

Gap between Education System and Labor Market in Saudi Arabia

OVERVIEW REPORT



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Education System & Labour Market

Executive Summary

Education sector in Saudi Arabia is gaining momentum from intrinsic growth drivers including population growth, increasing expatriates in the region, growing demand for quality education and growing spending propensity of people. The sector is also receiving extensive support from the government to enhance of education delivery and quality to produce more industry ready students in the society who are well-suited for the labor market needs.

Government in the region is making significant efforts by offering grants to universities, providing scholarships to students, sponsor students to pursue education from overseas, promote vocational education and so on. Despite these educational reforms, education is still evolving and there is a growing need for education institutions to better align the courses and curriculum as per the industry requirements.

The Saudi Arabian economy may align Ministry of Education and Ministry of Labor in order to formulate focused and consolidated strategic policies rather than operating in isolation.

The report aims to highlight the key growth drivers and trends in education segments including K-12, Higher Education and Vocational Education. It also highlights the need to align education with labor market needs to increase employability of youth in Saudi Arabia and bridge the skills gap. Moreover, it highlights the key trends shaping the education sector and the potential obstacles in the growth of education in the region.

-EDUCATION-



1: Education Overview

The Gulf Cooperation Council (GCC) member nations have identified that a sound educational systems is vital to the economic growth and has thus taken several initiatives aimed at improving the quality (and quantity) of education over the last two decades.

A. GROWTH OF EDUCATION

The total number of students in the GCC region is expected to grow from an estimated 10.2 million in 2011 to 11.6 million in 2016, registering a CAGR of 2.7%.¹

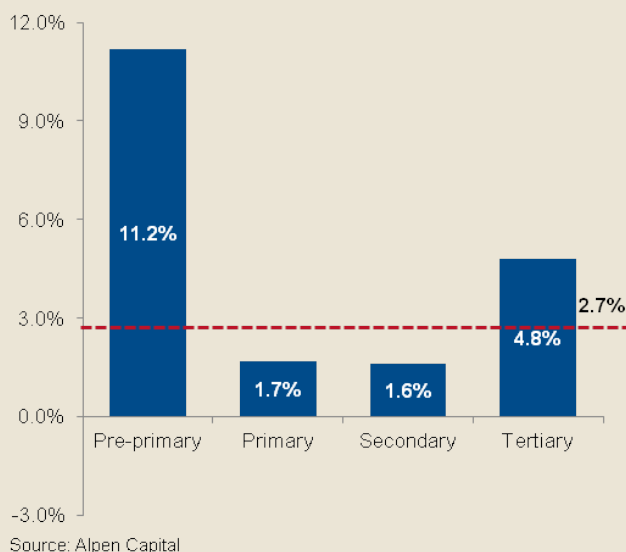


Figure 1: CAGR of Number of Students by Segments in the GCC (2011-2016)

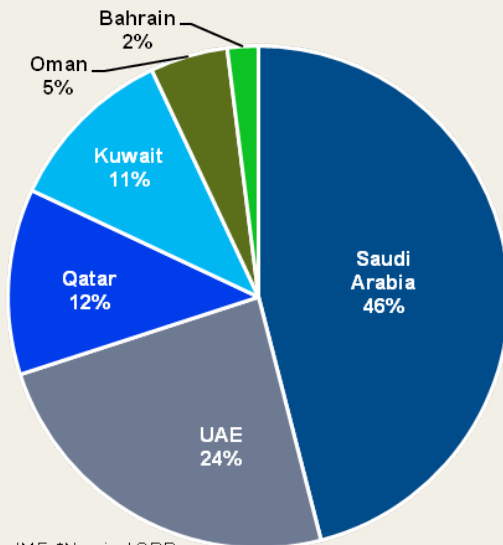
¹ CAGR is Compound Annual growth Rate

Key Growth drivers

The education sector in the GCC is poised for robust growth in the future due to several factors:

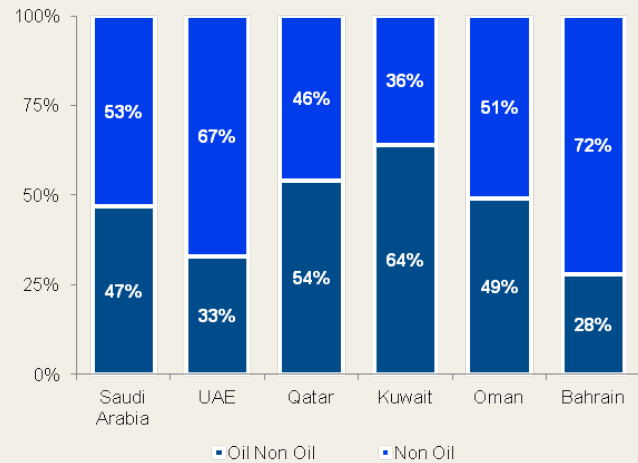
- Government's earnest intention to improve the education sector is evident from the Government spending on education, as a percentage of total government expenditure, across the Middle East and North Africa (MENA) region increased from 12.7% in 1985 to 19.3% in 2008, with particularly impressive increases in the UAE, Saudi Arabia and Oman
- An increasing population base in the region is expected to drive demand for education across the region
- The increase in income levels of individuals has led to the increase in the middle class population's propensity to spend on education of their children and thus, driving demand for high-quality education
- Rising participation of investors in the education sector is stimulating the demand for high-quality education in the region

The above factors are driving the growth in the GCC region, particularly in Saudi Arabia.



Source: IMF, *Nominal GDP

Figure 2: Contribution to the GCC Economy (2013)*



Source: IMF, QCB Q2 2014 Update, SAMA, UAE National Bureau of Statistics, *2013 Preliminary Figures

Figure 3: Nominal GDP Component by Sector*

B. ECONOMIC DIVERSIFICATION FOR SUSTAINABLE ECONOMIC GROWTH

GCC is cognizant of the vulnerability of oil market dynamics in the recent past and has been investing considerably in health, infrastructure and education over the years. Hence, it is making significant efforts to diversify and create a sustainable economy by reducing dependence on oil and promoting other growth sectors including education.

GCC nations could gain significantly from economic diversification in terms of:

- Reducing the exposure of the economies to the volatility and uncertainty of the global oil market,
- Creating more private sector jobs to attract and absorb the growing young population in the region
- Realizing a sustainable non-oil economy in the long run

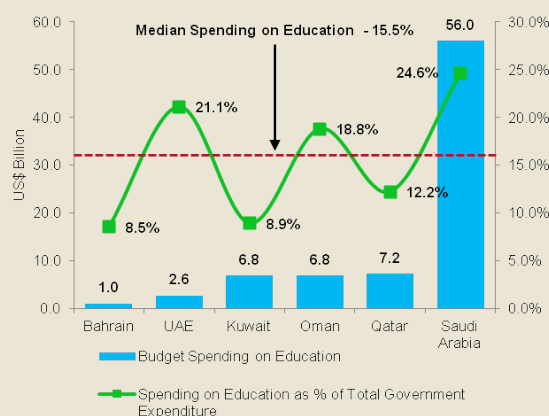


Figure 4: Estimated Government Spending on Education as a Percentage of Total Government Expenditures, 2014

GCC Economy Outlook

It can be seen that Saudi Arabia contributes the maximum to the GCC economy. The budgetary allocation is vital to the economic growth of Saudi Arabia and GCC at large.

Despite the drop in the share of oil revenues to the real GDP, the GCC nations have had limited success in economic diversification. But it clearly highlights the region's intent of reducing its reliability on hydrocarbon revenues.

C. GOVERNMENT SPENDING ON EDUCATION

Government spending is a key economic driver for any nation's social and economic growth. Given the growing youth population in the GCC region, the governments have been spending significantly to address the social challenges in the region by spending on education, healthcare, infrastructure and housing. Saudi Arabia, in particular, allocated about 25% of its budgetary expenditure towards education and human resource development. The trend is likely to continue in the future as well with the GCC nations continuing to allocate considerable portion of their budget towards development of education sector in the region.

Public spending on education in the GCC as a share of national income (2004–13) averaged 3.9 percent, relative to an average global spending ratio of 4.6 percent.

It can be seen from figure 4 above that UAE, Oman and Saudi Arabia are the leading countries spending on Education as a percentage of total government expenditure, with Saudi Arabia spending the maximum 24.6% as compared to the other GCC nations.

