolled, primary (1996)	Girls as percentage of total enrolled, secondary (1995)
Algeria	46	47.1
Bahrain	49	53.5
Egypt	45	46.1
Iran	47	45.4
Iraq	45	39.1
Jordan	49	50.3
Lebanon	32	52
Morocco	42	42
Oman	48	48
Saudi Arabia	48	46
Syria	47	45
Tunisia	47	47
Yemen	28	21

Source: World Bank Education Sector Strategy, 2004

Table 4 shows the percentage of total girls enrolled in primary and secondary school through the Middle Eastern region. The highest value for both primary and secondary enrollment is in Bahrain, with 49 percent and 53.5 percent respectively. However, the lowest values are in Yemen, with only 28 percent and 21 percent. Overall, the average primary enrollment rate is 44.08 percent, and the average secondary enrollment rate is 44.81 percent.

But in examining the costs per student throughout the region, a trend becomes clear: Middle Eastern states spend much more on tertiary education than primary or secondary. For example, consider educational spending in Tunisia:

> the unit cost at the tertiary level was 27 times in 1980, and 11 times in 1990, that of the cost of a student at the primary level. These numbers mean that, for the equivalent cost of educating one university student for one year, 27 primary school students in 1980 and 11 primary school students in 1990 could have received a year of schooling in Tunisia. Since the ratio of primary school students to tertiary level students is above 100 to 1, we can conclude that Tunisia spends a large proportion of its educational budget on a very small proportion of students enrolled at the tertiary level, (Tansel 83)

This trend continues in the Middle East region as a whole, where the average tertiary spending was four times that of primary spending in 1990 (Tansel 84). Because of this inequity of wealth distribution on higher levels of education rather than primary or secondary, it is clear that Middle Eastern governments are favoring a small amount of individuals at the tertiary level, at the expense of primary and secondary education for all students. This is also questionable, because tertiary-level students in the Middle East are more likely to come from wealthy backgrounds, though state universities are free. These students generally come from families who can afford for them to continue their studies, rather than work.   This especially impacts female access to education. Girls' schooling is harmed by this lack of government priority since it makes it harder, or sometimes more expensive in terms of opportunity costs, to send daughters to school rather than have them stay at home or go to work. Due to the traditionally patriarchal society, sons are more likely to be sent to school than daughters.

TABLE 5

Early childhood education

Percentage of children age 36-59 months who are attending some form of organized early childhood education programme, Qatar, 2012

|		Percentage of children age 36-59 months currently attending early childhood education [1]	Number of children aged 36-59 months
Sex	Male	40.8	425
	Female	40.8	395
Nationality	Qatari	32.3	273
	Non-Qatari	45.0	547
Age of child	36-47 months	27.6	430
	48-59 months	55.4	390
Mother's education	Below Secondary	27.4	99
	Secondary	31.1	209
	University and above	47.3	512
Total		40.8	820

[1] MICS indicator 6.7

Table 5: UNICEF. "Multiple Indicator Cluster Surveys, 2012-2015." UNICEF MICS. UNICEF, n.d. Web. 2 July 2015.

However, in some nations, gender equality seems close, at least statistically. Consider the individual case of Qatar. As shown in Table 5, the percent of male and female students attending early childhood education there is equal (40.8 percent).

Meanwhile, in Iraq, a much larger country than Qatar, there is substantial variation. This MICS map (Table 6) represents the percentage of primary school aged children that are currently attending their first year of primary school, in Iraq in 2006 by governorate. The darker areas represent areas of relatively high attendance compared to the lighter areas. It is important to understand school attendance in Iraq by different geographical areas, since Iraq is not a homogeneous nation: its different regions are home to different social, cultural, and religious sects, which accordingly have different economic backgrounds. Each of these factors impacts

TABLE 6 Percentage of children of primary school entry age (7 years) currently attending grade 1, by governorate, Iraq, 2006
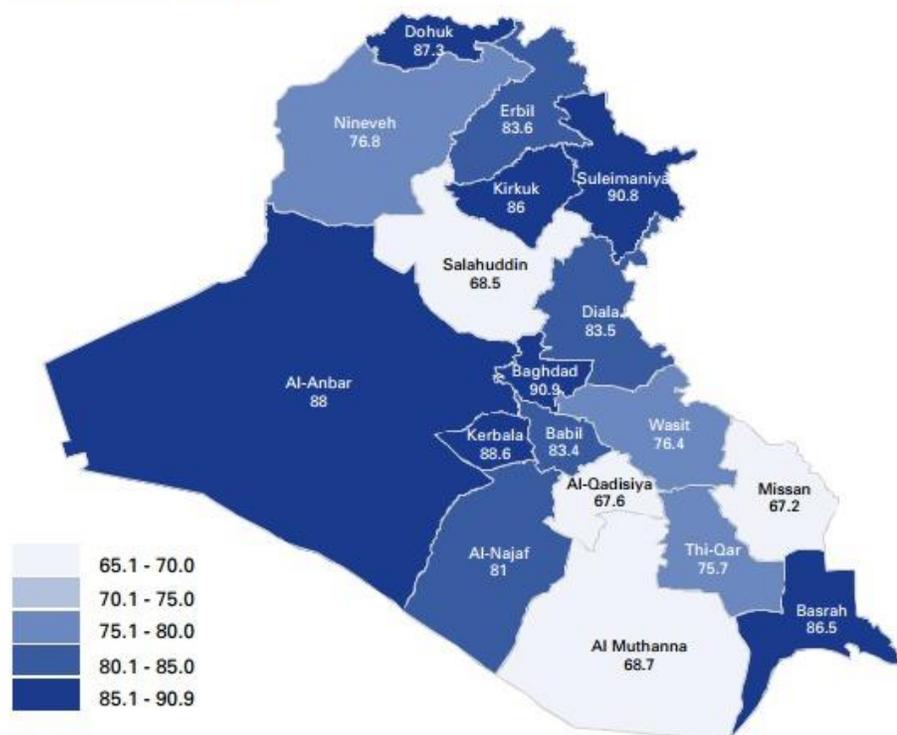
Table 6: UNICEF. "Multiple Indicator Cluster Surveys, 2012-2015." UNICEF MICS. UNICEF, n.d. Web. 2 July 2015.

the availability of education to the children in these areas. The large western governorate and the

central regions, which are primarily Sunni, and most of the northern governorates, which is

primarily Kurdish, have fairly high attendance rates, as well as high petroleum and chemical

resources. However, the densely populated Salahuddin region, as well as the majority of the

south which is mostly Shiite and relatively devoid of resources, have much lower percentages.

Meanwhile, Table 7 represents the percentage of net attendance rate in secondary schools in

Iraq in 2006. Overall, 48 percent of secondary school aged children are not in school, but this

figure is 58 percent for females. It is also important to note that in the northern oil-rich

Kurdistan region, the figure is much smaller, at 30 percent, while in the poorer Southern and

Center governorates, it is higher, at 53 percent. This indicates that while Iraqi girls are, overall, less likely to be in school than Iraqi boys, there may be variations in this gender inequity in different regions of Iraq.

TABLE 7

Percentage of secondary school NAR, secondary school age children attending primary school and secondary school children ouf of school, Iraq, 2006
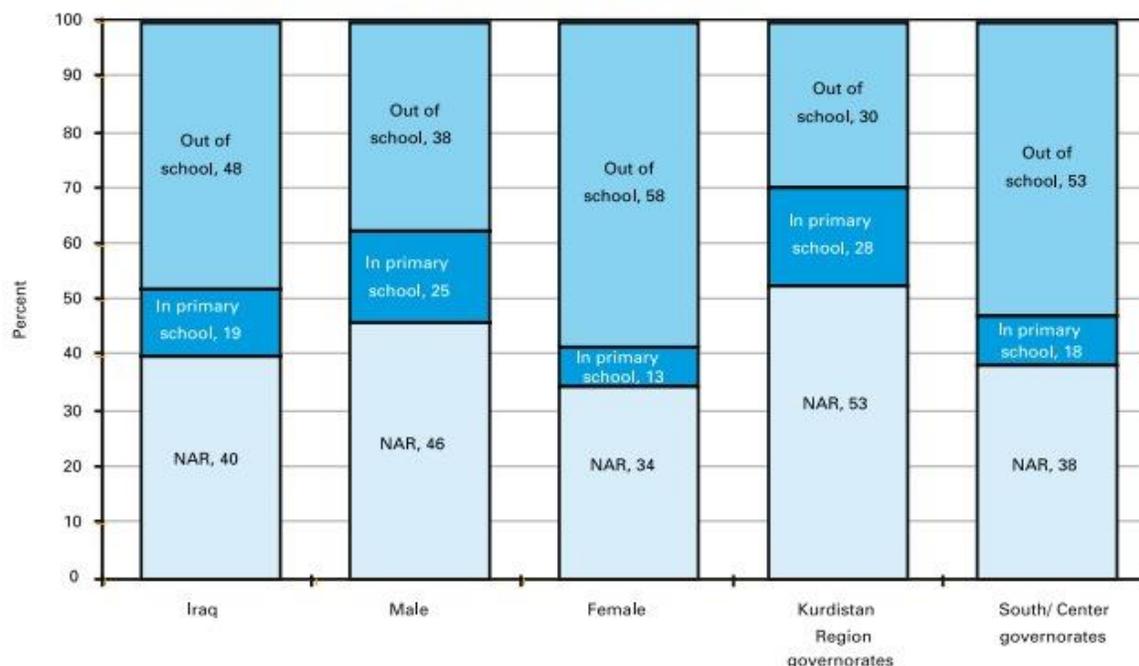
Table 7: UNICEF. "Multiple Indicator Cluster Surveys, 2012-2015." UNICEF MICS. UNICEF, n.d. Web. 2 July 2015.

In most Middle Eastern nations, patriarchy plays a large role in cultural norms, which affect women's access to education in the region. The male-centered and male-dominant cultural tradition ensures that women have a subordinate place in society, and policies that empower women are normally not a priority. Patriarchy is evident as a large part of everyday life in Yemen, and this is manifested in education.

In Yemen's "conservative, male-dominated society […t]he school curriculum perpetuates the traditional values of social injustice, and Yemen is in the last place among 142 countries for gender equality" (Al-Arashi 4). This nation's case typifies the status of many Middle Eastern

nations, in that women in urban areas have had relatively easy access to education since the 1960s, compared to women in rural areas. Rurally, females still face many obstacles to their schooling: "almost three-quarters of the Yemeni population [are] living in small remote rural communities, and despite basic education being free as well as compulsory for all children aged 6–15, many girls are not sent to school" (Yuki 47).   In rural areas, coeducational schools are a major problem from a social perspective, since many conservative families will not support sending their daughters to school with males (Beatty 9). Only five percent of the available schools are for females only; the other 95 percent are coeducational, or for males only (Al-Arashi 50). In 2011, the World Economic Forum found that the male literacy rate was 79 percent, while the literacy rate for females lagged at 43 percent. Though the amount of female teachers has increased since 2000, "the female share in total basic education teachers was still as low as 27 percent in 2010/2011 [according to Yemen's Ministry of Education], and the rural share is even less, negatively affecting girls' enrolment and retention" (Yuki 47).

Another obstacle to equal access to education in Yemen, as well as much of the region, is poor quality of education. This includes both the teaching methods in Yemen, as well as the curriculum. Yemeni schools primarily rely on lectures, memorization, and busywork, and lack activities, games, resources, field trips, and technology. There is no early childhood education before the primary level except for wealthy families (Al-Arashi 32). Class sizes also present an issue, since an average of 50 students prevents one-on-one time with the instructor, as well as hinders group discussion (Al-Arashi 32).

However, the main obstacle is the belief that women's education is basically unnecessary, and so there is a "[l]ack of desire on the part of parents to invest in the education of their female offspring. Where families are large, boys are almost certain to get priority. The expense of

schooling for boys is often perceived to be more 'justified' in terms of material investment since they are to be the breadwinners" (Beatty 10). This is because it is normal in Yemeni culture for women to marry at a young age; more than half are married before age 18, and the average age of marriage is 14 (UIS). This leads to a high female dropout rate, as girls leave school when they get married to be caretakers of their husbands and families. UNICEF also reported in 2012 that out of all the dropouts in two major cities in Yemen, 74.48 percent were girls. This phenomenon is also prevalent in Syria, which will be examined more closely later in the study.

