

K-12 Reform in the Gulf Cooperation Council (GCC) Countries: Challenges and Policy Recommendations

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CONTENTS

FOREWORD	3
EXECUTIVE SUMMARY	5
INTRODUCTION	8
I - THE NEED FOR EDUCATION REFORM IN THE GCC POST 2000	10
II - EDUCATIONAL REFORM AND ITS CHALLENGES: THREE GCC COUNTRIES	13
1. QATAR	
Educational Reform Structure	14
Challenges of the educational reform	19
2. ABU DHABI, THE UNITED ARAB EMIRATES	
Educational Reform Structure	21
Challenges of the educational reform	24
3. THE KINGDOM OF SAUDI ARABIA	
Educational Reform Structure	26
Challenges of the educational reform	28
III - PRINCIPALS' AND TEACHERS' ROLES IN IMPLEMENTING EDUCATIONAL REFORM	30
IV - CRITICAL REFLECTION: LESSONS LEARNED FROM REFORM EFFORTS	35
V - RECOMMENDATIONS: LOOKING TO THE FUTURE	41

1. POLICY LEVEL	
• Clarity and specificity of Objectives	42
• Consistency of policies and procedures	43
• Closing the gaps between national-level innovation and performance, and labor potential and education support	43
• Build capacity of school principals to manage change	44
• Understand and manage change efficiently	44
2. SCHOOL LEVEL	
• Building a collaborative culture in schools	45
through collective decision making	
• Raise teaching standards – Help teachers	45
manage change and refine their skills	
• Reduce workload	45
3. SOCIETAL LEVEL	
• Cultural Awareness	46
• Parental Involvement	46
VI - CONCLUSION : OBSERVATIONS AND OUTLOOKS	47
ANNEX A	49
ABBREVIATIONS	50
LIST OF FIGURES	51
ABOUT THE AUTHOR	52
ACKNOWLEDGEMENTS	53
ABOUT WISE	53
REFERENCES	55

The views and opinions in this publication are solely those of the author.

FOREWORD

Over the past decade and a half, key countries of the Gulf Cooperation Council ('GCC'), have invested considerable resources in education. Driven by a desire to better prepare their economies and societies for an increasingly globalised and competitive world, these countries adopted ambitious and comprehensive education reform agendas, which were closely tied to equally ambitious and far-reaching, long-term national strategies. And yet despite the availability of ample financial resources and expert policy and management advice, most independent reviewers have concluded that the actual results have fallen short of initial expectations.

This report reviews the available literature and critically examines the education reform experiences of the State of Qatar, the Emirate of Abu Dhabi and the Kingdom of Saudi Arabia, and attempts to draw out useful implications and lessons learnt that could guide future policy and practice. What emerges from the report is a reaffirmation of the notion that policy formulation and implementation are of equal importance in determining the success or failure of efforts at reform. More specifically, the report highlights the need for education policy not to get too far ahead of the implementation capacity and capability of the education system as a whole.

In the case of the GCC experiences reviewed in this report, it is clear that the policy prescriptions contained many elements of what might be termed global best-practice – autonomy for schools, curricula built around twenty-first century skills and competencies, introduction of technology and so on. However, it is also clear from the research that GCC policymakers paid insufficient attention to the softer-side of successfully managing change and in particular the pivotal role that school principals and head teachers would need to play. What is clear from the literature review is that in far too many cases, these key stakeholders were poorly equipped to manage and implement the ambitious and far-reaching education reforms demanded by policymakers. Moreover, the report also highlights the often neglected but nonetheless crucial role that parents and the broader community play in creating an environment that is supportive of education reform efforts.

In framing their policy recommendations, the author and contributors to the report are cognisant of the fact that more research is needed into the subject before firm conclusions can be drawn. This report should therefore be seen as an attempt to synthesise the best available research and evidence on the subject and draw out implications that can serve as a useful starting point for further discussion.