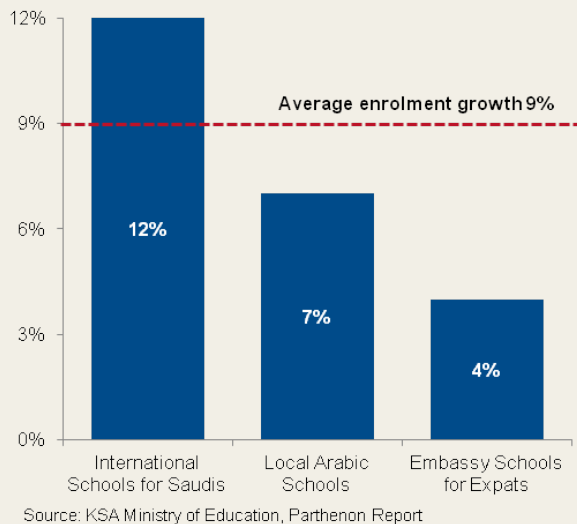


Figure 5: Private K-12 Enrolment Growth

GCC Population, Under 19, By Geography (in Thousands; 2010, 2020E)

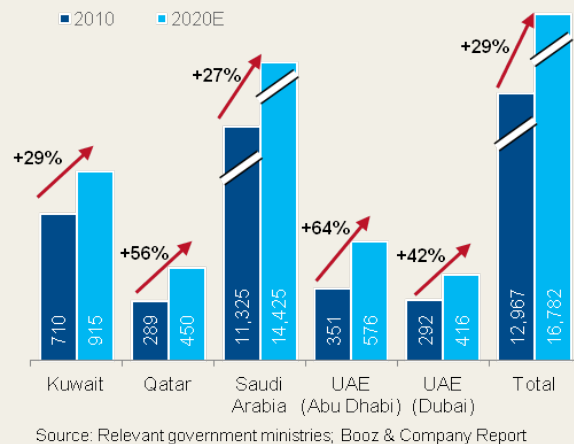


Figure 6: The Under-19 Population is Growing Quickly

2: K-12 Education

Saudi Arabia is undergoing massive transformation in education with a mission to create a knowledge based society. It is following holistic approach to reform and improve the quality of education in the region. There are substantial growth opportunities for investors and stakeholders in the education sector as discussed in the above sections.

A. GROWTH OF PRIVATE SCHOOLS²

Private schools are growing at a rapid pace in Saudi Arabia owing to better infrastructure. There is also a growing demand of Saudi children to enroll in schools offering international curriculum. Most of the private schools in Saudi Arabia are concentrated in the three largest metropolitan regions of Riyadh, Jeddah and Dammam. These regions are further expected to drive the private school enrolment growth.

Private schools are bringing a radical educational transformation to cater to the increase in the size of the market and the quality of private education. This growth in education sector is due to several factors:

I. CHANGING DEMOGRAPHICS³

The key driver for the increase in private sector education is change in demographics in terms of the school-age population. It is expected to grow by about 30% through 2020. The growth of student population is estimated to be 27% for Saudi Arabia for the decade 2010 to 2020.

² <http://www.parthenon.com/GetFile.aspx?u=%2FLists%2FThoughtLeadership%2FAttachments%2F36%2FBFE-MENA.pdf>

³ <http://www.strategyand.pwc.com/media/uploads/Strategyand-Private-School-Expansion-GCC.pdf>

II. DEMAND FOR HIGHER QUALITY EDUCATION

High Quality of Education entails attributes such as good quality of teachers, curriculum, reputation of the schools, and environment for children and preservation of culture are the most rated parent preferences.

III. INCREASED SPENDING CAPACITY TO PAY FOR EDUCATION

There is increasing spending propensity and people are willing to pay for better infrastructure, foreign accreditation of universities and quality education.

IV. ALTERNATIVE FOR EXPATRIATE STUDENTS

There is also a growing interest among the expatriates to enroll in private sector schools.

B. CURRICULUM

The education system at various levels of education has established a set of objectives that the system wishes to achieve by imparting education to children.

The objective at the pre-primary level is to familiarize the children with school atmosphere

at an early stage and empower their imaginative thinking and creativity. Primary education aims to develop the basic skills of the students and provide a comprehensive Islamic education to instill Islamic values at an early age. The education at this stage enables pupils to learn about the culture while preparing them to be able to make better future academic choices. Intermediate education aims to provide the skills and knowledge necessary develop students' scientific thinking along with nurturing and advancing their Islamic character.

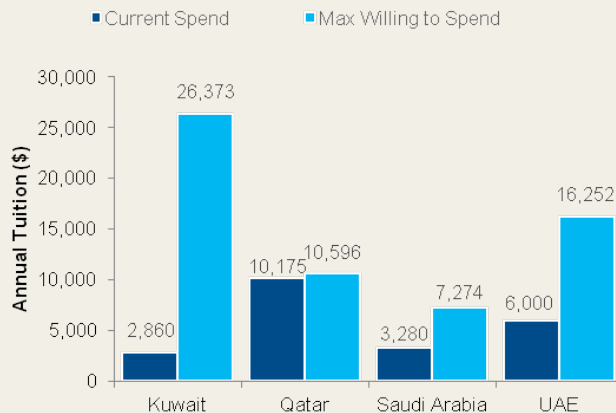
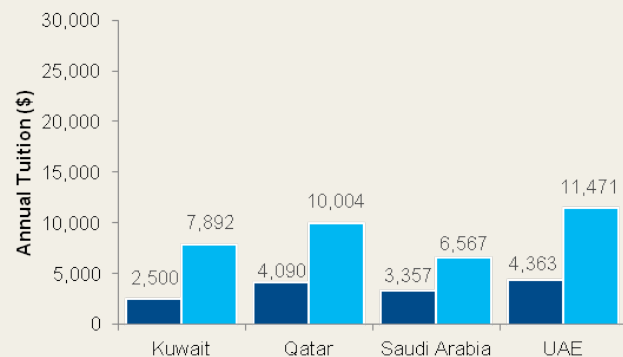
Current Private School Spend and Parental Willingness to Spend (Nationals, By Country, in US\$)**Current Private School Spend and Parental Willingness to Spend (Expatriates, By Country, in US\$)**

Figure 7: Both National and Expatriate Parents Expressed a Potential Willingness to Devote a Larger Portion of Their Family's Income to Private Education

Secondary education inculcates skills and habits including reading, scientific thinking, research and analysis while instilling Islamic values and doctrines. It opens up opportunities to enable competent students to continue their higher education.⁴

Girl's education in the region has confronted many problems in the past. Girls' education was not perceived in the same manner as that of boys. But over time, Saudi government took interest in girls' education including creating more schools and universities for girls, bringing reforms in the curriculum for girls, granting financial assistance to female students and provide opportunity to Saudi women to enroll at all levels of higher education. Education for women is associated with vital measures of human resource development such as reducing population growth and mortality rates, improving health and nutrition and increasing literacy rates. Additionally, with the King Abdullah's Project⁵ in 2006, the future for women's education in Saudi Arabia appears even brighter. The project was focused on the development education creating a knowledgeable society through various programs for both boys and girls including the following:

- Continuing professional development for all those working in education
- Development of curricula and learning materials
- Improve the school environment to enhance learning
- Use information technology to improve learning
- Develop non-classroom activities and student services

C. INTERNATIONAL ASSESSMENT OF STUDENTS' PERFORMANCE

TIMSS (Trends in International Mathematics and Science Study)

TIMSS 2011 is the fifth assessment carried out since 1995 by the International Association for the Evaluation of Educational Achievement (IEA) – an international organization of national research institutions and governmental research agencies. TIMSS assesses the mathematics and science knowledge and skills of 4th- and 8th-graders internationally.

In 2011, 57 countries and other education systems administered TIMSS at grade 4, and 56 administered TIMSS at grade 8.