Meanwhile, women in Iran and Lebanon are encouraged to pursue higher education, but only as an ornament to add to their social standing. Iranian and Lebanese families typically only "support their daughter's higher education as a way to improve her chances of finding a husband of similar or higher social status, which, in turn, adds to the family's collective social status" (Haghighat 274). Female higher education is otherwise useless in the eyes of many Iranian and Lebanese families, since there is no application for these degrees. No jobs that require such high-level degrees are available to women, and since their training and education is not utilized by society, it becomes worthless in this regard (Haghighat 275). Because of this paradox, "Iran and Lebanon are two examples of countries where the government has been offering resources, but tapping into and capitalizing on deep-seated notions of traditional family values to keep women out of the labor force and overall political involvements," though this involvement would stimulate their overall economic development (Haghighat 275).

This is indicative of a wider trend in the region, that though women's access to some education has increased overall in the past twenty years, it is not usually access to a quality or useful education, since labor force participation has not increased in turn: in 2000, women's employment in the region was only about 27 percent (Haghighat 288).   However, even this

employment presents problems from an educational perspective, since "employed workers are often concentrated in particular sectors that contribute to gender segregation in the labor force [and…f]emale concentrated jobs are often lower status and lower paying jobs" (Haghighat 289). Because of this, it is sometimes not even necessary for women to have higher education to pursue these jobs, making it even less likely that they will be encouraged to do so.

From all of these issues, it becomes clear that there are obstacles to women's access to education in the Middle East. Each of the regional trends discussed indicates just one of the obstacles that females face to their schooling. These can be summarized to three major categories of obstacles: societal roles, resources, and educational structure.

IV.   Obstacles to female education in the Middle East

Societal roles refer to the expected parts that women are expected to play in their cultures. These include but are not limited to the roles of obedient daughter, wife, mother, and in careers, teachers or nurses. Because of these traditional roles, women's formal schooling can seem culturally unnecessary or redundant due to the homemaking education that women receive in the family environment. However, it is important to recognize what social traditions and practices exactly influence and continue to perpetuate these social roles. In many Arab societies, once women marry out of the family, they no longer have a financial obligation to their family. This means that the family is no longer expected to support them financially, but in turn, the woman has no obligation to support her family either. The woman becomes dependent and bound to her husband's family instead. Therefore, parents count on their sons to care for them and support them in old age rather than their daughters. This obviously has financial implications for women's education: since the woman, once married, will have no financial obligation to her parents, it makes more sense for the parents to invest in the continuing education of their sons

(Beatty 9). If the sons have a full education, they will be more likely to have a higher-paying job, and that money will go towards supporting the parents in the future, while the daughters' wages would support her new family or her husband's parents (Beatty 10). In this way, parents are obligated to place male education above female education in importance.

However, it must be understood that this traditional societal structure and patriarchal priorities are a strong part of Middle Eastern culture, and not a law or teaching of Islam. In fact:

> Islam condones educating women and allows them to participate in politics. The religion of Islam acknowledges that both men and women have the capability and responsibility to learn. According to the Quran, 'Whosoever performs good deeds, whether male or female and is a believer, we shall surely make him live a good life, and we will certainly reward them for the best of what they did' (XV1: 97). (Marri 3)

Arab society has held this patriarchal cultural standard since before Islam, with long-dated and pre-Islamic traditions such as female infanticide and genital mutilation, which have persisted despite the equalizing language of the Quran (Marri 2).

Furthermore, it is vital to recognize what social institutions are in place that have both created and perpetuated these social roles. The main reason that parents are primarily concerned with their own welfare in old age is due to the lack of social security or pension programs in their country. Most Middle East countries, with the exception of the rich oil states, are too poor to support such large and expensive social welfare programs for their citizens. Because of this, Arab adults must always think about their own future sources of care and income, since no support or safety net can or will be provided. This shifts the financial burden of retired parents to the younger members of the family. Because of this, there is a distinct advantage to marrying off daughters as early as possible, and investing extensively in the education and prosperous future of sons. As soon as the daughters are married, they become the financial responsibility of their husbands, and their husband's family; they are no longer dependent on their own family's

resources. If the family can afford quality and continuing education for their sons, there is a much higher chance of profit to be gained than for daughters, whose employment possibilities are much more limited in Middle Eastern countries. The more educated and profitably-employed sons the parents can ensure to support them, the more secure their own futures will be. In this way, the lack of social security programs and pensions perpetuate social roles that impede women's education.

However, the aspect of this problem that has not yet been touched on by this study is the opportunity for female employment in the Middle East. Women's participation in the labor force in the Middle East remains low due to discriminatory hiring practices. Even though many companies in the Middle East are initially interested in hiring women, "these companies were wary of hiring [them], despite the fact that they prefer female employees, because they assumed that the restrictions placed upon them by their societies would keep them from succeeding at their jobs" (Aslan). However, unemployment for both genders of young people has been increasing steadily in the Middle East for years. This clarifies another reason that more men have a higher rate of participation in the labor force than women, since families put such an emphasis on employment for their sons. From this perspective, it would be socially inappropriate for a woman to be hired instead of a man in a competitive labor market. This perspective's prominence in Egypt will be discussed later in this study. Unfortunately, this creates a problem for measuring women's education and opportunity, since the quality of their education cannot be measured by jobs they obtain after graduation.

Additionally, the useless education provided to unemployable women underlines how circular the problem can be. This is noticed particularly in Iran and Lebanon, where an education is just a placeholder title that provides status to their families. The lack of societal use

or opportunity of a degree for a woman who will not be employed is brought about by, and then reinforces, the lack of priority for women's education in Middle Eastern society. When women do overcome obstacles to obtain their degree, it can become essentially useless professionally due to the dearth of jobs available for the general population, and men traditionally filling those jobs before women. Therefore, women's education can quickly become unnecessary in the eyes of families or even whole societies and governments due to its current lack of societal profit.

Women's access to quality education is also affected by a lack of resources. Resources refer to anything, including money, technology, governmental protection, endorsement, or subsidization, that makes education better, more affordable, or easier to access. Some schools could reasonably take on more female teachers if they could afford to pay them, and some girls could reasonably go to school or stay in school if they could afford it. In this way, lack of resources affect both sides of the education equation. Many schools also lack technology, or adequate technology, which can be a barrier itself to a quality or useful education. Finally, education for women in the Middle East as an issue lacks a primary resource: priority status to the governments of Middle Eastern states. Because women's education is not a priority, government education funds are more likely to be allocated to the (primarily male) tertiary education sector rather than lower levels, like in Tunisia. On top of that, total government resources are limited in much of the Middle East, excluding oil-rich states. Because of this, even the total amount of funds allocated to subsidizing any level of education can be meager.

Since many government-funded schools are lacking, their structure is affected. Structural failure of schools in the Middle East refers to curricular problems as well as corruption. Patriarchal cultural traditions influence the curriculum that is taught: most curricula are male-centered and created almost exclusively by males (Al-Arashi 20). They have culturally skewed

themes and information, but they are also out of date and somewhat ineffective. Most education in Arab states is structured around memorization, rote learning, and standardized testing, which results in a poor quality education. No skills or critical thinking are taught, and students often ignore most classes and tests until those that determine advancement or failure. This was previously discussed as a problem in Yemen, but it is typical of most Middle Eastern education systems. There is also systemized corruption in many Middle Eastern states, where teachers essentially force students to pay for private tutoring sessions to learn the information on the important tests by refusing to teach it during class time. Obviously, this puts students that cannot afford private tutoring at a disadvantage academically, though their talents may not be less than their peers. This is especially prevalent in Egypt, where corruption has only increased in the past decade.

To clarify these obstacles and study them closely, it is valuable to look at specific data from three different countries in the region: Egypt, Saudi Arabia, and the Syrian Arab Republic.

V.   Case study: Egypt

First, this research considers Egypt. Egypt is the largest country in North Africa, and its population in 2013 was over 86.9 million people, with 56 percent considered rural (UIS). The breakdown of this population is roughly 32.1 percent under age fifteen, 17.8 percent between fifteen and twenty-five years, 38.4 percent between twenty-five and fifty-four years, and 11.7 percent over age fifty-four (CIA World Factbook). Egypt's GDP per capita in 2012 was 3,256 USD (UIS). The vast majority of Egyptians are Sunni Muslim, with a 10 percent minority of other religions including Shia Muslim and Christian (CIA World Factbook). Egypt's largest cities, Cairo and Alexandria, are densely populated, as most Egyptians live along the banks of

the Nile River (Napier 201). These serve as the urban hubs of Egypt, while the other 26 governorates are considered rural (Napier 201).

A formal schooling system began in Egypt between 1805 and 1848, when ruler Muhammad Ali Pasha instituted two systems: traditional Islamic schools for the general public, and separate school system for "elite civil servants and technicians, who studied a broader range of subjects, general of western origin" (Allard 385). These included military academies, medical and veterinary schools, as well institutes for sciences, engineering, the arts, agriculture, finance, and languages. When Britain colonized Egypt as a protectorate in the 20th century, low level education for the general population ceased to exist, and education became for the elite only. As a result, when Egypt gained its independence in 1922, over 95 percent of the population was illiterate (Allard 386). This remained the status quo until Gamal Abdel Nasser gained power in 1956, when the government expanded both Islamic and secular education. Nasser's five-year plans in the 1960s included mass education as well as guaranteed employment within the government for all tertiary-level graduates, though these goals were not totally achieved. Anwar Sadat later ended this hiring requirement, which in the 1980s resulted in mass unemployment among university graduates: as high as 30 percent (Allard 386). Hosni Mubarak's educational approach championed education as a way to increase the labor force in order to kick-start the Egyptian economy; his technical education programs increased student enrollments, as well as produced new schools. In the 1990s, the Egyptian government began a comprehensive attempt to rid the educational system of all Islamic influences, including the wearing of the veil.

As of 2001, there were 18,522 primary schools in Egypt, and schooling is compulsory for eight years. In 2008, Egypt spent about 3.8 percent of its GDP on education, and this represented 9.86 percent of total government expenditure (UIS). The enrollment rate declines

with level of education, with 101 percent enrolled in primary, 75 percent in secondary, and only 20 percent of the general population enrolled in tertiary education (Allard 384). Comparatively, for the female population, these rates are 94 percent, 70 percent, and 16 percent respectively, showing a slight but steady gap (Allard 384). In 2015 the literacy rate of the general population was estimated at 73.8 percent, though this rate is 65.4 percent for females (CIA World Factbook). In the wake of modern political turmoil, Egyptian society and education have also seen major changes. Women's access to education in Egypt is stifled by the same obstacles that face the region as a whole: societal roles, resources, and structure.

In Egypt, societal expectations are one of the major cultural obstacles to women's equal access to quality education, especially in rural areas. However, these social roles do not necessarily prevent women from going to school in Egypt: they prevent them from truly entering the labor force. Schooling for women in Egypt seems to be more about the social value of schooling rather than its use or intellectual value: "for many of the women, education for employment did not seem to be encouraged; in fact whereas employment was the most important reason for male's education (62%), raising family and being a better mother was listed as the most important reason for educating girls" (Ghazal 27). Though legally, Egyptian women have the right to attend school, seek employment, vote, and even run for office, their literacy rates remain at 65.4 percent, and women make up only 23 percent of the labor force (Lekas 4). Furthermore, "women account for only 12 percent of the trained employees and 10 percent of the executive employees" (Loewe 4).

The reasons that women are severely underemployed in Egypt are complex, but stem primarily from the societal expectations of women which are reinforced by Egypt's social institutions. Egyptian women must adhere to strict social rules enforced by their families, from

things as relatively minor as a curfew, to living at home until marriage, to the challenge of accepting all educational, professional, and personal choices made for her by the family (Ghazal 77). An interview with an Egyptian tertiary-level graduate student, Mahi, revealed how her family reacted to her education: "When I asked Mahi what she meant by living in a male society, she responded that the 'first and last words are for males. My needs or the things I want are subject to his approval. If I want to continue my studies my father might object. Maybe, if I were married, my husband would refuse. Then what?' (Mahi, May 18, 2013)" (Ghazal 80). Mahi's experience is typical of Egyptian women, who are "sometimes deemed second-class citizens, denied full legal identities by exclusion from the rights, privileges, and security entitled to individuals of society" (Lekas 2).