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EXECUTIVE SUMMARY

In an age of global connectivity in which knowledge and information are the currencies of individual success, education is among the best investments and a cornerstone of a nation's long-term economic health. Among the Arab Gulf countries, governments acknowledge the rising expectations and aspirations of their youthful populations for transformation through quality education. In the three Gulf Cooperation Council (GCC) nations that are the subject of the case studies in this report, closer linkages to global economic flux and uncertainty has added to the pressure for change in education priorities and systems.

In this context the report examines education reform efforts over the last 15 years in Qatar, the United Arab Emirates (UAE), and the Kingdom of Saudi Arabia (KSA). While there were unique aspects to the reforms in each of the three countries, the commonalities of experience were more prominent, and reflect a general portrait of education change in the GCC. The structure of each reform, its approaches and context are considered, the challenges and outcomes described. Through the lens of current thinking and concepts of change and change management, recommendations are offered at various levels of the reforms –in policymaking, school leadership, among teachers, and in the broader community and society.

While the reforms examined appeared to reflect twenty-first century skills and practices such as student-focused, problem-based learning and teamwork, collaborative approaches to learning were often found to be new to GCC educators. Reform fundamentally shifted the roles and relationships in school communities. The following were some of

the specific school-based challenges that emerged in the reform process: pressure to show quick results; gaps in leadership skills among principals; stress due to lack of clarity on methods; lack of student motivation; increased drop-out rates and teacher turnover. In some communities, attachments to traditional ways reflected mistrust around the use of the Internet.

Most, if not all, of these outcomes were found to stem from a single, underlying response to the reforms being introduced: resistance to the change. Although resistance was expressed in various ways, it revealed a fundamental truth: when the principals, teachers and others are not actively engaged and enrolled as partners and collaborators in the enterprise of reform, the whole plan is in jeopardy. In general, efforts to inform and educate participants in the benefits of the changes well in advance of implementation were inadequate or absent. They were not given enough time to study and to fully understand the changes, or to discuss and comment on the plan or the process.

Successful change requires concise, measurable, and achievable objectives. Change is particularly complex because it involves individuals with unique perspectives and temperaments. There must be key leaders and others who are genuinely interested, engaged in, and committed to the reforms, and who are able to create school-level ownership and accountability to help manage the challenges and seize the opportunities of change. These take time; change is a slow and dynamic process, not an event; it may be ongoing over many years.

At the policy level in the GCC, reform should help students develop Arabic and English proficiency and strengthen cultural identity. It should integrate continuing professional development for teachers, robust teaching resources, and curriculum guides. Teachers should encourage critical thinking, collaboration, and other skills through consistent, relevant pedagogy that produce clearly defined learning outcomes. A spirit of collaboration among principals and teachers is needed; principals should support and empower their staff in developing new practices.

The three GCC governments have formally and explicitly created strategies to support improvements in the structures, processes, and outcome of education systems. The goal is to produce a strong, highly skilled and knowledgeable workforce that can compete globally. But beyond a clear vision and aspiration the leadership holds for the achievements of the young, policy-makers and implementers should grasp the full range of complexity that accompanies any reform effort. They should further understand that it will be counter productive

to attempt control over such a dynamic process in which diverse stakeholders have important roles to play for ultimate success.

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THE GOAL IS TO PRODUCE A STRONG, HIGHLY SKILLED AND KNOWLEDGEABLE WORKFORCE THAT CAN COMPETE GLOBALLY.

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Conducting and disseminating reliable research, facilitating open debate around ways of improving education quality and outcomes, and careful planning of reform are among the keys for building effective education systems. A serious limitation to this investigation is the lack of solid research on the outcomes and results of reforms: to what degree (if at all) student learning improved. The GCC countries have implemented many education reforms, but empirical evidence evaluating their tangible impact is scarce. Education reform in the region remains relatively unexplored in formal research. The lack of data is an impediment for policy-making and leaders who plan further reform.

This report aims to collate existing research and raise additional questions for policy and research toward improvement of the reform efforts and process. Based on further data collection in a second phase of this research, specific recommendations for each of the three GCC countries can be presented, and will serve as a concrete foundation for future and ongoing findings.