⁴ UNESCO Report on World Data Education, 2010-2011

⁵ Report on Development of Curriculum for Girls in Saudi Arabia, 2014

Education system	Average score
TIMSS scale average	500
Korea, Rep. of	613 ▲
Singapore ¹	611 ▲
Chinese Taipei-CHN	609 ▲
Hong Kong-CHN	586 ▲
Japan	570 ▲
Russian Federation ¹	539 ▲
Israel ²	516
Finland	514
United States¹	509
England-GBR ³	507
Hungary	505
Australia	505
Slovenia	505
Lithuania ⁴	502
Italy	498 ▼
New Zealand	488 ▼
Kazakhstan	487 ▼
Sweden	484 ▼
Ukraine	479 ▼
Norway	475 ▼
Armenia	467 ▼
Romania	458 ▼
United Arab Emirates	456 ▼
Turkey	452 ▼
Lebanon	449 ▼
Malaysia	440 ▼
Georgia ^{4,5}	431 ▼
Thailand	427 ▼
Macedonia, Rep. of ⁶	426 ▼
Tunisia	425 ▼
Chile	416 ▼
Iran, Islamic Rep. of ⁶	415 ▼
Qatar ⁶	410 ▼
Bahrain ⁶	409 ▼
Jordan ⁶	406 ▼
Palestinian Nat'l Auth. ⁶	404 ▼
Saudi Arabia ⁶	394 ▼
Indonesia ⁶	386 ▼
Syrian Arab Republic ⁶	380 ▼
Morocco ⁷	371 ▼
Oman ⁶	366 ▼
Ghana ⁷	331 ▼

Average Mathematics Scores of 8th-grade Students, 2011 among 56 countries and other education systems

Education system	Average score
TIMSS scale average	500
Singapore ¹	590 ▲
Chinese Taipei-CHN	564 ▲
Korea, Rep. of	560 ▲
Japan	558 ▲
Finland	552 ▲
Slovenia	543 ▲
Russian Federation ¹	542 ▲
Hong Kong-CHN	535 ▲
England-GBR ²	533
United States¹	525
Hungary	522
Australia	519
Israel ³	516
Lithuania ⁴	514 ▼
New Zealand	512 ▼
Sweden	509 ▼
Italy	501 ▼
Ukraine	501 ▼
Norway	494 ▼
Kazakhstan	490 ▼
Turkey	483 ▼
Iran, Islamic Rep. of	474 ▼
Romania	465 ▼
United Arab Emirates	465 ▼
Chile	461 ▼
Bahrain	452 ▼
Thailand	451 ▼
Jordan	449 ▼
Tunisia	439 ▼
Armenia	437 ▼
Saudi Arabia	436 ▼
Malaysia	426 ▼
Syrian Arab Republic	426 ▼
Palestinian Nat'l Auth.	420 ▼
Georgia ^{4,5}	420 ▼
Oman	420 ▼
Qatar	419 ▼
Macedonia, Rep. of	407 ▼
Lebanon	406 ▼

Average Science Scores of 8th-grade Students, 2011 among 56 countries and other education systems



3: Higher Education

Ministry of Higher Education was a centralized authority responsible for supervising and directing the university level education, formulating policies for compliance by higher education institutions. However, with the recent restructuring in the Saudi government, the Ministry of Education and Ministry of Higher Education have been merged to form a single entity overlooking education in the region.

A. PUBLIC HIGHER EDUCATION IN SAUDI ARABIA

There has been rapid expansion in higher education institutions in Saudi Arabia. Public universities increased from 8 in 2003 to 25 by 2014. A brief overview of a few top universities is given below:

- King Saud University in Riyadh is the oldest university in Saudi Arabia. Today, almost 65,000 students pursue degrees at the faculties of art, science, commerce, engineering, agriculture, medicine, dentistry, nursing, education, computer science and information science. The university offers doctorate programs in many fields and is particularly known for its engineering and medical schools.
- King Abdulaziz University in Jeddah is the largest university in the region, with over 70,000 students. The Islamic University.
- The Islamic University at Madinah is a renowned university for Islamic studies, with graduates from over 100 countries.

- Imam Muhammad bin Saud University in Riyadh and Umm Al-Qura University in Makkah are regarded highly for their Islamic Law, history and Arabic literature, in addition to programs in arts and sciences. Imam Muhammad bin Saud University offers programs in Islamic and Arabic studies at its branches in Japan, Indonesia, Mauritania, Djibouti and United Arab Emirates.
- King Faisal University's eastern province offers a range of programs including medicine and architecture at its campus in Dammam. Its Hofuf campus is renowned for its agricultural and veterinary science programs, experimental farms and advanced research in agriculture and animal husbandry.
- King Fahd University of Petroleum and Minerals in Dhahran is considered at par with the best in the world in that field.
- Princess Nora bin Abdulrahman University (founded in 2007) is one of the largest universities for women with an enrollment of over 52,000 undergraduate and graduate students.

The students in public higher universities are charged with no or nominal tuition fee which is indicative of the government's desire to promote education in the region. All Saudi students are eligible for a monthly allowance which varies slightly by field or level of study. Scholarships are also offered to selected students to study in private universities or abroad.

The demand for higher education, however, has been beyond the capacity of public sector. The education in

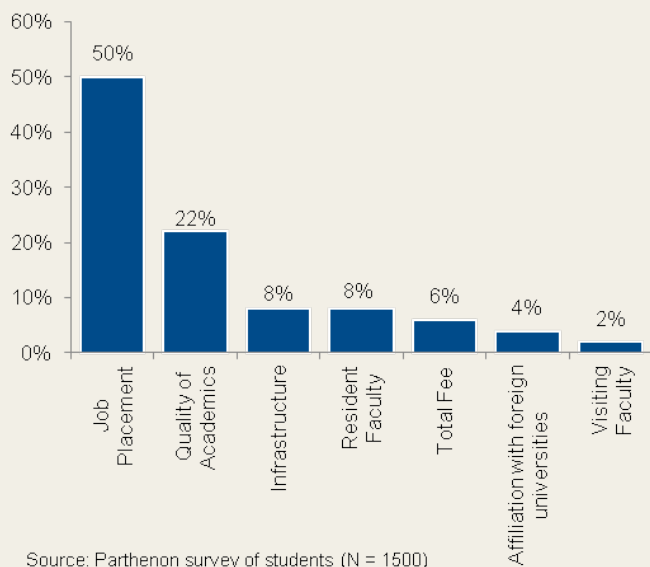


Figure 8: Primary Reason for Choosing Higher Education Institution

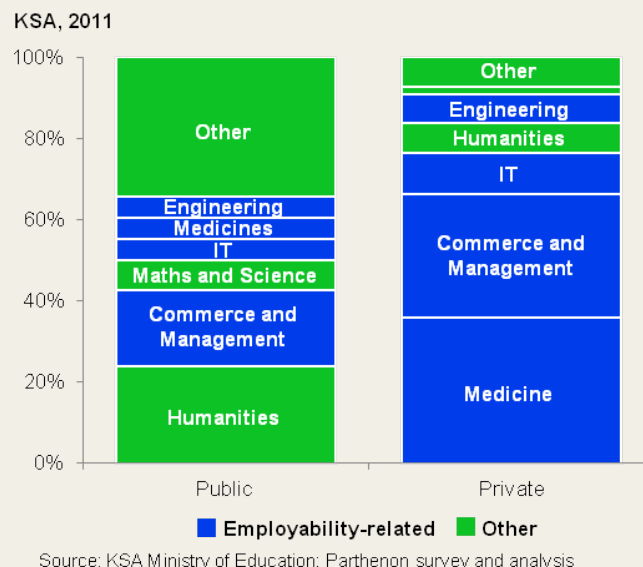


Figure 9: Enrolment in Higher Education by Course Type

public and private sector is also perceived differently in terms of quality of education, teaching, employability etc.

B. PRIVATE HIGHER EDUCATION GROWTH IN SAUDI ARABIA

Private higher education enrolment in Saudi Arabia has grown at ~33% (2008-2011) per annum and is amongst the fastest growing education segments globally.⁶

Key Drivers:

The growth of the private higher education in Saudi Arabia is driven by the following key factors:

- **Focus of employability:** The region experiences maximum growth in courses that produce maximum employable graduates such as medicine, management and commerce, IT and engineering.
- **Demand for quality English education:** It is perceived that private institutions offer better quality English instruction than public universities. It is due to the fact that private higher education institutes hire more expatriate teachers with better English language capability than in public universities. English speaking is also a key driving factor for securing private sector jobs in the region.
- **Alternative for expatriate students:** Public universities (barring only a few) do not enroll expatriate students and thus, private universities offer these students an alternative for pursuing higher education in Saudi Arabia.