This is quantified in women's wages, since women in almost every country in the world are paid less than men for the same work (CIA World Factbook). In Egypt, the wage equality for similar work is just 0.78 on a scale from zero to one, where one represents complete equality (World Economic Forum). This can essentially be interpreted to mean that Egyptian women are paid about 78 percent of what men receive for the same work.

Another social institution that works in tandem with women's low wages to present an obstacle to schooling is the Egyptian social security system, which is neither efficient nor equitable. In 2000, Egypt spent more than 20 percent of its GDP on social protection, though its social security systems still grow at a much higher rate than other developing countries, despite Egypt's quickly aging population (Loewe 6). In the past decade, already-low pensions have been decreasing as costs of living increase, and the average pensions in 2000 were all "below the per capita expenditure at the lower poverty line in 1999/2000 (80.30-92.40 [Egyptian pounds]), i.e. they do not satisfy basic needs at the poverty line" (UNFPA). In addition, Nasser's guarantee of

government employment for all university graduates drained government resources considerably between 1973 and 1987, leaving a smaller pool for pensions in the past two decades (UNFPA). For the future, this means that "[t]he social security system in Egypt faces a long-term shortage in funding, with the increasing borrowing of the central government, low nominal rates of return and increasing financial rates" (UNFPA).

   In terms of equity, Egypt's social security programs effectively discriminate against the poor, and benefit the upper and middle classes: "2.3 percent of GDP is spent on subsidies but less than 0.2 percent on social assistance" (Loewe 6). However, the government system is also highly biased against women, especially unmarried or widowed women. In general, women usually draw lower pensions than men due to their smaller salaries and therefore lower pension contributions (Loewe 4). Furthermore, to even apply for a pension or social assistance from the state, one must hold an identity card; in 2000, only 55 percent of women held these (Loewe 4). Finally, due to societal roles, Egyptian women can face specific risks of social shock that do not affect men, and against which they are ineffectively protected by Egyptian social security. For example, women who are widowed receive low pensions, and divorced or abandoned women are not entitled to any benefits whatsoever (UNFPA). Additionally, it is nearly impossible for widowed elderly women to return to work or to enter the labor force for the first time, and so they become entirely dependent on their families, or their pensions, which are below the poverty line (Loewe 4).

   Wage inequality, combined with Egypt's inefficient and discriminatory social security system, mean that women's education is not economically efficient for the family. This is especially true if they are poor or live rurally, where education is much harder to find already. Therefore, for a poor Egyptian family, it may be more economically efficient to send their sons

to school and their daughters to work, since overall "an educated boy can earn more than an educated girl" and Egyptian families must rely on their offspring to support them in retirement rather than the poor pension system (Kugler 15).   These social institutions reinforce the societal norms that leave women at home, out of school, and underemployed.

It is impossible to identify a single actor that creates and perpetuates these obstacles. However, it is possible to clarify that these social institutions are continued by a number of phenomena. For instance, the Egyptian social security system is one institution that creates an obstacle to women's education by forcing families to consider future financial need above education for all their children. Additionally, the male-dominant society leaves women, in practice, as second-class citizens, despite their legal rights.

The second category of obstacles facing women's access to quality education in Egypt is resources. Egyptian schools lack the necessary resources from the Egyptian government to become high quality. Though Egypt has focused on, and for the most part achieved, a high quantity of Egyptian children in attendance of pre-primary and primary school, the quality of this education and higher education has suffered. The secretary general of the Supreme Council of Universities stated in one interview that the Egyptian government's main educational goal was "providing access to higher education[… and that they are] in the phase of access rather than the phase of quality" (Ghazal 106).

This phase has been largely successful, as in 2013, 99.29 percent of all primary-age students were enrolled in primary school, though as previously discussed these figures decline with level of education (UIS). Therefore the problem for Egyptian schools is state resources for the improvement of the curricula and classroom resources, as the Egyptian government is still focused on expanding access rather than quality. Since 2005, this has created an even greater

strain on Egypt's dwindling funds as the school-age population has risen, and the unit costs of providing education at the primary and secondary level have also increased (Gershberg 12). Egypt's public spending on education is relatively high compared to other nations with similar incomes, but this spending is largely inefficient, which has left Egyptian schools with major flaws (Gershberg 1). One such issue is textbook spending, which in 2005 was 63 percent of the Egyptian Ministry of Education's nonwage spending, about 28 percent of which was for reprints of old textbooks (Gershberg 13). Another problem is lack of school facilities coupled with increasing school populations, creating class densities over 80 or more students (Sobhy). Furthermore, Egypt has "attempted to cope with this through the institution of multiple shift schools, whereby two or three school populations use the same building at different times of the day," which means that teachers and students get only four to five hours in the classroom per school day (Sobhy). Between 2001 and 2006, schools that operated in shifts represented 56.7 percent of primary schools (Egypt 58). This is totally counterproductive to effective teaching. Egypt is also guilty of overstaffing these inefficient and overcrowded schools by hiring teachers at a higher rate than enrollment growth (Gershberg 11). All of these resource problems contribute to Egypt's low level of quality in public education, which creates an economic obstacle for women to access a quality, expensive, private education. Considered in the context of finances as the major family priority, and therefore the sons' schooling rather than the daughters', an expensive education is a major problem.

The largest count of inefficient expenditure in Egypt is teachers' salaries. Many teachers in Egypt are hired "on precarious contracts and paid real wages below poverty line estimates" which has created the widespread notion of teachers' "right" to increase their incomes privately through tutoring (Sobhy). Over 60 percent of household spending on education in Egypt is

allocated towards this private tutoring (UNESCO). The lack of resources for teachers' fair salaries therefore creates a hostile educational structure, which discriminates based on wealth.

Egypt's educational structure allows the teacher to be "the sole provider of knowledge with the ultimate power in the classroom [which] sets the students at a disadvantage, making them vulnerable" (Ghazal 113). Independent learning is discouraged through curricular emphasis on rote learning and memorization. Whether or not students may continue onto a state-subsidized university or simply a secondary- or tertiary-level technical program is determined entirely based on their standardized test scores. At the final year of each level of education, students take these high-stakes national tests that determine their next possible course of education, and "[t]his makes students focus on studying only at the end of each of those stages and ignore school work in between" (Ghazal 101). However, if their test scores are poor, but they wish to continue on the track to a university, students can continue their studies in a private school instead. Poor families cannot afford to do this, and so this competitive and expensive educational system places them at a disadvantage. This structure contributes to making cost a substantial obstacle to quality and continuing education. Combined with the economic advantage of educating sons rather than daughters, women are more likely to drop out of school at an early age due to low scores (Egypt 41).

Egypt's low-paid teachers exploit this system for their own benefit and create an even more hostile and discriminatory educational system. In many schools, "teachers refuse to teach in class, instead forcing each student to pay for private lessons in order to even be exposed to the material that will be tested" (Ghazal 114). Therefore students attend public school during the day, learn nothing, and are manipulated by teachers into attending private tutoring sessions. The Egyptian Ministry of Education perpetuates this by assigning official textbooks which are "so

poorly presented as to force students to rely on expensive auxiliary textbooks [… which]

cements the need for private tutoring in order to complete and revise the centrally mandated

curriculum" (Sobhy). However, even within these private lessons educational quality is poor

since students rely on "lenient assessment" from the teachers that they pay to tutor them to give

them passing grades on their exams (Sobhy). It is in this way that in 2010, 35 percent of

Egyptian secondary-level graduates were illiterate (Nachazel 52).

     This structure of corrupt private tutoring is not only supported by the official textbook

strategies, but also enforced via harassment and abuse by the teachers themselves. As young as

the primary level, teachers "coerced students into taking private classes with them by harassing

them in class and lowering their grades" (Ghazal 114). There is widespread cultural acceptance

of this, and in fact "endorsement of beating as an appropriate and effective disciplinary

technique, at least for the poor" (Sobhy). Though Egyptian law has clear regulations which

prohibit both physical and emotional punishment in schools, "teachers in low-end schools are

rarely penalized for beating students or in fact humiliating their parents if they should come

forward with any complaints" (Sobhy). As a result, the educational system structure in Egypt

"contributes to student drop out, aversion to schooling, contentious unmanageable classrooms

and sometimes counter-violence by students and parents" (Sobhy).

     Therefore it is clear that in Egypt, the lack of efficiently-allocated resources has contributed

to supporting a hostile educational structure. When considered next to the expected social roles

and unemployment that face Egyptian women, the result is a major, complex obstacle to

women's equal access to education. The state has not efficiently used its resources to build

enough schools with well-paid teachers, and, in turn, the education system has adapted its

structure to attempt to solve these problems on its own. This adapted structure is widely corrupt,

hostile, and can be extremely expensive. Since in Egypt "an educated boy can earn more than an educated girl," and the inadequate social security system requires that families consider their future finances first, women have a disadvantage when it comes to schooling (Kugler 15).

The major barrier that presents itself to Egyptian girls and families is the cost of education. However, the actors that create this obstacle are many. The Egyptian Ministry of Education certainly plays a role in its poor allocation of resources. Teachers, in reaction to this, play a role by forcing the cost of education to be much higher than it would be otherwise. Finally, the pension system and overall financial status situation is partially to blame for the fact that many families live below the poverty line and cannot afford to send their daughters to school. These are large, systematic, and established problems that need to be addressed, but cannot be fixed overnight.

VI.   Case study: Saudi Arabia

The Arabian Peninsula on which Saudi Arabia is situated is the historic origin of Islam. After conquering the Hijaz kingdom in 1926, the Kingdom of Saudi Arabia was established in 1932, when the Hijaz and the Nejd were joined into one state under King Ibn Saud. Saudi Arabia has a geopolitically strategic location, as well as an incredibly vast oil supply which funds its state economy. The original Royal Family of Saud has ruled Saudi Arabia since 1932, whose government remains primarily an absolute monarchy. The Arab Spring protests had little effect on this situation, as censorship and political arrests quieted the efforts; however, former King Abdullah created a huge citizen benefits package in response to aid loan repayment and offset inflation. Protests are banned, and Saudi Arabia remains a monarchy led by King Salman.

Saudi Arabia's total population is about 27.3 million people. The population is roughly 27.6 percent under age fifteen, 19.3 percent between ages fifteen and twenty-five, 45.4 percent

between ages twenty-five and fifty-four, and 7.7 percent over age fifty-four (CIA World Factbook). Saudi Arabia's GDP per capita in 2012 was 25,136 USD, which is much higher than both Egypt and Syria due to Saudi Arabia's vast oil reserves and rentier state status (UIS). Between 85 and 90 percent of Saudis are Sunni Muslim, with the rest being Shia Muslim or other minority religions; however having a religion other than Sunni Islam is prohibited by law, and non-Muslims cannot obtain Saudi citizenship (CIA World Factbook).

Public education did not exist in Saudi Arabia until the 1930s. Before 1925, there were only four private schools in existence within the nation. King Ibn Saud began instituting education programs designed to "observe the teachings of Islam, disseminate knowledge, and construct schools" (Paquette 1167). In fact, Saudi Arabia's first education system was modeled after Egypt's (Paquette 1167). In the 1930s, the first public and private primary schools were established; in 1935 the first secondary school was built. Later in the 1930s, a General Directorate of Education was instituted and tertiary level schools followed in the 1940s and 1950s. However, in 1952, the United Nations reported that illiteracy was between 92 and 95 percent. The creation of a Ministry of Education, led by Prince Fahd, divided Saudi Arabia into school districts and began programs to lower adult illiteracy. Education became compulsory for six years. In 1961, the General Directorate of Girls' Education was created and women's schooling was mandated, and later in the 1960s Saudi education developed to allow 50 percent of students to continue to secondary and tertiary education, and the other half to certificate programs for teaching, vocational, and technical skills (Paquette 1167).