There have been substantial efforts toward improved outcomes in these countries. They have made some progress, and they are capable of much more. The governments would all benefit in their common economic strategy initiatives from strong collaboration among schools, universities and the private sector. All reform must have a solid foundation that, once implemented, can support ongoing development and adjustment. Results should be easily tracked and meaningfully assessed.

Building lasting standards and structures, encouraging proven practices such as collaboration, student-focused learning environments, and valuing diversity are all worthy and valuable undertakings. The way ahead in education reform can never be fully defined, but in facing the challenges together and finding solutions, all the players on the stage will benefit. Engaging young people in the success of the enterprise will have the best returns; it is their character, aspiration, and talents that are the source of transformation and future direction.

INTRODUCTION

This report reviews the current literature around the intersecting themes of change management and k-12 education reform within the unique socio-economic contexts of three Gulf Cooperation Council (GCC) countries: Qatar, Abu Dhabi in the United Arab Emirates and the Kingdom of Saudi Arabia. The case studies provide a comparative portrait of the challenges faced and strategies pursued in the implementation of reform over a period of some 15 years. The report weighs current thinking on the understandings of change and education reform, and presents a framework for change management. The report notes the conditions that produced pressure for change in the education sectors of the three countries, examines the formulation of reform at policy levels, and describes the process of introducing and implementing reforms in schools.

In this phase, the roles of the various players, including district and school leaders, teachers, students and their parents, are presented in the dynamic complexity of their interactions. Key areas examined include leadership, raising teaching standards, curricular improvement, and integrating Information Communications and Technology (ICT). Issues around reform and culture also figure prominently adding further to the overall complexity.

The report makes final observations of current trends, and concludes with policy recommendations aligned with the national goals of each country. These recommendations include a call for more focused research to assess and examine the outcome of reforms in greater detail.

#1 THE NEED FOR EDUCATION REFORM IN THE GCC POST 2000

In recent decades globalization has had a significant impact on education in the Arab world; forces of change have led to fundamental shifts in the way nation states and their economies and societies interact. Sources of these changes include:

- Growth and integration of a global, increasingly free-market economy that has raised the standard of competition in all sectors providing goods and services.
- Greater openness of political systems that has allowed greater access to global information.
- Development in information technologies that has dramatically changed the way in which business is conducted, allowing for less expensive communication, easier information sharing, and greater efficiencies in production and management of goods and services (Hallinger & Snidvongs, 2008).

The social impact of these technological and economic forces has produced pressure for change in education. Taylor et al. (1997) states that such global economic trajectories and pressures is one of the reasons behind new policies in the education field:

Global economic restructuring has led to calls for the creation of an education system more responsive to the changing labor market needs of nations. The collapse in the youth labor market has led to calls for education policies designed to ensure greater student retention in senior secondary schools and curricula that are more vocationally responsive. (p. 4)

Governments have noted a need to reform and adapt education system design and delivery that can address these changes. Most of the Arab countries have sought to reform their education systems to address perceived weaknesses in global standing. Leadership has recognized that improved education systems are the cornerstones of sustainable economic progress (Maroun, Samman, Moujaes, & Abouchakra, 2008). Several countries have established a goal for

education systems to produce a strong, highly skilled and knowledge-based workforce. Maroun and colleagues further drew from article 26 of the United Nations Universal Declaration for Human Rights to create the framework for improved education in the Middle Eastern countries. The framework is based on three pillars they find essential to the success of the reform:

- A socioeconomic environment in which social and economic priorities can be translated into a viable education strategy and related goals.
- An operating model for the education sector, in which operating entities, good governance and funding allow for the sustainability of education goals.
- An infrastructure (e.g., quality teachers and relevant curricula, reliable assessment and performance measures, and a good learning environment) that is ready to make such goals attainable. (Maroun et. al., 2008, p. 1)

Moreover, a serious cause for concern is that despite significant spending on education systems in the GCC countries (See Figure 1 in Annex A, p. 53), these investments as a percentage of GDP continue to be low in comparison with other countries at similar income levels (Maroun, Samman, Moujaes, and Abouchakra, 2008).