Reason for pursuing higher education⁷

Another notable aspect in Saudi Arabia's education system is the reason students pursue higher education. Based on a survey conducted on a sample size of 1500 university students, it appears that job placement is the one of the most important factor followed by the quality of education that drives the students to attain higher education.

Other important reasons for choosing to go for higher education include infrastructure, faculty, fees, affiliation with foreign universities etc.

Enrolment in Higher Education by Course Type

Employability seems to be the most important driving factor for students to pursue higher education. Thus, the students prefer courses such as Medicine, Commerce & Management, Engineering and IT etc. that have relatively better chances of getting them job placements.

It can be seen that while Medicine, Commerce & Management and IT are the most preferred courses for students in private universities, students in public universities, on the other hand prefer Humanities.

^{6,7} Parthenon Group Report on "Investment Opportunities in K12 and Higher Education in the UAE and Saudi Arabia", 2011

World University Rankings

QS World University Rankings help students make informed decisions by comparing their study options. The ranking evaluates more than 800 universities around the world across four broad areas of interest to prospective students: research, teaching, employability and international outlook. The top 400 universities are awarded individual ranks while the rest are placed in groups starting from 401-410 up to 701+.

C. SCHOLARSHIP PROGRAMS









Government is bringing about a significant change and making efforts to enhance the higher education system in Saudi Arabia. Government's keen interest in education can be seen in offering scholarships to students, sponsoring students to pursue higher education and providing grants to universities.

King Abdullah Scholarship Program (KASP) was launched in 2005-06. This program is managed by the Ministry of Education. It sponsors Saudi students to pursue graduation, masters, PHD and medical fellowship programs in the most renowned foreign universities. An estimated 140,000 students have been sponsored from 2006 to 2012. The government has spent nearly \$5.3 Billion to sponsor the Saudi students covering their tuition fees, spouse and children expenses including annual air ticket and other living expenses. This scholarship is considered to be the largest fully endowed government scholarship program⁹

As a result of the scholarship program, Saudi Arabia has become the fourth largest sponsor of international students to the U.S. with over 100,000 Saudi students enrolled in American colleges and universities in 2013-14.

The scholarship program has created a lasting impact on the future of Saudi Arabian education. It has widened the horizons for Saudi students and given them the exposure to supply a qualified, skilled and a competitive workforce to the Saudi labor market. Saudi labor market demands more technical and managerial skills and KASP is bridging this skill gap as it obligates the students to return to Saudi Arabia after the completion of their studies from overseas.

QS World University Rankings ⁸

Ranking	University	
225	King Fahd University of Petroleum & Minerals	
249	King Saud University	
334	King Abdul Aziz University (KAU)	
501-550	Al-Imam Muhammad Ibn Saud Islamic University	
551-600	Umm Al-Qura University	
601-650	King Khalid University	
701+	King Faisal University	
NA	King Abdullah University of Science & Technology	

⁸ QS World University Rankings (2014-15)

⁹ http://hrmars.com/hrmars_papers/Would_the_Educational_Programs_help_in_Solving_Saudi_Arabia%E2%80%99s_Employment_Challenges.pdf

Key Education Projects in Saudi Arabia

Universities	Project Value (in \$US Million)	Expected Year of Completion
Saudi Arabia MOE – King Khaled University – Phase III	187.0	2015
Saudi Arabia MOE – Qassim University – Medical Colleges	141.0	2014
Saudi Arabia MOE – Al Dammam University Administration Building & Multipurpose Hall	91.9	2017
Saudi Arabia MOE – Al Imam Muhammad Bin Saud University – College of Engineering and Preparatory Year College	80.0	2015
Saudi Arabia MOE – Umm Al Qura University – Faculty of Social Sciences and Faculty of Dua'a for Women	64.0	2015
Saudi Arabia MOE – King Saud University – Medical Research Center	NA	2014
Saudi Arabia MOE – Tabouk University – Deanship and Administration Building	69.3	2014
Saudi Arabia MOE – Umm Al Qura University – Faculty of Social Sciences and Faculty of Dua'a for Women	64.0	2015
Saudi Arabia TVTC – Saudi Institute for Water Technologies in Jeddah	56.8	2016
Saudi Arabia MOE – Ibn El Jawzi Elementary, Intermediate and Secondary Schools	55.0	2015

D. KEY EDUCATION PROJECTS IN SAUDI ARABIA

Saudi Arabia is making substantial investment towards the development of education institutions. It has committed about US\$ 3.6 Billion towards the construction of 325 educational projects.¹⁰

¹⁰ Alpen Capital Report on GCC Education Industry, 2014

E. RESEARCH-DRIVEN HIGHER EDUCATION

Saudi Arabia's making efforts in terms of building research capability by funding researchers to fulfill its vision of building a knowledge society. The higher education system, however, lacks in terms of meeting the labor market demand of qualified graduates, unbalanced distribution of students across various disciplines and gap between research carried out by the scholars and community needs, with lack of funds and facilities for researchers.

With support from the government, the universities are constantly focusing on building research capability. For instance, the King Abdullah University of Science and Technology is established in the region to focus on science and technology research and teaching. In terms of research & development and innovation, Saudi Arabia's ranking out of a total of 144 countries on various parameters is given below:¹¹

Parameters	Score (1-7)	Rank (Out of 144)
Capacity for innovation	4.0	55
Quality of scientific research institutions	4.2	44
Company spending on R&D	3.6	37
University-industry collaboration in R&D	4.2	38
Government Procurement of advanced tech products	4.6	7
Availability of scientists and engineers	4.4	47
PCT patents, applications/million pop.*	6.7	44

It can be seen that Saudi Arabia ranks higher in terms of government procurement of advanced technology products which indicates Saudi Arabian government's willingness in terms of spending on integration of ICT to build research capability. It can also be seen that Saudi Arabia pays significant attention to university and industry collaboration in R&D. There is still a gap in terms of the skills that the students possess and industry needs. Hence, collaboration of education system with the industry is critical to align education with the labor market needs.

¹¹ World Economic Forum's "The Global Competitiveness Report", 2014-15

Centers of Research Excellence Supported by Ministry of Education

Scientific research is considered to be the basis of development in all fields including economic, industrial, medical, engineering, military, technical etc. The eighth development plan of the Ministry of Education in 2007 laid emphasis on supporting scientific research and technical development in order to transform into a knowledge-based economy. For this reason, Ministry has taken initiatives to establish centers of research excellence in Saudi universities.

Centers of Research Excellence ¹²

University	Center
King Saud University	Center of Research Excellence in Engineering Materials
King Abdulaziz University	Center of Research Excellence in Medical Genome
King Fahd University of Petroleum & Minerals	Center of Research Excellence in Petroleum and Petrochemical Distillation
King Faisal University	Center of Research Excellence in Date Palms and Dates
King Saud University	Center of Research Excellence in Biotechnology
King Abdulaziz University	Center of Research Excellence in Environmental Studies
King Fahd University of Petroleum & Minerals	Center of Research Excellence in Renewable Energy
Umm al-Qura University	Center of Research Excellence in the Hajj and Umrah
King Saud University	Center of Research Excellence in the Development of Science and Mathematics Education
King Abdulaziz University	Center of Research Excellence in Osteoporosis
King Abdulaziz University	Center of Research Excellence in the Technology of Water Distillation
King Fahd University of Petroleum & Minerals	Center of Research Excellence in Corrosion
Al-Imam Muhammad Ibn Saud Islamic University	Center of Research Excellence in the Fiqh of Contemporary Issues
King Saud University	Center of Research Excellence in Information Security