All education in Saudi Arabia has a distinctly Islamic influence. A result of this is that men and women have separate schools. All curricula are centered on the Quran; its memorization and application are required. Because of the state's vast oil funds, "[e]ducation is free but not

compulsory beyond the elementary level. The government provides free tuition, stipends, subsidies, and bonuses to students entering certain fields of study and to those continuing their education outside the country. Free transportation is provided for female students" (Paquette 1168).

In 2001, there were 11,506 primary schools in Saudi Arabia, and six years of formal schooling are compulsory (Paquette 1166). The female enrollment rate declines with level of education, with 75 percent enrolled in primary, 54 percent in secondary, and only 15 percent enrolled in tertiary education (Paquette 1166). The literacy rate of the general population is estimated at 94.7 percent, though this rate is only 91.1 percent for females (CIA World Factbook). In 2008 the Saudi government spent 5.1 percent of its GDP on education (CIA World Factbook). This represented about 17.7 percent of total government expenditure for the same year (UIS).

The main obstacle that faces Saudi women is the role that they are expected to play within their society. Saudi women are expected to be obedient daughters, wives, and mothers, and most careers are not open to them. As a result, they are severely underemployed and education is seen as a trophy that can enhance social standing rather than a qualification for a career. Saudi Arabia is, in many cases, "a highly male-dominated society that creates many social barriers that challenge women in leadership roles" (Alexander 201). As such, females may only attend school with the permission of their fathers or their husbands (Somers 50). In fact, schooling in Saudi Arabia reinforces these societal roles. Until 2002, males' education was overseen by the Saudi Ministry of Education, while females' education was controlled by the Department of Religious Guidance (Hamdan 44). The purpose of this separation was to "ensure that women's education did not deviate from the original purpose of female education, which was to make women good

wives and mothers, and to prepare them for 'acceptable' jobs such as teaching and nursing that were believed to suit their nature" (Hamdan 44).

This reinforcement of gender roles in society has contributed to women's subordination and has created a major obstacle to education and employment. Since only a few careers are accepted as suitable for women, the available labor force is severely underemployed. As seen in Tables 8A and 8B, while in 2014 the nation's unemployment rate was estimated at 11.2 percent (normal for developing countries), women's unemployment was 32 percent (CIA World Factbook, "Unshackling themselves"). Meanwhile, in 2012 for young people between the ages
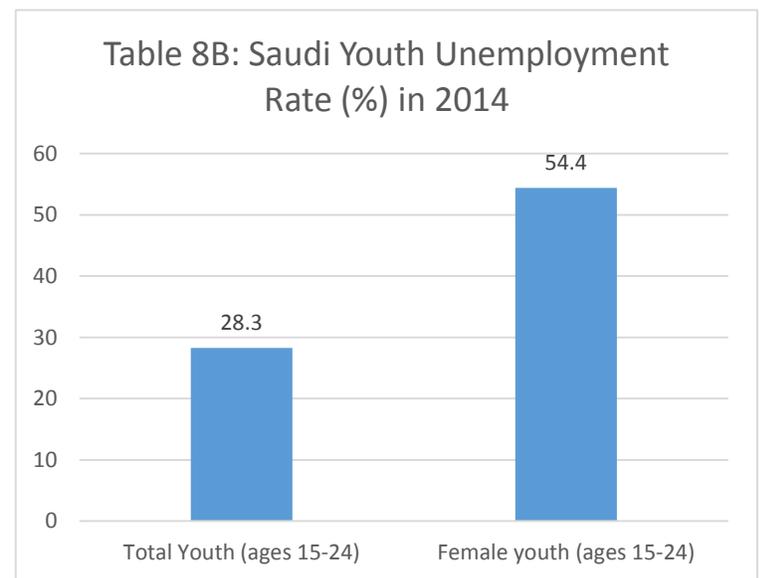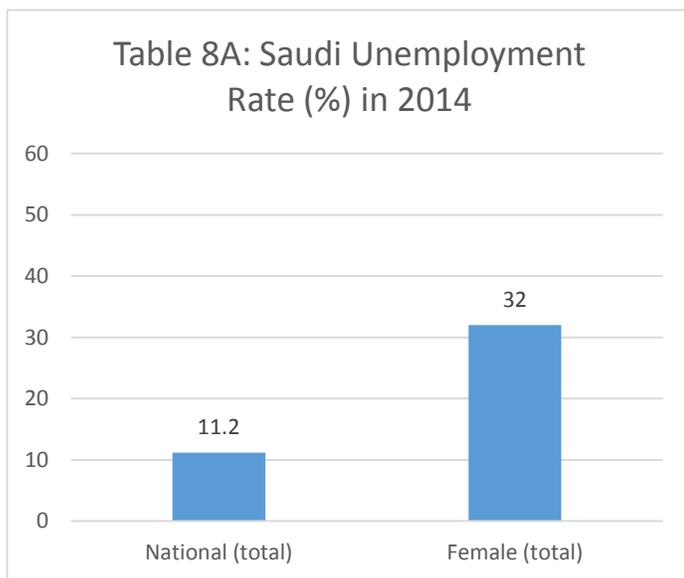
Tables 8A and 8B: CIA World Factbook. "Saudi Arabia." CIA The World Factbook. Central Intelligence Agency, 9 July 2015. Web. 17 July 2015.

of 15 and 24, the national unemployment rate was much higher at 28.3 percent; the young female unemployment rate was an enormous 54.4 percent (CIA World Factbook). While in the Middle East region a gender gap of about 10 percentage points is normal, Saudi Arabia's gap is about 22 percent nationally, and 26 percent for youths (Mahmood).

Unemployment in Saudi Arabia affects women's access to education in a different way than in Egypt, since Saudi Arabia's vast oil resources make it a rentier state that provides ultimate

welfare to all citizens. Therefore Saudi families worry much less about how they will be provided for in old age than Egyptian families. For Saudis, female education is more of a title that can confer a higher social status through marriage. It mirrors the situation in Jordan, where higher education is not a "transition for the workplace as much as it is becoming more desirable for marriage," according to Mayyada Abu-Jaber, founder of a Jordan-based foundation for the advancement of education (Cadei). When women continue their studies to secondary- or tertiary-level education, they are "are less likely to work [but] they're more likely to marry an educated man with a job that can support them both" (Cadei). This can encourage female education, but discourages female employment.

However, the education that Saudi women have access to is not equal to that of men, which creates a barrier to quality education. This is especially evident in the fact that male and female education is totally segregated in Saudi Arabia after the primary level (Somers 51). Women may not major in architecture, engineering, or pharmacology (Somers 57). The governmental separation, that has its focus on steering females away from careers that are unsuitable for them, is mirrored in the curricular separation that focuses on teaching girls to "buy into an assigned role, a role in which they were subordinate to men, but not enough to challenge it" (Doumato 93). Moreover the education that is accessible for Saudi women totally ensures that "at every level of competence and leadership there will be a place for them that is inferior and subordinate to the positions of men" (Smith 34).

This kind of education is far from equal or high-quality, and therefore this subordinate societal role represents an obstacle to female education in Saudi Arabia. It is hard to identify any single actor that creates or perpetuates these roles or this societal structure, other than the political necessity of maintaining order. Therefore, these societal roles "can be attributed to

traditional and socio-economic values, [which] gained legal force in Saudi society by being associated with Islamic teaching" (Hamdan 45). Though they are not directly derived from the Quran, their association with it, in the land where Islam originated, carries strong social influence. Due to this, the actors that perpetuate these values are everywhere and nowhere: it is all people in the society that establish, uphold, and enforce their traditions. However, change is happening in Saudi Arabia. Men and women alike are pushing for the adjustment of laws and rules, and spaces for women only are increasing. If these petitions persist and the Saudi government, which now welcomes more women than ever before to its ranks, may be able to affect and enforce real change to the parts of Saudi society that present barriers to women's access to education.

For the next category of obstacles, resources, Saudi Arabia's issues are again unique from Egypt's. Saudi Arabia, as the ultimate welfare state, "provide[s] free, general scholarships for students (male and female) in some areas of general education and in all vocational, technical, technological, and higher education with free transportation for all females" (Alexander 200). However, there is a distinction between the resources provided for women and for men. Furthermore, "the budget for women's higher education is only 18 percent of that allotted for men's education" and "women students receive a smaller [college attendance] stipend than their male counterparts" (Somers 50). Since most women in higher education will not go on to the workforce, the resources allocated for them have begun to reflect their likely roles as wives and mothers. As a result, "[w]omen's facilities are inferior, class sizes larger, and access to resources limited. For example, women can use the main library only one day per week, while men have access to it the other six days" (Somers 57). Women's education does not have priority status to the Saudi government, and therefore it is not a priority to the state-funded universities. The way

that resources are allocated reinforces the societal roles to which Saudi women are limited. This presents an obstacle to women's access to quality education. Since females are not afforded the same equal opportunities as males, their access is inherently restricted. In the case of the library, it is obvious that gender discriminatory policies enforced by the university prevent women's access to education materials; as far as budgets, class sizes, facilities, and overall educational resources, it is clear that women are at a disadvantage.

Another phenomenon in Saudi Arabia that distinctly limits women's access to quality education is gender segregation due to Islamic law. This issue also faces Egyptian girls, as all Egyptian state schools are segregated as well. However, in Egypt, females may attend classes taught by male teachers; in Saudi Arabia, this never happens after the primary level, except in medical school (Somers 49). Even the coeducational universities in Saudi Arabia are not truly gender integrated: there are separate campuses for women. This creates many administrative problems for the school, and personal problems for the students: "inadequate numbers of women teachers for girls' schools and faculty for their higher education, a shortage of educational facilities, problems in administrative communication because male and female administrators do not meet in person for discussion" (Somers 53). The most pressing obstacle presented by this segregation is the lack of female teachers. As females may only be educated in the classroom by female teacher, the dwindling number of female teachers at each level of education deters women from continuing their studies.

Table 9: Percent of Female Teachers in Each Level of Education in Saudi Arabia (2005)
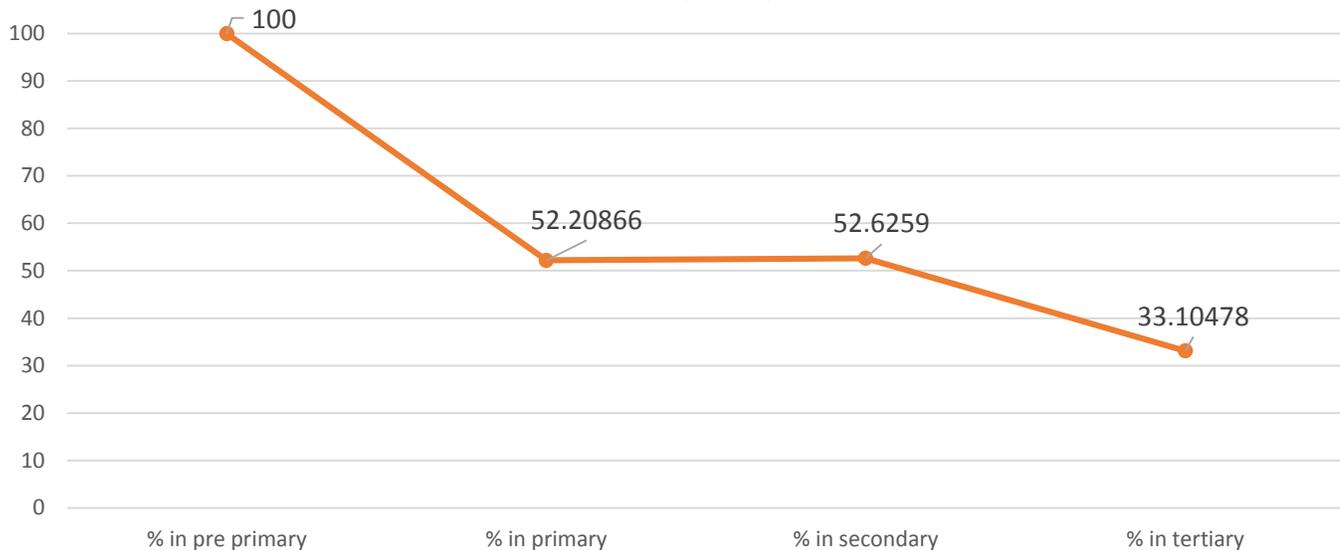

Table 9: UNESCO Institute for Statistics. UNESCO Institute for Statistics Database. 2014. Raw data. Quebec, Montreal.