While the GCC countries have implemented many education reforms, there is little empirical evidence evaluating the impact of reform. Education reform in the GCC remains relatively unexplored by academic and policy research. This lack of empirical evidence creates challenges for policy makers and leaders in implementing further reform. This report is an attempt to collate existing research and posit additional questions for policy and research considerations to improve the reform efforts. This report will closely examine the education reform efforts of three countries in the Gulf Cooperation Council (GCC): Qatar, the United Arab Emirates (UAE), and the Kingdom of Saudi Arabia (KSA). While the education change strategies and processes are different across and within each country of the GCC, the report reflects on the current status of education change within the GCC and compares the experience in the GCC to other Arab countries. More specifically this report examines the broad education goals, the education reforms, and the challenges that come along with the reform each country have faced in terms of access to quality education.

#2 EDUCATIONAL REFORM AND ITS CHALLENGES: THREE GCC COUNTRIES

1. QATAR

Educational Reform Structure

Qatar, a small peninsula on the northeast coast of the larger Arabian Peninsula, is one of the smallest nations in the Gulf region with a total land area of 11,437 square km, and a population of 1.8 million (Qatar Statistics Authority, 2012). Historically, Qatar's economy was based on camel breeding, pearl diving and fishing (Gonzalez, Karoly, Constant, Salem & Goldman, 2008). Today, over 80 percent of the population are expatriates; there are about 350,000 citizens. Arabic is the official language, although English has increasingly emerged as a medium of communication in the private business sector (Gonzalez et al., 2008).

Throughout the 1950s and 1960s, the Ministry of Education was formed. Educational practices in Qatar were similar to those in the majority of other Gulf and non Gulf Arab systems. In those systems, emphasis has always been placed upon 'learning by rote' memorization, with little attention given to critical thinking, or the development of problem solving skills (US Library of Congress 1994). During that period, the Ministry essentially copied the Egyptian system of education, and books from Egypt and other Arab countries were imported to educate the general population. In the early part of the twenty-first century, the Egyptian system began to be seen as lacking in many key areas, in comparison to other western education models. This growing perception, coupled with an increased drive to embrace modern international business practices, led to a recognition by Qatari leaders that the old system was failing to deliver. The Father Emir, HH Sheikh Hamad bin Khalifa Al Thani commissioned the RAND Corporation to do a national assessment of the educational system in Qatar, and this was the first major step toward true reform.

Since the 1960s Qatar's economy has been almost exclusively funded by substantial oil reserves and major natural gas deposits (Qatar

Knowledge Economy Project, 2007). A central goal of the government is the creation of a knowledge-based economy, facilitated by extensive education reform (Qatar Knowledge Economy Project, 2007), as well as investment in higher education and research.

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IT IS EVIDENT THAT THE TREND FOR BUSINESS AND THE GLOBAL ECONOMY IS TOWARD A KNOWLEDGE ECONOMY AND THIS IS RESULTING IN THE INCREASED DEMAND FOR SKILLED LABOR (GONZALEZ, ET AL, 2008). MOREOVER, THE LABOR MARKET IS HIGHLY DEPENDENT ON THE PRIVATE SECTOR AS GOVERNMENT POSITIONS ARE SCARCE (BREWER, AUGUSTINE, ZELLMAN, RYAN, GOLDMAN, STASZ, AND CONSTANT, 2007).

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In 2001, the RAND Corporation was contracted by the Qatar Government to examine the public education system provided by the MOE. At the time of the RAND study, there seems to have been something of a collective consensus among Qatar's leaders that:

- The existing MOE system of public education was not producing high-quality educational, social and economic outcomes for Qatari learners, or for society as a whole; and
- The system appeared to be out of alignment with the educational needs of a wealthy country seeking twenty-first-century global competitiveness (Brewer et al., 2007).