¹² Ministry of Education, 2007

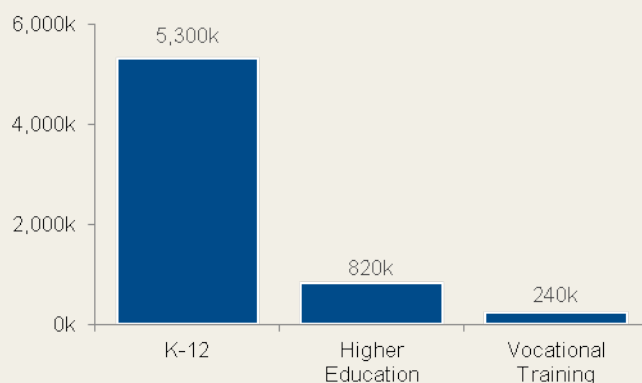
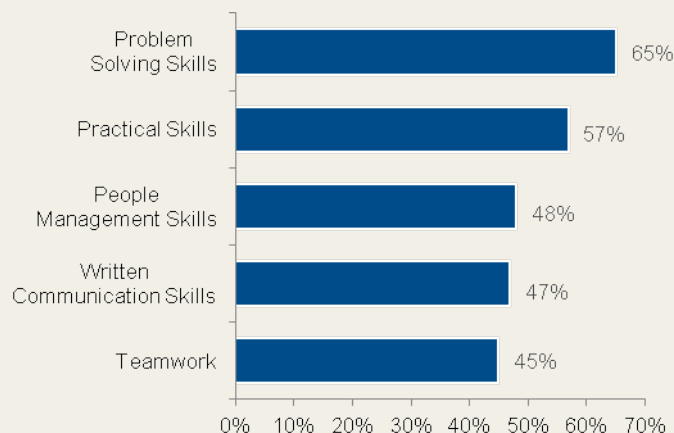


Figure 10: Education Enrolment by Segment, 2011



Source: GCC Education Leaders Conference 2007

Figure 11: Employer survey: What skills do recently passed graduates in GCC lack?

4: Vocational Education

Vocational education involves imparting of skills and competences to help individuals perform better in industries and commercial occupation. Success of vocational education largely depends on a number of environmental factors from an economic, political, cultural and labor market perspective.

Saudi Arabia has one of the highest percentages of male and female youth compared to its national population while at the same time, expatriates comprise of one-third of its total population. This creates a challenge for the Saudi government to absorb all of the youth in the labor market.

Development of technical education and vocational training is considered essential to satisfy the need for trained manpower in various sectors to widen the scope of economic activities with particular emphasis on industrial and agricultural development. However, the interest in vocational education is still growing at a modest pace. Enrolment in vocational education is considerably low as compared to K-12 and higher education level.

A. KEY GROWTH DRIVERS

There is a misalignment of higher education policy and labor market requirements which has resulted in a skill gap in the region. There is a gap between the education offered and workplace requirements.

There are many skilled and semi-skilled jobs in industries and private sectors but these positions are usually filled by non-Saudis due to the lack of such skills. Nationalization policies like Saudization are aimed at reducing the unemployment in the region but measures will have to be taken to address the root cause of the situation and that is lack of "youth readiness for the job market".

The nationals lack problem solving skills, practical skills, people management skills, communication skills and teamwork according to a survey conducted with 400 companies.

B. TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET)

The Saudi Arabian government is investing substantially in the vocational training and education segment. In the five-year plan from 2010 to 2014, the government allocated US\$ 6.1 Billion (SAR23 Billion)¹³. The government has thus set up Technical and vocational Training Corporation (TVTC) as a regulatory authority as well as to concentrate on the development of vocational training in the region.

TVTC carries out the Kingdom's policies of workforce development through three sectors: technical colleges (35), secondary institutions (35) and vocational training centers (65) in addition to more than 1000 private organizations accredited by TVTC. Training programs are developed and installed to respond to the labor market needs. These institutions offer courses in electrical, electronics, computer, mechanical, communication, construction, business and agriculture.

Vocational education and training is concerned with the acquisition of work-related knowledge and skills. Its primary objective is to train and develop manpower in technical and vocational fields according to the labor market requirements in order to achieve sustainable development. It also wants to lay emphasis on the importance of technical and vocational education in the society by delivering quality training programs. To achieve these objectives, Ministry of Labor has been increasing the capacity of institutions run by the Technical and Vocational Training Corporation (TVTC).

Notable Initiatives

- **Colleges of Excellence:** These are designed in consultation with the private sector employees to bridge the gap that exists between the labor market requirements and the skills possessed by the Saudi youth.
- **Short term vocational training courses:** These courses are specifically designed for job seekers to enhance their skills and meet the labor market demands. They are particularly attractive for females given the flexibility and duration of the courses.
- **King Abdullah Scholarship Program for Technical Trainers in Saudi Arabia** is one of the initiatives undertaken by the government to fulfill the demand for trained faculty and enhance the quality of vocational training in the region.
- The Technical Trainers College (TTC) in Riyadh is the first of its kinds in Saudi Arabia. The students acquire skills in a technical occupation and also qualify as trainers.

It is imperative to offer the right course mix to cater to the job market demands. Vocational education and training imparts life skills such as problem-solving, leadership, critical thinking, ability to collaborate, and technological proficiency. Qualification alone is not enough to stay competitive and hence, the Saudis must work on improving their skills to get absorbed in the private sector jobs and remain competitive.

In spite of several initiatives to promote vocational training segment in the region, it is still at a growing stage at present. The number of student enrollment is insignificant compared to K-12 and higher education.

¹³ Alpen Capital Report (http://www.alpencapital.com/downloads/GCC_Education_Industry_Report_July_2014.pdf)



5: Key Trends in Education

This section briefly highlights the prevalent trends in the education sector in the region.

A. PRIVATE EDUCATION SECTOR GROWTH

There is a tremendous growth of private institutions in the region due to government focus and increasing demand for quality education from the local students as well as expatriates. Government has extended its support and benefits to private sector institutes including land, subsidies and grants to academic institutions. The higher enrolments in private institutions is indicative of the growing popularity of private education sector.

Private schools offering international curriculum are emerging as a preferred choice over public schools. It is believed that the private institutions offer better quality of education in terms of improved English language instruction.

Saudi Arabia also recognized the need of a quality assurance and accreditation system in 2004 and established the National Commission for Academic Accreditation and Assessment (NCAAA).

B. INCLUSIVE EDUCATION FOR DISABLED STUDENTS

Inclusive education, meaning “education for all”, focuses on mainstreaming of disabled and physically challenged students into regular classrooms. It is widely recognized that education is a fundamental right for

everyone including students with special needs i.e. blind, deaf, physically challenged, mentally retarded and intellectually gifted students. The definition of special needs education has been expanded to include children with social disadvantage such as poverty.

The department of Special Learning was established in 1962 in the Kingdom of Saudi Arabia. An integration program for mainstreaming special needs students into normal schools began in the region. The objectives of inclusion programs include:

- To develop educational programs that cater to the needs of gifted students in technical and creative fields
- To develop special education programs for students with disabilities
- To secure materials and educational environment suited for students with special needs
- To enhance teachers’ vocational development to fully prepare them to work effectively with students with special needs
- To develop special education opportunities shared with the private sector
- To expand society’s participation in protecting the rights of children with special needs

The inclusion programs will lead to increased acceptance of students with special needs in the society by their regular school-going peers. The government is extending extensive support to facilitate inclusion of students with special needs in the mainstream education system.

C. E-LEARNING INITIATIVES VIA INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IMPLEMENTATION

E-Learning is an integrated approach that facilitates mobile learning to anyone, anytime at any place by employing technological capability. The government in Saudi Arabia is trying to create a more diverse educational environment by means of different delivery models such as e-learning. The rapid growth of e-learning can be attributed to several factors such as:

- Demand for education exceeds the supply: The educational institutions are faced with insufficiency of resources to cater to this growing demand for education. E-learning can therefore be an effective medium
- Education centers are isolated from certain areas: The educational institutions are established at central or populous locations and thus, a significant population remains isolated from major populated areas. E-learning has the potential to deliver education to remote locations.
- Separate education for men and women imposes resources constraints: Provision of separate education to men and women puts further strains on the limited facilities and resources available. E-Learning can facilitate and foster education for females providing increased access for women.

In 2005, Saudi Ministry of Education established National Center of E-Learning and Distance Education (NCEL) to develop information technology in the Kingdom. Universities have realized the potential of integrating information and communication technology (ICT) in universities for improved delivery of education.

Saudi Electronic University

Saudi Electronic University was launched in 2011 by King Abdullah Bin Abdulaziz as a government education institution. The SEU is the only specialized university in distance education offering both graduate and undergraduate degree programs. The university includes:

- College of Administration and Financial Sciences
- College of Computer and Informatics
- College of Health Sciences
- Environment based on Information and Communication Technology
- E-Learning
- Distance Education

E-learning is a method of education that depends on information and communication technology to provide educational content and delivery of skills. E-learning adds flexibility and ensure quality of education while catering to the needs of the labor market.