While all pre-primary teachers are female, the percent of female teachers at the tertiary level dips to about 33 percent, as evidenced in Table 9 (UIS). At the primary and secondary levels, near equal amounts of male and female teachers are employed. However, the extremely high and low figures at either end are troubling. At the pre-primary level, all jobs are given to female teachers and there is little to no opportunity for males; at the tertiary level, many more males are employed. This could indicate that while women's education and teaching positions are widely accepted at low levels, as the complexity of the content increases, more positions are available to males. It could also indicate a self-reinforcing structure: as there are not many female teachers, many Saudi women are forced to drop out before the tertiary level, and thus do not receive the necessary credentials to become teachers at the tertiary level.

However, when there is a lack of female faculty, it does not necessarily mean that classes for girls are cancelled. However, the solution that has been implemented in Saudi Arabia is far from conducive to a high-quality education:

> When there are no qualified female faculty, a male professor may teach a course using one-way closed circuit television. Each female student has a telephone on her desk and may call the faculty member, usually in a studio on the men's campus, to ask questions. However, while the women see, they are not seen by the male professor. About thirty percent of the women's courses are offered in this manner. (Somers 55)

This form of learning cannot provide a high-quality education, as the teacher is not even in the room with the students. This style of teaching encourages lecturing, memorization, and rote learning, which then become the cornerstones of the female curriculum. This curriculum equips Saudi girls only with the skills for careers that are suitable to them, or as homemakers, which are not equal to the opportunities offered to male students. Saudi girls "are raised to be mindless, like babies. Even the most intelligent woman is told she cannot take care of herself, she isn't able" (Somers 49). As a result, the lack of female teachers means a barrier to accessing education in the first place, as well as contributes to making that education low-quality because of its limiting curriculum. Islamic-inspired gender segregation also acts as an obstacle to women's education, as separate can never be equal.

VII.   Case study: Syrian Arab Republic

Syria was part of the Ottoman Empire from 1516 to 1920, when it became a League of Nations mandate, and shortly thereafter became a French mandate. Syria revolted in 1925, but would not gain its full independence from France until 1946. In 1958, Syria merged with Egypt to form the United Arab Republic, though it seceded in 1961 and the Ba'ath Party took control of the unstable state. In 1970, Hafez al-Assad, then the leader of the military, took control of the government. Under al-Assad Syria was involved with Egypt in wars against Israel, occupied

Lebanon from 1976 to 2005, and participated in the American Gulf War against Saddam Hussein. When al-Assad died in 2000, his son, Bashar al-Assad took over his empire.

Currently, Syria is engaged in a long and bloody civil war which sprung from the Arab Spring revolutions. After peaceful protests started in 2011, the Syrian Army responded violently. However, Sunni Muslims defected from the Alawite Syrian Army and formed the Free Syrian Army. These two factions have been fighting a violent and bloody war that has created over four million Syrian refugees, involved international actors such as ISIL, and the Syrian state has nearly ceased to function (UNHCR). As such, this research will primarily consider the state of education under the long-term Assad regime prior to 2011.

Syria's total population in 2014 was estimated at about 17.9 million people (CIA World Factbook). The population is roughly 33.1 percent under age fifteen, 20.2 percent between ages fifteen and twenty-five, 37.9 percent between ages twenty-five and fifty-four, and 8.7 percent over age fifty-four (CIA World Factbook). Syria's GDP per capita in 2012 was 3,289 USD (UIS). Almost three-fourths of Syrians are Sunni Muslims, with Alawite and Christian minorities (CIA World Factbook). However, the Syrian government has been largely Alawite, but followed generally secular policies (Shaaban 102).

While Syria was part of the United Arab Republic, its education system took on the same format of the Egyptian educational system, with the three main levels of schooling with the first six years being compulsory. Attendance and enrollment were both low, and illiteracy was high, until the 1970s (Groiss 7). General Syrian enrollment in all levels of education increased substantially in the 1970s under al-Assad, due to the government's goal of eliminating all illiteracy by 1991 (Bryant 1347). The Assad regime viewed education as a priority, since it was "a means of both ensuring progress and indoctrinating and controlling the masses" (Groiss 7).

Since 1970, the number of females enrolled in all levels of education have increased enormously, more than tripling for primary and secondary levels (Bryant 1347). Syria's female enrollment rate in 1998 was between 45 and 50.7 percent at each level of education (Bryant 1345).

As of 2001, there were 10,783 Syrian primary schools. Like Saudi Arabia, six years of formal schooling are compulsory (Bryant 1345). As in both Egypt and Saudi Arabia, the female enrollment rate declines with level of education, with 96 percent enrolled in primary, 40 percent in secondary, and just 13 percent enrolled in tertiary education (Bryant 1345). About 86.4 percent of the total population of Syria is literate, but the female literacy rate is below this at 81 percent (CIA World Factbook). As of 2007, Syria spent about 4.9 percent of its GDP on education (CIA World Factbook). This represented about 18.9 percent of total government expenditure for the same year (UIS). However, as seen in Table 10, in 2002, the labor-force population was primarily educated only at the primary level (Huitfeldt 9).

TABLE 10 **Educational attainment (share of working-age & labor force populations)**
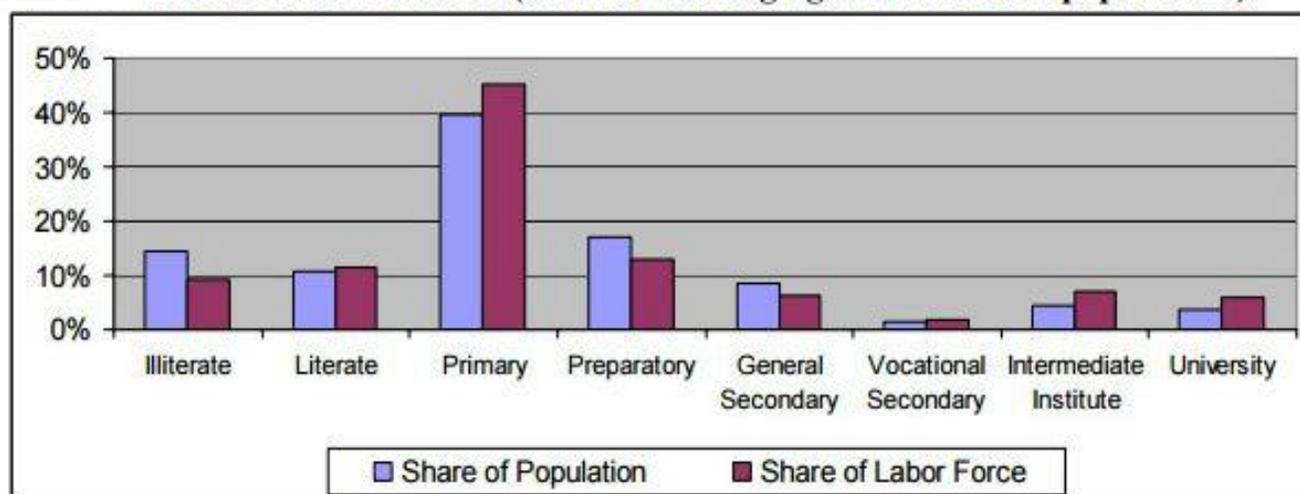
Source: *2002 Labor Force Survey.*

The lack of female participation in the labor force, as in Egypt and Saudi Arabia, presents a problem for female access to quality education. Though the Ba'ath regime promised full participation for women in the workplace when it seized political control in 1963, many Syrian women finish primary school, but never enter the labor force. In 2010, Syria ranked quite close to last for female participation in the labor force (Dervis 315). Those that do start working around the age of 12 are likely to leave around age 20 (Huitfeldt 12). However, as evident in Table 11, an even greater proportion is likely to never even seek employment in the first place. However, those women that do continue their education to the secondary or tertiary level are much more likely to enter the labor force; furthermore, marginal rates of return in reported wages per year of additional public schooling for Syrian females can be up to 18 percent (Huitfeldt 23). Even in light of this encouraging trend for Syrian women who continue their education, most drop out after primary school.

TABLE 11 **Labor force status by age, females**
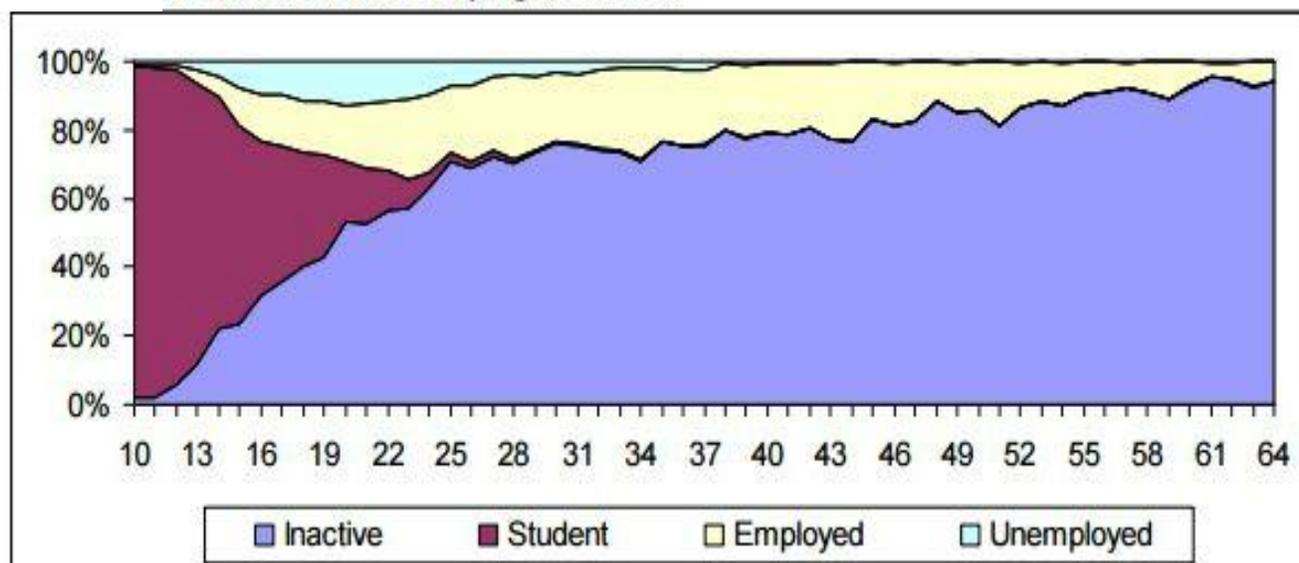
Source: 2001 and 2002 Labor Force Surveys.

Though a free, public, segregated education is open to women, and since the Assad regime they have been gradually entering the labor forces in increased numbers, "social attitudes have changed more slowly, leading to significant divergence between the ideal and the actual status of Syrian women, most of whom profess Islam but whose opportunities may be shaped as much or more social class, education, residence, and economic means" (Shaaban 101). While Islam is the official religion of Syria, its vaguely secular laws leave a lot of gray area that has led to the denial of access to quality education, equal share in the labor force, and even equality via personal status laws for women. Because of the political coexistence of both secularists and Islamists in the Syrian government, "each immediately lists its fear of the other as a pretext for its reluctance to act" on any particular issue of civil society (Shaaban 103). In this way, the political gray areas have been exploited so that there is no national conversation in Syria about why women, who are allowed to attend school, do not do so past the mandatory level.

One reason that has been cited for this is the difficult nature of the curriculum, coupled with its irrelevance to the needs of female students, who are unlikely to enter the workforce (Mehrah 47). Furthermore, prevalent punishment and unfavorable conditions in schools lead to Syrian girls fearing the formal education environment, and making a personal decision not to continue their education (Mehrah 50). Another possible explanation is family poverty, and therefore the need for children to drop out of school and help with finances, as in Egypt. Some Syrian parents feel that there is no use for formal education for their daughters' "future functions"; namely, homemaking skills that are easily taught at home. This especially contributes to the drop-out rate of girls from school after the primary level, as Syrian girls are likely to become child brides.

UNICEF defines child marriage as "a formal marriage or informal union before age 18" (UNICEF, "Child marriage"). In 2006, 17.7 percent of Syrian girls were married before age 18;

3.4 percent of these were married before age 15 (Central Bureau of Statistics). However, these

rates are likely much higher in reality, as many Syrian marriages are unregistered (Save the

Children 12). This rate declines with every level of education: 23.4 percent of girls whose

mothers have only primary education are married before age 18, while this rate drops to just 2.3

percent of girls whose mothers complete secondary education (Central Bureau of Statistics).

Early marriage is often necessary for poor families, who cannot afford to continue to support or

even feed their daughters (Save the Children 5). As in Egypt, marriage is a way to reduce

financial burden on Syrian families. However, poor girls who are married young are likely to

remain poor, be unable to finish their educations, and eventually have their own daughters in the

same situation. Other Syrian families agree to young marriages for their daughters because they

believe it will benefit them by providing more male protection:

> Where there is only one man in the household, many Syrian [families] report feeling that this is not sufficient protection for women and girls – especially if that man has to leave the home regularly (for example, to collect food or to work). […G]eneral insecurity and sexual harassment are commonly reported as reasons for arranging for girls to be married at a young age. Parents see child marriage as a way to protect their daughters – and their family's honour – from possible sexual assault and other kinds of hardship. (Save the Children 4)

Whatever the individual motivation, the phenomenon of child marriage influences Syrian

families to pull their daughters out of school after the primary level. However, the average age

of marriage for Syrian girls is 25 (UNICEF). This means that even those women that remain in

school are extremely likely to be married soon after completion of either the secondary or

tertiary level of education, and thus are unlikely to enter the workforce. This reinforces the

societal roles of Syrian girls as wives and mothers rather than as students, and restricts their

access to equal, quality education. Many are forced to drop out after the primary level for a

variety of reasons related to the social safety of their families. As in Egypt, a revision of

legislation and social security practices in Syria could aid this problem. The lack of enforcement

of codes that make women equal in the labor force, and able to receive an equal pension, also present an obstacle to women's education, as poor families have no incentive to encourage their daughters to remain in school.

Monetary resources also present an obstacle to women's access to quality education in Syria. This is especially true at the tertiary level, where enrollment tripled between 1995 and 2005, but Syria's expenditure on these free-tuition public university only increased by 25 percent (Kabbani 106). Additionally, in 2006 Syria had a higher student-to-teacher ratio than the majority of its Arab neighbors (Kabbani 107). In fact, in 2010, Syrians responded that the "inadequately educated workforce" was the biggest obstacle to doing business (Dervis 314). This could be due to the fact that the same study rated Syria in last place for the "extent of staff training" for higher education, and very low on the "quality of the educational system" as a whole (Dervis 315). However, the Ba'ath party's social contract with the Syrian people included their emphasis on making education attainable. Therefore, it is not necessarily access to primary education that is an obstacle for Syrian girls: it is the quality of the education they receive there, which, as previously examined, is likely to be the only schooling they ever attend. Though teachers at each level are required to have certain competencies, their job performance is poorly monitored by educational advisors, whose visits are "very infrequent, no more than once or twice a year, and they often do not provide objective remarks" (UNESCO World Data on Education). Furthermore, it can be seen that the educational process in Syria may contribute to higher rates of repetition or drop-outs: acceptance to state-funded university programs is based solely on the scores of the national exam taken at the end of the secondary level, and the "[s]election of field of specialization is highly dependent on the grades received during the secondary school national exam, often with little regard to personal aptitudes (students with the highest scores select

medicine, those with the second highest scores select engineering, etc.)" (Kabbani 107). As a result, these university students usually have little prior knowledge about their concentrations, since the selection is based on their test scores; "[t]his results is a lot of repetition and high dropout rates increasing the government financial burden" (Kabbani 107).

All of the effects of misallocated or inefficient resources have an impact on girls' access to education because it reduces quality and can increase cost either directly on families or indirectly, through taxes. However, it is important to note that:

> many efforts have been initialized in Syria in an attempt to develop the existing education system and to harmonize it with today's global education standards and market place. These are actually trying to provide students with access to sources of information, where learning becomes student-centered and allows each learner to construct his own understanding of concepts instead of rote memorization of facts. (Kabbani 113)

Combined with Syria's high rate of enrollment in primary school, this is an encouraging step for Syrian women's access to education at this level. However, the lack of government spending on higher education, low female enrollment in the secondary and tertiary levels, as well as low female participation in the workforce, mean that more government investment could reduce the number of female dropouts, by making an education eventually more profitable than a marriage.

Another obstacle presented by education in Syria is its goals and curriculum, and their influence on the quality of women's education. The Ba'ath party of Syria ultimately invested in education as "a means of both ensuring progress and indoctrinating and controlling the masses" (Groiss 7). This is evident in its goals, stated explicitly in Syria's constitution in Articles 23: "The nationalist socialist education is the basis for building the unified socialist Arab society. It seeks to strengthen moral values, to achieve the higher ideals of the Arab nation, to develop the society, and to serve the causes of humanity" (Syrian Arab Republic). Furthermore, the main objectives of Syrian curricula are to educate citizens who are "rooted in their Arab homeland,

having deep faith in their Arab nationalism and its objectives" (UNESCO World Data on Education).

While nationalist narratives within educational dialogues could be construed as political propaganda or mass indoctrination, it is extremely common for such language to be in place in state-provided education. The vast majority of the world's countries include such nationalist agendas in their curricula. Obviously, the goals of these messages in Syria is quite useful to individuals and society as a whole: "[d]eveloping citizens with a mature integrated character in all ethical, mental and social dimensions, able to establish positive, useful and happy relations with their family and society, to appreciate arts and culture, and to respect ethical and spiritual values and human rights" (UNESCO World Data on Education). Though it would be ideal for all students to receive an objective education free from persuasive political influence, it is unlikely that such a curriculum will occur. Therefore, the major problem with the socialist dialogue that is invested in Syrian curriculum is not its existence; it is, rather, how its overall message affects female students.

The messages of Syrian nationalist narratives involved in education revolve primarily around Pan-Arab unity, national and socialist struggle, and a personal love and investment in work (UNESCO World Data on Education). This was complemented at the start of the Assad rule by a huge state program, which "called on women to work as clerks in the expanding public sector. […T]he state guaranteed women as well as men employment in the public sector if they held intermediate school diplomas or college degrees" (Sparre 8). In this way, the educational system instilled in female students the Syrian nationalist narrative of the importance of contribution to society through employment, and "an obligation to society, which they can fulfill only through a close relationship to the new state, whose purpose is to serve society and the people" (Sparre 8).

Therefore upon completion of their academic program, these educated women were guaranteed positions within the government, making their education profitable and worthwhile, and providing the personal feeling of accomplishment and meaningfulness within society. This program of guaranteed state employment for educated women continued until the 1990s, where this politically mobilization of women into the workforce ceased when the state could no longer fund this mass employment; unemployment has increased ever since (UNESCO). Furthermore, since this system's degradation and increased inflation, "the average salary of a public-sector worker in the 2000s is far from enough to cover the necessary expenses of a family" (Sparre 9). Since the Syrian government can no longer afford to have women continuing their education and seeking public sector employment, the national discourse on women's education and equality has shifted considerably to encourage women to be wives and mothers rather than wage-earners (Haddad 46).

Therefore, the construction of the Syrian education system was oriented for one set of outcomes; since that outcome, government employment, has become scarce or obsolete, the educational message now presents a problem. The narrative of socialist struggle and the duty of contribution to a collective society is now irrelevant to female students, who are encouraged by their families, societies, Islamic religious leaders, and cultural media to become homemakers. Since the 1990s, "references to an Islamic moral code and lifestyle are more common in the family, as well as in society in general. In Islamic discourses women most often are presented as mothers and housewives" (Sparre 9). As a result, the socialist narratives within Syrian educational structure have rendered it basically useless to girls.

Consider an example based on statistical probabilities. A Syrian girl from a poor family in a rural area is likely to attend state-funded primary school, where "teachers communicate the

ideology of the Ba'th Party on every possible occasion, instructing students in detail on what the

Ba'th leadership, and particularly the late president, Hafez al-Asad, has stated on various issues"

(Sparre 6). The explicit goals of this stage of education include "bringing up citizens who

believe in their Arab nationality and understand its liberal characteristics," and over the course of

six years, she will learn this through a number of subjects, including religious education, Arabic

language, social studies, musical and art education (UNESCO World Data on Education). At the

end of these mandatory six years, in 2008 there was a 28.7 percent chance that she might fail the

final examination that would allow her to move to secondary school; furthermore, there was a

17.7 percent chance that her family would prefer that, rather than repeat a year of primary

education, she drop out of school altogether to get married and start her own family (UNESCO

World Data on Education, Central Bureau of Statistics). However, if she does pass this

examination and move to secondary education, she will spend one-eighth of every school week

focusing on socialist education, the same amount she would spend on mathematics and twice as

much as she would spend on home economics (UNESCO World Data on Education).

Meanwhile, her family, her religious leaders, and other people she would interact with in her

society would emphasize to her the necessity of home-making skills, and that "the primary role

of the woman is as a wife and mother at home, and her most important function is as a nurturer

and educator. A mother working away from home never could carry out this work in a

satisfactory manner" (Sparre 10). As a result, she hears two conflicting narratives every day:

from school, of her duty to her society to study and to work, and from society, of her duty to

marry and bear children. As seen in Table 11 above, the majority of females that complete

school never enter the workforce (Huitfeldt 23).

This presents the major obstacle to women's education in Syria. The schooling that she receives emphasizes a path that she is very unlikely to take; when she does not enter the workforce, the majority of her schooling becomes irrelevant. Knowing this, or experiencing it at some level by losing a pair of helpful hands at home when their daughter goes to school, many Syrian parents cannot see the importance of extending their daughters' education. The obstacle of Syria's educational structure, therefore, is the socialist narrative of the educational curricula that render it immediately unnecessary for many Syrian girls. This contributes to high dropout rates after the primary level, and low employment after every level. An adjustment of curriculum to teach skills that are more relevant to female students, or as previously suggested, make education more profitable than marriage, could combat this obstacle in the Syrian Arab Republic.

VIII.   Policy recommendations

Societal roles, resources, and system structures present obstacles to women's education in many different ways in countries in the Middle East. In Egypt, the lack of an effective pension program reinforces the role of women as wives first, while lack of government resources has created underfunded schools with underpaid teachers who use corruptly their positions to make schooling expensive. Each of these phenomena, both individually and together, affect girls' easy access to quality education. In Saudi Arabia, traditional social roles have led to low employment for women, and inferior educational standards and funding. Though schooling is provided, it is at a lower quality and with smaller funding than for males. This phenomenon is ensured by strict gender segregation, though separate can never be equal. Segregation and lack of female teachers for female students limits their educational opportunity and quality. Finally, in Syria, low female participation in the workforce combined with the relative prevalence of child marriage give

societal cause for girls to drop out after the primary level. Furthermore, the lack of government spending on higher education makes the option of staying in school unprofitable for girls who could reduce their family's economic burden by working or marrying instead. Additionally, the prevalent political narrative embedded in Syrian curriculum has the effect of sending the message to girls that their talents are best used in the workforce, which they are highly unlikely to enter; meanwhile, their society preaches the importance of females as wives and mothers. This renders much of their schooling useless, which means their parents and families encourage them to drop out, especially if they are poor.

How can we begin to solve these problems? The actors that enact, encourage, and explain these issues are both everywhere and nowhere. Much of the time, it is simply tradition or religious belief that reinforce some ideas such as child marriage or gender segregation. Traditions and religions must be respected, and their ideas honored; however, all people are entitled to their universal rights. This means that women are entitled to equal education, and equal pay for equal work (The Universal Declaration of Human Rights). Though the official constitutions of all three countries examined treat women as equal to men, their laws and codes do not. In Egypt, it is legal for women to receive a lower pension than men; in Saudi Arabia, women still owe their obedience to their fathers and husbands (UNESCO). Syrian women sometimes must marry their rapists, who can then take them away from their families, friends, jobs, and schools (Save the Children 5). Therefore, the laws and codes of these nations, and therefore their governments and legislative bodies, can be identified as enactors of the obstacles that face girls' equal education. Furthermore, those people who hold political power are the ones to whom these issues should be brought; they are the ones who can affect the positive changes needed to clear the path for girls to go to school.