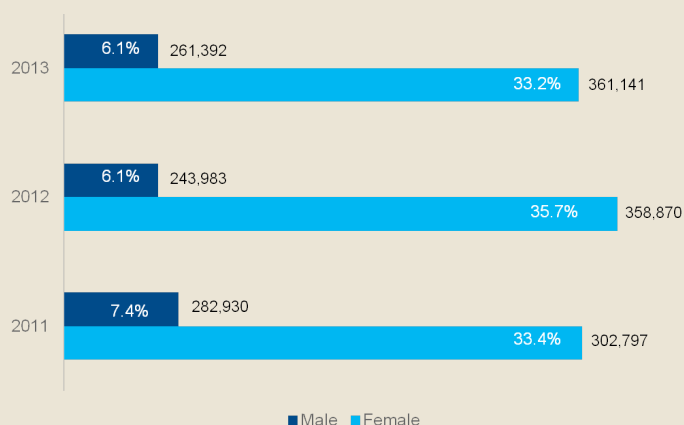


6: Aligning Education and Labor Market Needs

Aligning education with labor market is vital as economic development is strongly dependent on workforce development which is in turn influenced by the quality of education. Therefore, education system and labor market need to co-exist for a continued sustainable development of Saudi Arabia. With the growing transformation in the education system in the region, there may exist a skill gap between young job seekers that it produces and the new knowledge society. The increasing unemployment at present indicates that, there is a growing need for the education system to develop the students in a way that is well-suited for the labor market needs.

The rate of unemployment above shows increasing inability of the education system to meet the labor market needs. It can be seen that the female unemployment continues to be higher than the male unemployment. Also, unemployment rate is increasing over the period from 2011 to 2013.

This clearly reveals that there is a growing need to adopt effective measures in terms of education and labor policies collectively by the Ministry of Education and Ministry of Labor in order to produce a workforce that responds well to the labor market needs.



(Total Saudi Unemployment – excludes foreign workers)

Ministry of Labor initiatives to tackle unemployment

Ministry of Labor has undertaken several initiatives to promote employability of Saudi nationals.

Localization of specific sectors and professions:

Ministry of Labor has established a number of initiatives to tackle the problem of unemployment. One of the strategies involved forcing the private sector to recruit Saudi nationals. It began to localize certain sectors and professions such as the gold sector, bank sector, administrator jobs, accountants and human resource specialists. The strategy did not achieve its desired objective because of the shortage of local qualified workforce and lack of willingness of the locals to take up jobs in private sector due to the long working hours as compared to the public sector.

Human Resource Development Fund: The government established the Human Resource Development Fund to lead the nationalization of jobs initiatives under Ministry of Labor. The fund concentrates on training and employment of Saudi human resources by cooperating with chambers of commerce and industry.

Saudization: Another strategy termed as “Saudization” was implemented by the Ministry of Labor in which, MoL required all the companies in the Saudi market to achieve 5% of Saudization every year to reach 30% after six years. Many organizations, however, could not achieve the target and thus, Ministry of Labor implemented a similar program for private sector to achieve a specific quota for each sector. Even though this strategy did better than the previous, but the organizations still could not manage achieving the required Saudization percentage. There are several factors that have adversely affected the nationalization of employment such as lack of qualified local workers, lack of skills and willingness of local workers to take certain job offers, reluctance of private sector to recruit local workers, preference of hiring foreigners because of better qualification etc. Later, the ministry launched a program called “Nitaqat”

The aim of achieving Saudization is dependent on the below mentioned critical factors:

- Disparity of wages and career ladder between Saudis and non-Saudis within the same sector makes the employment of Saudis unappealing to private companies
- Private sector companies preferred hiring non-Saudis as it is easier to find specialized workers among foreigners

Other initiatives: Other initiatives taken by the government to promote the employment of Saudis and reduce country’s dependence on foreign workers includes:

- Financial incentives were given to young Saudis to learn special skills
- Introduction of several new policies in education system including emphasis on quality of education, introducing a mechanism for career guidance, collaboration with the industry to tailor the education programs to employers’ needs
- Directing research efforts in order to improve Saudization efforts. The studies highlighted various reasons why foreigners were preferred over the Saudis for employment such as there is no training needed for foreign workers because the companies hire them only if they possess the necessary skills and qualification.

Initiatives to Encourage Female Workforce Participation

The female participation is limited due to the social and cultural restrictions that discourage women from working in the region. The female workforce contributes only about two percent in the private sector workforce. Majority of the women work in the public sector mostly for Ministry of Education, Ministry of Health and Ministry of Social Affairs. One of the main objectives of the government is to increase the participation of women in the workforce. The government aimed to create more job opportunities for women in the private sector to encourage them to participate in the development of the country. For instance, in 2012, the Ministry of Labor reserved certain jobs in the retail sector for women only such as women clothes and beauty. The Human Resource Development Fund (HRDF) is also an effective strategy that fosters the employment of well trained and well qualified Saudis including both males and females.



7: Key Challenges & Initiatives

This section lists the major challenges in keeping up with the growing demand for education in Saudi Arabia. It also highlights the key initiatives taken by the Saudi government to mitigate those challenges.

A. PROBLEM 1: YOUTH UNEMPLOYMENT FOR SAUDI NATIONALS

Saudi Arabia's economic transformation can largely be attributed to its strategic planning and roadmap to tackle problems like unemployment. There is growing young population and a huge wealth of job opportunities available. Hence, the employment plan's key focus is to ensure Saudi nationals have access to these employment opportunities. Though, the Saudi Nationals are mostly employed in the public sector, the government is taking initiatives to develop Saudi Nationals into an attractive workforce for the private sector to hire.

Employment Challenges in Saudi Arabia

Saudi Arabia has experienced continued high economic growth in the recent past but it still faces challenges in terms of unemployment which is driven by the following factors:

- Increasing youth unemployment
- Competitive imbalance between Saudi Nationals and expatriates

- Lack of female workforce participation

Initiative: Nitaqat Program – Government initiative to tackle youth unemployment

The Ministry of Labor launched the Nitaqat program in June, 2011 to enhance the percentage of Saudi Nationals in the private sector. It was implemented encourage nationalization of employment in the private sector and to replace the Saudization program, used earlier to boost the number of Saudi employees in the private sector. It measures the percentage of Saudizations, calculated as the number of Saudi employees compared to the total number of employees in the organization.

The Nitaqat program divides categorized the organizations working in the private sector into fifty one industries and each industry was classified according to the workforce size as Micro, Small, Medium, Large and Mega. It measures the organizations' nationalization performance by comparing it with the others in the same industry and with the same workforce size in order to perform a fair comparison. The program evaluates private sector entities based on their performance in terms of employment localization by segmenting them into four categories namely Platinum, Green, Yellow and Red. Platinum is for entities achieving exceptional nationalization performance and green for above average performance. On the other hand, yellow indicates average performance and red indicates poor performance. Platinum and Green entities represent the top half of the entities within the same industry with the

same workforce size. Entities in Red represent the worst five percent of entities within the same industry with the same workforce size.

The Nitaqat program has been able to transform the Saudi labor market after its implementation as many organizations have been able to achieve the required percentage of workforce nationalization that fall into the platinum and green category.

The government's Nitaqat program has doubled the number of jobs for Saudis since its inception from 723,894 to 1.46 million. In terms of the wages, the number of those who earn less than SR3,000 has decreased from 356,806 employees to only 109,654 employees while those earning more than SR3,000 increased from 376,087 to over 1.3 million. The program has been successful in a short period of time, however, the below mentioned challenges remain:

- Labor market faces the challenge of shortage of workforce
- Saudi jobseekers face disparity in wages between the expatriates and nationals
- Mismatch between educational output and market needs

The program plans to address the above concerns including improving the competitiveness of Saudi Nationals by implementing policies such as by raising the cost of recruiting foreign workers by levying a fee, free movement of expatriate workers inside the country and wage protection system. The Ministry has also improved its systems and operations by integrating its database with data from Ministry of Interior and the General Organization for Social Insurance and introduced several e-services.