There are a number of actions that policymakers could take, both long-term and short-term, to aid the schooling of the girls in their countries. For the purposes of these recommendations, long-term changes would be enacted during time period between ten and thirty years. Short-term changes could be enacted in ten years or less. However, the amount of time that each adjustment could take is entirely dependent on the popular support that it receives. As previously stated, much of the current situation in regards to societal roles and structures has traditional or religious derivations, and therefore garners a fair amount of popular support. In 2006, 86 percent of Saudi women agreed that they should not work alongside men; 89 percent agreed that they should not be allowed to drive ("Unshackling themselves"). However, in 2010, 61 percent of Egyptians thought that women should be allowed to work, but a greater 75 percent responded that "when jobs are scarce, men should have more right to work" (El-Naggar). Though more women have joined the workforce in Egypt, "a lot of the younger generation do not want to work," says the chair of the Association for the Development and Enhancement of Women, in Cairo (El-Naggar). Without popular support, no reform can truly be effective. The reason these reforms are suggested, though they may be initially unpopular, is because education should be guaranteed to all people as their universal rights.

The first long-term policy recommendation offered by this study is to reform social security and pension practices, so that Egyptian and Syrian families do not have to prioritize savings and budgeting over education. Of course this is a large and expensive undertaking that relies on the growth of both countries' economies and their further development. However, its benefits are numerous. A safety net for citizens would mean that they do not have to base every day's decisions on the thought of destitution later in life, a practice which has contributed to rigid social gender roles. If Egyptian and Syrian families had assurance of their income and status

after they can no longer work, they might be more open to their daughters pursuing their studies and careers, though this means that they must support them longer. In the long term, the financial costs initially paid by the government would hopefully be repaid by citizen contributions to long-term savings plans and taxes. The benefits of more employed citizens and a higher rate of female participation in the labor force would be a positive impact on women's access to education, and would, in turn, raise government returns to expenditure on education, as well as increase taxes paid by a new generation of working women.

The next long-term policy recommendation would be to reform state curriculums that are taught in schools. At every level, the curriculum offered to male and female students must be identical: "[t]he curriculum should present both males and females as equal citizens, without a focus on one sex over the other, so that both genders can receive the same type of inspiration" (Al-Arashi 24). The curriculum must also be reformed to contribute to advancing their knowledge, skills, and abilities in order to prepare them for careers; states must also take action to make more jobs available for young, educated people, either by creating more jobs or allowing more private companies. It is imperative that "[f]irst, the classroom must teach skills that Middle Eastern youth will need to apply later in life. Second, work opportunities must be available when students graduate. Third, the young graduates must receive an education that makes them willing and able to perform that work" (Bernard 37). This means that specialized curricula for girls that teaches them only home economics, or bars them from certain areas of study, must be abandoned. It also means that curricula that involve national narratives must not allow these narratives to encourage girls to drop out, as in Syria.

Another policy recommendation that complements adjusted curricula is to enact or enforce laws against gender discrimination in hiring practices. This is definitely a long-term policy

adjustment, and it would likely be unpopular, especially in Saudi Arabia. However, for women

to have a higher rate of participation in the workforce, they must have the legal right to do so.

Without this right, women's education will continue to have a sense of unnecessary cost or

irrelevance to parents, especially of low-income families. One of the most important sectors

where gender discrimination must be eradicated is teaching. While women are up to 100 percent

of all teachers at the pre-primary and primary levels, they make up usually no more than 35

percent of teachers at the tertiary level (UNESCO). Women must be equally employed as

teachers so that girls have an equal opportunity to attend, especially within conservative

traditions that exist in some places in the region. The costs of this will likely be political

unpopularity as well as the economic burden of expanding the workforce in a time of already

high unemployment. Therefore, this policy would also depend on the expanding and

development of Middle Eastern economies. However, the benefit of educating and employing

more women will lead to increased economic development in the following decades (Summers

15).

 The final long-term policy recommendation this study will supply is to reform corrupt

education systems, especially in Egypt, where teachers exploit their positions through corrupt

tutoring. To eradicate this, it must be explicitly outlawed, and these laws enforced. Such an

extreme policy adjustment would be certain to take a long time to make effective change, and

would meet resistance from teachers. However, all signs point to the fact that students and their

families would support cheaper and more straightforward education; in fact, such qualities are

what have made new private schools with low tuitions aimed at low-income families recently

popular ("The $1-a-week school"). The cost of this policy would be heavy, as it would require

both legislation and constant enforcement. However, the benefits to students and their families

would be enormous: education would be much cheaper to the individual family, children would

not be subject to abuse and extortion, and schools would once again be places of learning.

However, a short-term and more cost-effective way of implementing this strategy would be to

increase classroom observations and evaluation of teachers. The more teachers are held

accountable for student learning, the better the school and learning environment will be.

In the short-term period, one of the most effective means of increasing girls' access to

education is to basically build more schools, and make them cheaper. Though in all three

countries examined female attendance has steadily increased in the past twenty years, if there are

no affordable schools for girls, they can never attend them. Furthermore, it is important that the

schools that are available be tailored to the cultural and social standards that exist for girls in the

community: "[f]emale enrollment depends heavily upon schools not being too far away, upon the

provision of appropriate sanitation facilities, and upon the hiring of female teachers[…] Flexible

hours and the provision of care for younger siblings can also be helpful in some cases"

(Summers 16). Of course, building more schools that fulfill all these requirements and offering

free public education within them would have a substantial financial cost to the state. Therefore,

as previously mentioned, the new private schools that are cropping up with cheap tuitions and

big-name investors like Bill Gates and Mark Zuckerberg are a feasible new alternative ("The $1-

a-week school"). A study on educational investment in Peru found that "rules requiring students

to pay for textbooks had a large negative effect on female enrollment, but almost no effect on

male enrollment" (Summers 16). The cheap private school option bypasses expensive tutoring

and textbooks required by state schools to provide education whose quality "ranges from top-

notch international standard to not much more than cheap child care. But the alternative is often

public school that is worse – or not school at all" ("The $1-a-week school").

The effect of this is to make educating girls more economically attractive by "reducing the costs to parents of sending their daughters to school" (Summers 16). Investing in these private schools which are aimed at low-income families could be one way to increase the number of schools, increase their effectiveness, decrease their cost, and get girls to school. Though many governments generally do not these private schools because they see education as the duty of the state, and teachers' unions oppose them due to their lower wages, in developing countries in the Middle East they present an answer that must be considered ("The $1-a-week school"). Therefore, encouraging these cheap private schools to increase their numbers, or even providing incentives for them to do so, would be a cheap short-term policy solution to bring more girls to school and help them complete their educations.

The last policy recommendation offered by this study is to end gender segregation. Separate education can never be truly equal. Furthermore, systems like the phone-in learning system such as used in Saudi universities is an example of how educational quality and classroom efficiency are sacrificed for gender segregation. This reform would likely be highly unpopular among religious communities and traditionalists. Therefore, the cost of this policy would not only be the financial cost of integrating schools and enforcing the change, but also the political unpopularity that could be garnered. However, the benefit would be, in the long-run, lower educational costs since two different facilities would not need to be built and maintained at each location. Additionally, gender integration would inherently mean increased gender equality, and in some cases would improve educational quality. This recommendation is classified as short-term, as gender integration could be implemented effectively in under ten years with popular support; however, it is likely that in traditionally conservative countries such as Saudi Arabia, popular support will be initially scarce. However, change and gender integration are already

coming quickly in Saudi Arabia: women are more visible, more represented in their government, and have begun working in a mixed environment. One male Saudi businessman said: "The first women we got jobs for in a supermarket in Riyadh last year had to be sacked after a week— thanks to the public outcry. But soon people got used to the idea" ("Unshackling themselves"). The same can be true for mixed environments in school, for the sake of equality and learning.

IX.   Conclusions

In conclusion, Middle Eastern women face many barriers to their access to an equal and quality education; however, these obstacles can be overcome with strategic reform, popular support, and state commitment to improvement. The major categories of obstacles to education are societal roles, lack of or inefficient use of resources, and the structure of educational systems.

Female enrollment in public schools has been increasing across the Middle East for the past two decades; however, the education that they receive is not always one that enhances their knowledge and skills and prepares them to work. This is often due to the fact that Middle Eastern women are unlikely to enter the workforce; their unemployment rates have decreased, but remained substantially higher than males', since 1995. Women must enter the workforce for their education to be profitable. However, all unemployment in the Middle East has risen in the past ten years. How to educate Middle Eastern youth effectively for jobs that do not exist is a major problem that faces the entire region. For more jobs to be created, these Arab states must open their markets more to foreign companies and private ventures, rather than relying on the rentier state structure to employ all of their citizens. States that do not employ the rentier state structure need to improve their social status protection measures through increased pensions, so that mature adults do not fear their fate if they retire, and therefore open their positions to a

younger workforce. These large-scale measures will open the labor market to female workers, which will contribute to economic development for these states.

Once women join the workforce, their schooling will become more important and prioritized not only to their employers and the state, but also to individual families. Reducing the cost of girls' education to parents must also be considered in the scope of the opportunity cost: whether it would be, in the long-term, more profitable to allow girls to drop out of school to get married, or to continue their studies for a higher-paying career. Once the latter becomes more economically attractive, female access to education will increase.

Finally, Middle Eastern schools themselves need to be reformed: irrelevant curricula, abuse, cheating, exploitation, overcrowding, underfunding, and high stakes all plague various educational systems in the region, drain the resources of families, and degrade the quality of education. Schools must teach males and females equally; their curricula must reflect the genders equally and teach them both the same useful and important skills that will be relevant to jobs that will be available to them. The cost of education must be lowered so that sons and daughters will have equal opportunity within their families to go to school. Private schools could be a solution to this issue. However, in state-funded schools, male and female education must have the equal funding, and equal amounts of male and female teachers must be employed at every level.

Males and females are equal and have the same universal human rights, including the right to work, to equal pay for equal work, and to education. Until these rights are guaranteed, Middle Eastern nations are doing their citizens a disservice. It is vital that females everywhere can attend school as easily as their male counterparts, while within their cultural, social, and religious requirements. It is also important that this education has high quality, and does not rely solely on

memorization, but teaches knowledge and skills that Middle Eastern youth need for their futures. An educated population, whose labor market is open to young people both male and female, will advance the economic development of the Middle East. Government investment, popular support, and international commitment to education can achieve this goal.

This study has primarily considered three countries in the Middle East: Egypt, Saudi Arabia, and Syria; however, complex individual problems face every country. Further research could delve into the specific obstacles that face girls in other parts of the Middle East, or how Syrian girls' education has been affected during the ongoing civil war and international conflict. Additionally, this study has primarily focused on large-scale problems such as pensions, unemployment, corruption, and the like. A more detailed and focused study could evaluate how one of these issues alone affects girls' education, or how individual obstacles such as distance, siblings, or individual preference affect girls and their schooling. This issue is a broad and long-term puzzle that will continue to change as the Middle East grows as a region, as individual states make decisions that impact their schools, and as regional traditions and practices evolve with time.

X. Bibliography

Al-Arashi, Lamis Yahya. An analytical case study: Curriculum development and girls' education in Yemen. Diss. Cambridge College, 2015. Massachusetts: Cambridge College, 2015. PQDT Open. Web. 2 June 2015.

Allard, M. June, and Pamela R. McKay. "Egypt." World Education Encyclopedia. Ed. Rebecca Marlow-Ferguson. 2nd ed. Vol. 1. Detroit: Gale, 2001. 384-402. Gale Virtual Reference Library. Web. 15 July 2015.

Alexander, Neva Helena. "Teaching Leadership To Female Students In Saudi Arabia." Advancing Women In Leadership 31.1 (2011): 199-212. Education Research Complete. Web. 26 May 2015.

Aslam, Abid, ed. The State of the World's Children 2013. Rep. UNICEF, May 2013. Web. 1 Aug. 2015.

Beatty, Sharon, and Scientific, and Cultural Organization, Paris (France). Education for All Forum Secretariat. United Nations Educational. "Basic Education For Girls In Yemen: Country Case Study And Analysis. Mid-Decade Review Of Progress Towards Education For All." (1996): ERIC. Web. 8 July 2015.

Bernard, Cheryl. "Fixing What's Wrong--And Building On What's Right--With Middle East Education." SAIS Review Of International Affairs 26.2 (2006): 29-45. Education Research Complete. Web. 26 May 2015.

Biltagy, Marwa. "Estimation of Gender Wage Differentials in Egypt Using Oaxaca Decomposition Technique." Topics in Middle Eastern and African Economics 16.1 (2014): 17-42. Loyola University Chicago. Loyola University Chicago, May 2014. Web. 21 July 2015.

Bryant, Jo Anne R. "Syria." World Education Encyclopedia. Ed. Rebecca Marlow-Ferguson. 2nd ed. Vol. 3. Detroit: Gale, 2001. 1345-1353. Gale Virtual Reference Library. Web. 16 July 2015.

Cadei, Emily. "Arab Women: Highly Educated, Underemployed." OZY. OZY, 18 July 2015. Web. 28 July 2015.

Cassola, Adèle, Amy Raub, Danielle Foley, and Jody Heymann. "Where do Women Stand? New Evidence on the Presence and Absence of Gender Equality in the World's Constitutions." Politics & Gender 10, no. 2 (06, 2014): 200-235. doi:http://dx.doi.org/10.1017/S1743923X1400004X. http://search.proquest.com/docview/1525999331?accountid=12434.

Central Bureau of Statistics, Ministry of Health, State Planning Commission, UNICEF, and PAPFAM/League of Arab States. Multiple Indicator Cluster Survey 2006: Syrian Arab Republic. Rep. N.p.: UNICEF, 2006. Web. 1 Aug. 2015.

Chapman, Davic W.., and Suzanne L. Miric. "Education Quality In The Middle East." International Review Of Education / Internationale Zeitschrift Für Erziehungswissenschaft 55.4 (2009): 311-344. Education Research Complete. Web. 26 May 2015.

CIA. "Country Comparison to the World: Literacy." CIA The World Factbook. Central Intelligence Agency, n.d. Web. 22 July 2015.

CIA World Factbook. "Egypt." CIA The World Factbook. Central Intelligence Agency, 9 July 2015. Web. 17 July 2015.

CIA World Factbook. "Saudi Arabia." CIA The World Factbook. Central Intelligence Agency, 9 July 2015. Web. 17 July 2015.

CIA World Factbook. "Syria." CIA The World Factbook. Central Intelligence Agency, 9 July 2015. Web. 17 July 2015.

Deniz, Zeynep, and A. Suut Dogruel. "Disaggregated Education Data And Growth: Some Facts From Turkey And Mena Countries." Topics In Middle Eastern & North African Economies: Proceedings Of The Middle East Economic Association (2008): 1. Supplemental Index. Web. 26 May 2015.

Doumato, Eleanor Abdella. Getting God's Ear: Women, Islam, and Healing in Saudi Arabia and the Gulf. New York: Columbia UP, 2000. Print.

El-Naggar, Mona. "In Egypt, Women Have Burdens but No Privileges." The New York Times. The New York Times Company, 13 July 2010. Web. 1 Aug. 2015.

"Egypt - From Crisis to Opportunity." Education in Crisis. Education International, 22 Apr. 2015. Web. 23 July 2015.

Egypt. Ministry of Education. National Strategic Plan For Pre-University Education Reform in Egypt. Comp. Hassan El-Bilawi. Cairo: n.p., 2012. UNESCO. The United Nations Educational, Scientific and Cultural Organization. Web. 23 July 2015.

El-Kogali, Safaa, and Krafft, Caroline. Expanding Opportunities for the Next Generation : Early Childhood Development in the Middle East and North Africa. Washington, DC, USA: World Bank Publications, 2015. ProQuest ebrary. Web. 26 May 2015.

Gershberg, Alec Ian, and Nagwa Riad. Making Egyptian Education Spending More Effective. Rep. The World Bank: Social and Economic Development Group, Middle East and North Africa Region, July 2005. Web. 2 July 2015.

Ghazal, Rehab Y. The Arab Spring and beyond: Society, education, and the civic engagement of women in Egypt before, during, and after the January 25 uprising. Diss. State University of New York at Buffalo, 2014. New York: State University of New York at Buffalo, 2014. PQDT Open. Web. 2 June 2015.

Groiss, Arnon. JEWS, ZIONISM AND ISRAEL IN SYRIAN SCHOOL TEXTBOOKS. Rep. Institute for Monitoring Peace and Cultural Tolerance in School Education, June 2001. Web. 16 July 2015.

Haddad, Zerene. "How The Crisis Is Altering Women's Roles In Syria." Revista Migraciones Forzadas 47 (2014): 46-47. Academic Search Complete. Web. 8 June 2015.

Haghighat, Elhum. "Social Status and Change: The Question of Access to Resources and Women's Empowerment in the Middle East and North Africa." Journal of International Women's Studies 14, no. 1 (01, 2013): 273-299.

Hamdan, Amani. "Women and Education in Saudi Arabia: Challenges and Achievements." International Education Journal 6.1 (2005): 42-64. ERIC. Web. 8 June 2015.

Huitfeldt, Henrik, and Nader Kabbani. 'Returns to Education and the Transition from School to Work in Syria.' N.p., 2005. Print.

"International Literacy Data 2014 ." International Literacy Data 2014. UNESCO Institute for Statistics, 17 July 2014. Web. 08 June 2015.

Kabbani, Nader, and Siba Salloum. Financing Higher Education in Arab Countries (Syria). Rep. Ed. Ahmed Galal and Taher Kanaan. The Economic Research Forum, July 2010. Web. 1 Aug. 2015.

Dervis, Kemal, Ricardo Hausmann, Felipe Larrain Bascunan, Mari Elka Pangestu, and Xavier Sala-i-Martin. The Global Competitiveness Report 2010-2011. Rep. Ed. Klaus Schwab. World Economic Forum, 2010. Web. 3 Aug. 2015.

Lekas, Sara L. The emergence of women leaders in Cairo, Egypt. Diss. University of Phoenix. Arizona: University of Phoenix, 2014. PQDT Open. Web. 2 June 2015.

Loewe, Markus. "Social Security in Egypt: An Analysis and Agenda for Policy Reform." SSRN Electronic Journal SSRN Journal (2000): 1-25. Social Security Research Network. Social Science Electronic Publishing, Inc., 26 Feb. 2013. Web. 21 July 2015.

Mahmood, Moazam. Five Gender Gaps in the Labour Market. Publication. ILO Employment Policy Department: Economic and Labour Market Analysis, n.d. Web. 28 July 2015.

Marri, Maliha. Muslim female leadership. Diss. Pepperdine U, 2011. California: Pepperdine U, 2011. PQDT Open. 2 June 2015.

Mehrah, Golnar. Girls' Drop-Out from Primary Schooling in the Middle East and North Africa: Challenges and Alternatives. Tech. no. 143. Amman: United Nations Childrens' Fund, 1995. ERIC Document Reproduction Service No. 394626. ERIC. Web. 20 July 2015.

Nachazel, Thomas, and Gretchen Hannes, eds. The Condition of Education 2010. Rep. no. 2010-028. Washington DC: National Center for Education Statistics, 2010. The Condition of Education 2010. Institute for Education Science, U.S. Department of Edcuation, May 2010. Web. 23 July 2015.

Napier, Diane B, and Suzanne Majhanovich. *Education, Dominance and Identity*. Rotterdam: SensePublishers, 2013. Internet resource.

Paquette, William A. "Saudi Arabia." World Education Encyclopedia. Ed. Rebecca Marlow-Ferguson. 2nd ed. Vol. 3. Detroit: Gale, 2001. 1166-1174. Gale Virtual Reference Library. Web. 15 July 2015.

Roudi-Fahimi, Farzaneh, and Valentine M Moghadam. "Empowering Women, Developing Society: Female Education In The Middle East And North Africa." Al-Raida 23/24.114/115 (2006): 4-11. Women's Studies International. Web. 26 May 2015.

Salehi-Isfahani, Djavad, Nadia Hassine, and Ragui Assaad. "Equality Of Opportunity In Educational Achievement In The Middle East And North Africa." Journal Of Economic Inequality 12.4 (2014): 489-515. Business Source Premier. Web. 26 May 2015.

Save the Children. Too Young to Wed. Rep. Save the Children, 2014. Web. 1 Aug. 2015.

Shaaban, Bouthaina. 'Persisting Contraditions: Muslim Women in Syria.' Women in Muslim Societies: Diversity within Unity. Ed. Herbert Bodman and Nayereh Esfahlani Tohidi. Boulder, CO: Lynne Rienner Publishers, 1998. 101–117. Print.

Smith, Dorothy E. The Everyday World As Problematic: A Feminist Sociology. Boston: Northeastern University Press, 1987. Print.

Sobhy, Hania. "Mafish Ta'lim: Why Egypt Ranked Last on Education." Hypotheses. Orient-Institut Beirut, 28 May 2015. Web. 23 July 2015.

Somers, Patricia, and Chris A. Caram. "Veiled Delusions: Gender, Education, And Employment In Saudi Arabia." Initiatives (Washington, D.C.) 58.4 (1998): 49-58. Education Full Text (H.W. Wilson). Web. 8 June 2015.

Sparre, Sara Lei. 'Educated Women in Syria: Servants of the State, or Nurturers of the Family?' Critique: Critical Middle Eastern Studies 17.1 (2008): 3–20. Web.

Summers, Lawrence H. "Investing in All the People." EDI Seminar Paper 45 (1994): n. pag. UCR. Web. 5 June 2015.

Syrian Arab Republic. National Legislative Bodies. Syrian Arab Republic: Constitution. N.p.: n.p., 1973. Yale Law. Yale University. Web. 3 Aug. 2015.

Tansel, Aysit, and Abbas Kazemi. "Educational Expenditure In The Middle East And North Africa." Middle Eastern Studies 36.4 (2000): 75. Historical Abstracts. Web. 26 May 2015.

"The $1-a-week School." Economist 1 Aug. 2015: 9. The Economist. The Economist Newspaper Limited, 1 Aug. 2015. Web. 5 Aug. 2015.

UNESCO Institute for Statistics. UNESCO Institute for Statistics Database. 2014. Raw data. Quebec, Montreal.

UNESCO Counts Towards the Millennial Development Goals. Publication. Paris: UNESCO, 2010. Education Counts Towards the Millennial Development Goals. UNESCO, 2010. Web. 17 July 2015.

UNESCO, and International Bureau of Education. World Data on Education, VII Edition 2010/11: Syrian Arab Republic. Rep. World Data on Education, 2011. Web. 3 Aug. 2015.

UNFPA. "Population Ageing." UNFPA. United Nations Population Fund, n.d. Web. 21 July 2015.

"UNHCR Syria Regional Refugee Response." UNHCR Syria Regional Refugee Response. The UN Refugee Agency, 9 July 2015. Web. 16 July 2015.

UNICEF. "Child Marriage." UNICEF: Child Protection from Violence, Exploitation and Abuse. UNICEF, 22 Oct. 2014. Web. 1 Aug. 2015.

UNICEF. "Multiple Indicator Cluster Surveys, 2012-2015." UNICEF MICS. UNICEF, n.d. Web. 2 July 2015.

The Universal Declaration of Human Rights. Publication. United Nations, n.d. Web. 17 July 2015.

"Unshackling Themselves: Saudi Women Are Gaining Ground, Slowly." Economist 17 May 2014: n. pag. TheEconomist.com. The Economist Newspaper Limited, 17 May 2014. Web. 28 July 2015.

World Economic Forum. The Global Gender Gap Report 2014. Rep. 2014 ed. Geneva: World Economic Forum, 2014. The Global Gender Gap Report 2014. World Economic Forum, 2014. Web. 21 July 2015.

Yuki, Takako, et al. "Promoting Gender Parity In Basic Education: Lessons From A Technical Cooperation Project In Yemen." International Review Of Education / Internationale Zeitschrift Für Erziehungswissenschaft 59.1 (2013): 47-66. Education Research Complete. Web. 8 July 2015.