B. PROBLEM 2: PARTICIPATION OF SAUDI WOMEN IN LABOR MARKET

The government of Saudi Arabia is making a lot of efforts for the inclusion of women in the labor market. Female labor force participation is a vital element for the overall economic development.

▼ This displays the numbers of females in the labor market for the years 2008-2012

Year	Male	Female	Total
2008	3513032	659487	4173019
2009	3580790	705725	4286515
2010	3706133	730428	4436561
2011	3835863	755996	4591859
2012	3970134	782459	4752593

Source: Saudi Arabian Monetary Agency – Annual Reports (47, 48, & 49), (2008-2013)

The percentages of females in the labor market in 2008 and 2012 was estimated at 15.8% and 16.5% respectively whereas the participation of males during the same duration reached to 84.2% and 83.6% respectively. Also, women participation in labor market is mostly restricted to urban areas. Equal labor force participation of women in the society is key to develop the economy but it is a gradual process and will require focused and consolidated efforts at the ground level (educational level) over a period of time.

Initiative: Inclusion of women in decision-making

The Ministry of Labor claims the increase in women's private-sector employment. However, the proportion of women participation in the labor market is lower than other countries in the region.

▼ Labor force and employment

Female labor force participation rate, employment and unemployment	1990	1995	2000	2005	2010	2012
Labor force participation rate (% of age 15-64)	15.3	16.2	17	18.5	18.6	19.1
Employed (% of age 15+)	NA	13.8	14.7	15.7	14.7	14.4

Source: ILO (2003) Key Indicators of the Labor Market database

Source: ILO (2003) Key Indicators of the Labor Market database

Education is pivotal for women empowerment. Saudi Arabian government is spearheading several campaigns to enhance women participation in political and business arenas.

King Abdullah also announced that he would include women in political institutions in the country, the Majlis Al Shura (parliament) and Majlis Al Balady (city councils)¹⁴. Despite considerable reforms introduced in this area, the professional space within which women operate is still very limited due to political and social restrictions.

C. PROBLEM 3: CO-EDUCATION – EDUCATION FOR MALES AND FEMALES

Saudi Arabia faces workforce shortage in many disciplines like engineering, science and technology, biotechnology, nanotechnology and information technology etc. The country faces shortage of scientists and female education is still evolving in the region in such critical fields.

Initiative: Co-education Universities and Government Reforms

To promote a knowledge-based economy and move from an oil-based economy, Saudi Arabia is making significant efforts to promote women education. The reformation to promote co-education is evident with the opening of the first co-educational university, King Abdullah Science and Technology University (KAUST) in 2009. It also included changes in the curriculum to include more globally recognized subjects. Saudi Arabia has also announced a research initiative called “Aafaq” or Horizons, managed by King Fahd University of Petroleum and Minerals. It is intended to improve higher education opportunities for women in the region including in the field of law and engineering.

D. PROBLEM 4: MAJORITY EXPATRIATE TEACHERS IN PRIVATE INSTITUTIONS

Saudi Arabia has a modest pupil-teacher ratio as compared to the other GCC countries and the world average. Despite this, there is a room for improvement in terms of the teaching faculty in Saudi Arabia. The performance of education sector largely depends on the quality of teachers. Hence, it is imperative to hire and retain skilled teachers. The academic institutions especially private prefer hiring expatriate teachers because of their English language proficiency. Other problems faced by the teachers in the region include compensation levels not meeting the expectations of quality teachers, frequent teacher absenteeism etc.

It is important for Saudi Arabia to recruit qualified and skilled teachers to enhance its teaching capability because going forward it will witness a shortage of quality teachers. Moreover, Saudi Arabia needs to attract more qualified nationals into teaching.

Initiative: King Abdullah Scholarship Program

King Abdullah Scholarship Program aims at fulfilling the shortage of Saudi faculty members. It has been extended for third five-year term to provide opportunity for more Saudis to obtain higher education at premier universities across the world.

¹⁴ <http://www.prweek.com/article/1283423/saudi-arabia-inclusion-case-study-making>



Education System & Labour Market

8: Conclusion

A. CASE STUDIES

To conclude the report, this section entails relevant global case studies related to the government reforms to transform education globally or to specific areas such as integrating technology in the educational framework, focusing on specific skill development, aligning education with labor market needs and so on.

Case Study 1: Strategies from UK's education system to align with labor market

The case study aims to highlight the most important aspects of UK's education system that can be incorporated in Saudi Arabia's educational transformation strategy.

Education Focus: Transforming education system to create a solid learning foundation amongst students. The education system must focus on instilling learning ability in the students and not just focus on employability. Students should be keen learners rather than just focusing on acquiring jobs after the completion of their education.

Workforce Development: Well-developed workforce must possess a broad range of skills, which is one of the areas that has further scope of improvement in Saudi Arabia as it faces the challenge of providing employment to the growing population in the region. Hence, reforms in the education systems for instance promoting creativity, implementing programs and initiatives to nurture talent, develop skills and prepare the students to compete in the work place.

Responding to Skills Mismatch: UK developed an education system aligned to the demands of the labor market by focusing on developing academic skills as well as life skills in students. The most effective measure was the creation of a separate commission or body to foster skill development. There is also a growing need for developing both specific hard skills such as computing, languages, literacy etc. and broader soft skills such as presentation skills, interaction skills, and management skills etc. This would help in building a skilled workforce in Saudi Arabia.

Engaging Employers in Quality Assurance: UK fosters labor market participation to build an effective relationship between the higher education institutions and employers. Such an extensive engagement of employers leads to improved quality of education and better aligned education system with the labor market needs. Saudi Arabia may consider constituting a similar engagement body or model to promote industry-university collaboration.

Case Study 2: Germany's higher education system to meet labor market needs

The below case study highlights the effective strategies adopted by the German Education System to align education to meet the labor market needs.

Well Defined Labor Market Qualification: In order to respond effectively to the issues related to workforce development, Germany has set up well defined labor market qualification requirements the individuals must

meet in order to secure a job in the labor market. It has also introduced programs that would generate strong interest among the students for certain occupations, to meet labor market shortage in technological, technical and innovative fields.

Embracing Learning: The Germany's education system has instilled a learning ideology that emphasizes on: learning to do, learning to know, learning to be and learning to live together. Such a system would create a generation of skilled, independent and entrepreneurial workforce that will effectively utilize the opportunities presented to them to create job opportunities rather than getting affected by the problem of unemployment.

Holistic Strategy: German labor market has been successful by developing holistic strategies for workforce development to meet the labor market needs. Saudi Arabia could gain significantly by financing higher education to focus on unemployment, development of workforce, quality of education, labor market shortage and promotion of employer engagement.

Financing Higher Education: Germany ensures significant funding in order to increase the effectiveness and quality of education across all levels. Ease of access to loans, scholarships and funds helps in increasing enrolment, quality teaching and development of workforce. GCC can also be successful by investing in education to build a knowledge based economy.

It can be concluded from the above case studies that education is critical for economic and social development. Labor market plays a critical role in shaping the society's way of life and is influenced by the education system. Hence, it is important to align the education system with the labor market.

Case Study 3: Singapore's Teacher Oriented Initiatives

The case study below highlights Singapore's teacher-oriented initiatives as part of its education strategy.

Getting More Teachers: Singapore focused on maintaining better teacher-to-students ratios to enable better student interaction. This would in turn help in better addressing the growing need to motivate and instill strong values in students.

Retaining and Training Existing Teachers: Singapore launched several teacher training programs to retain and develop the existing teaching staff. It also established an Education Leadership Development Center for the professional development of potential and current teachers.

Freeing-Up Teachers' Time: The schools received co-curricular assistants for the teachers to free up their time spent in administrative tasks related to co-curricular activities and community involvement programs.

Enhancing Teacher Resources: Allotting some time to teachers and school leaders for professional planning and collaboration to allow them to think, reflect and plan for their lessons and instructions.

Case Study 4: United States' Strategy for Nationalization of Employment

The case study described below elaborates the strategy behind nationalization program of the United States labor market.

U.S. Labor Market Overview: United States labor market can be used as a benchmark by Saudi Arabia as it has strong procedures for offering jobs to foreigners under H1B Visa type. The limit of H1B visa is 65000 which means only 65000 foreign workers can work in United States every year.

Department of Labor's Restrictions: The U.S. Department of Labor ensures that hiring foreigners does not impact the local workforce adversely. Employers seeking to hire for a position must first carefully search for a qualified national and then hire a foreign worker with an H1B Visa if they do not find qualified American workers.

Protecting the Interest of Local Workforce: The employer first has to submit an application to the Employment and Training Department to ensure that there is no adequate American available for the job opportunity. The employer has to go through lengthy procedures to get permission to hire a foreigner. This recruitment and labor certification process by Department of Labor aims to protect the interest of U.S. labor market. The recruitment of foreign workers should not impact the salaries and working conditions of similarly employed U.S. workers.

Department of Labor's "Good jobs for everyone initiative": There are five strategic goals under this plan as mentioned below:

- Preparing workforce for good jobs and ensuring fair compensation
- Securing safe and healthy workplaces, particularly in high-risk industries
- Assuring fair and high quality work-life environments
- Securing health benefits and providing income security for those who are not working
- Providing accurate data about the labor market

B. RECOMMENDATIONS

The following aspects from the case studies could be adapted and applied effectively to the present education system of Saudi Arabia to ensure a sustainable future:

- **Diversification of education system to introduce vocational courses, courses focused on science, technology, engineering etc.**
- **Emphasis on skill development and learning**
- **Involvement of employers for curriculum development and other related tasks**
- **Creating new committees or organizational bodies to govern quality of education**
- **Ease of funding to promote education sector**
- **Create new positions of deputy minister in both ministries of labor and education. The new position will be called *deputy minister of labor-education alignment*. The main duty of those two new deputies is to ensure that both ministries build an aligned actions and bridge the gap between their activities at execution level.**
- **Encourage participation of the private sector and industry in the higher educational activities.**
- **Reduce the gap between jobs requirements in public and private sectors.**
- **Develop a teacher oriented strategy (similar to Singapore initiative)**

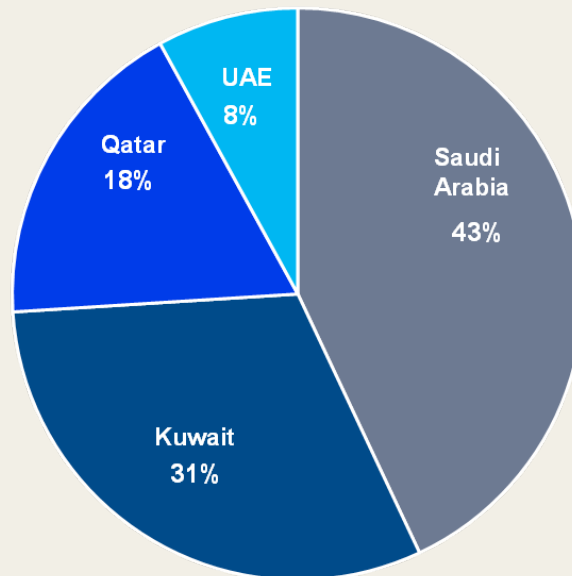


Figure 12: Saudi Arabia is the top spender

9: Appendix

A. MAJOR EDUCATION PROJECTS ¹⁵

According to data from Zawya, GCC members have committed ~USD23.6 billion in 214 educational institution construction projects. These projects are expected to be developed predominantly over 2013–17. GCC member Kuwait's one project is to be completed by 2025. Key spenders would be Saudi Arabia (42.9%), Kuwait (31.3%), Qatar (17.5%) and the UAE (8.2%). Bahrain and Oman's spends are miniscule compared to the rest of the GCC members. Most projects are expected to be completed by 2014 (61.2%) and 2015 (22.4%).

According to data from Zawya, a total of 13 educational projects (worth USD13.2 billion) were concluded over 2011–12 in the GCC region. Saudi Arabia is the top spender, accounting for 92% of the total spend in the past two years. The spending predominantly reflects expenditure incurred on the construction and equipping of schools and universities in GCC. Expenditure toward universities and school development accounted for 95.5% and 4.5% respectively, of total spend.

Saudi Arabia spent USD4 billion to establish the Princess Nora University, a major university education setup focused on women. A new science and technology center was also formed at the King Abdullah University. Approximately USD1.6 billion was spent toward establishing the University for Health Sciences at the King Saud University.

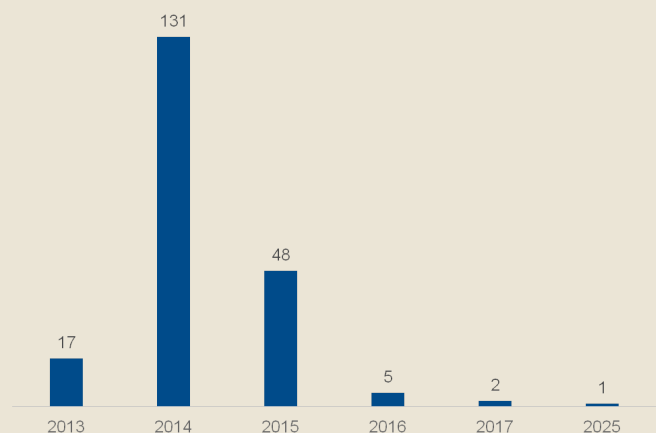


Figure 13: Number of Project Completions

¹⁵ Al Masah Capital Limited's MENA Education Report,

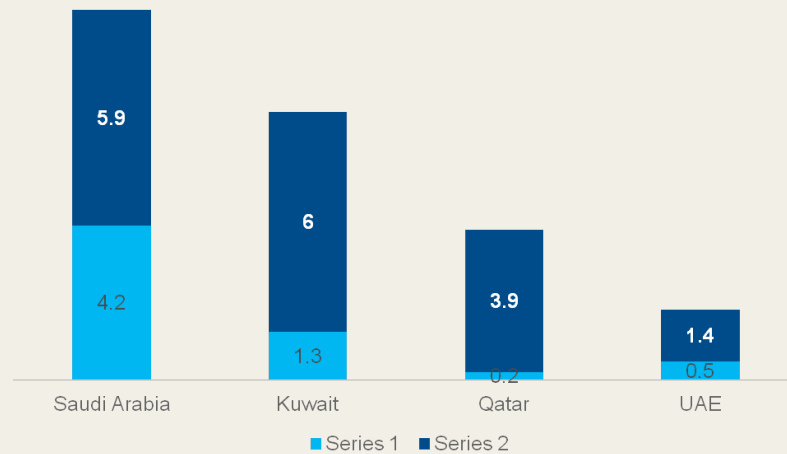


Figure 14: Ongoing Education Projects in GCC (USD Billion)

Higher Spend in developing university infrastructure

Of the anticipated USD23.6 billion spend, 73.5% is toward building universities and technical centers spread across the GCC region, with the remaining being deployed toward construction of K-12 schools. Of the USD17.4 billion that would be spent on the construction of universities, Kuwait (34.8%) and Saudi Arabia (34.2%) are the largest spenders, followed by Qatar (22.5%) and the UAE (8%). A total of USD6.3 billion would be spent on building K-12 infrastructure in GCC, with the highest spend by Saudi Arabia (66.3%), followed by Kuwait (21.2%), the UAE (8.6%) and Qatar (3.6%).

Increasing spend on female education

Largely, co-education institutions are being established in the GCC region fostering female education. Approximately 6.4% of the total education budget will be spent in the GCC region towards female focused institutions with maximum spend taking place in Kuwait followed by Saudi Arabia.

B. COUNTRY-WISE EDUCATION MARKET SIZE IN 2015

Country	Private Education Market	Public Education Market	Total Education Market
Saudi Arabia	USD 2.2 Billion	USD 41.9 Billion	USD 44.1 Billion
Kuwait	USD 0.8 Billion	USD 4.8 Billion	USD 5.6 Billion
Oman	USD 0.6 Billion	USD 3.1 Billion	USD 3.7 Billion
UAE	USD 1.4 Billion	USD 1.8 Billion	USD 3.2 Billion
Qatar	USD 0.3 Billion	USD 2.9 Billion	USD 3.2 Billion
Bahrain	USD 0.1 Billion	USD 0.6 Billion	USD 0.7 Billion
GCC	USD 5.4 Billion	USD 55.1 Billion	USD 60.5 Billion