RAND's study was carried out from September 2001, through May 2002. A nine interdisciplinary team of RAND researchers began on-site investigations in October 2001. The team had three goals:

- To describe and understand the Qatari school system;
- To identify problems with that system; and
- To recommend approaches for improving the performance of schools and students within the system (Brewer et al., 2007:33).

The RAND team worked with a coordinating committee, including

high-ranking decision makers, (both Qatari and non-Qatari), to help the research team discover and understand social and cultural context. RAND conducted observations at 15 schools, (boys and girls), at primary, preparatory and secondary levels. The team also held focus groups with teachers, students and parents. They conducted approximately 200 interviews with key people responsible for the provision of education, including school personnel, students, parents, MOE and other ministers. Rand also gathered data from documents, including student test scores, curriculum materials and regulations.

Pre-reform, Brewer et al. (2007) identified the following major issues within the MOE system of education in Qatar - a lack of vision and setting of adequate educational goals, piecemeal growth without an overall consideration of the whole system, an inflexible hierarchical organizational structure, unclear lines of authority, top-down control of curriculum and teaching, and a lack of training and professional development. Despite the weaknesses in the Qatari education system, the RAND team did identify some positive areas, including: familiarity with international development, enthusiastic and committed staff, desire for autonomy and change, and the acceptance of alternative schooling options (Brewer et al., 2007).

Resulting from the analysis and recommendations made by RAND, the Supreme Education Council was established by Emiri Decree No. 37 in November 2002, with the central aim of directing the nation's public education policy. As a semi-governmental agency, the SEC plays an integral role in overseeing and implementing education reform, including the work of its operational institutes, which are responsible for the practical success of Education for a New Era. (The act encompasses the reform.) The education reform relies on the development of a new education system independent of the MOE, which was phased out in October 2009 when the SEC replaced it.

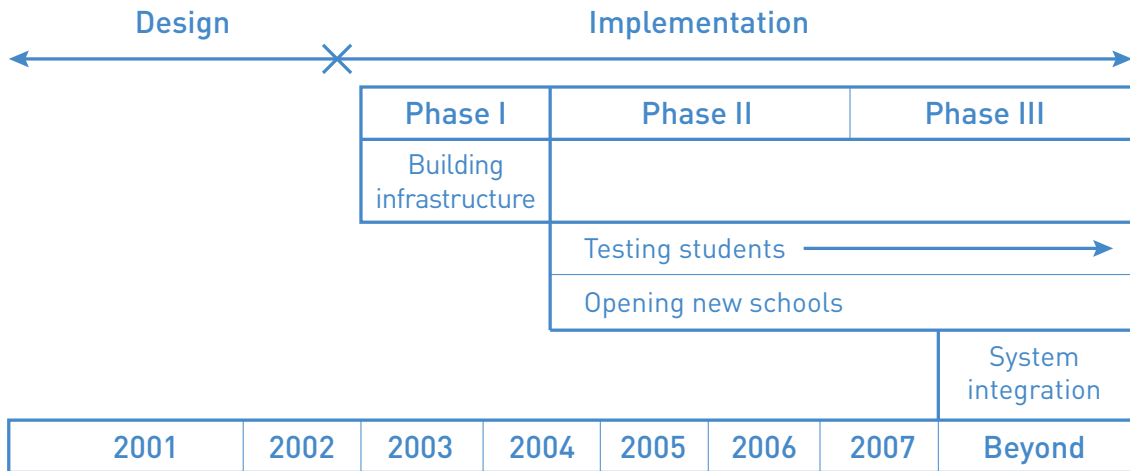
The Independent Schools Model that was selected during this process represented a move to a more decentralized system of schooling than had previously existed in Qatar. The aim was to build a system that would incorporate many more schooling options; a dramatically reduced level of centralized control; more monitoring and evaluation of students, administrators, and schools in the context of an accountability system, and increased parental choice. The goal for the new system was to improve education in Qatar by generating a variety of schooling alternatives—with different missions, curricula, pedagogy, and resource allocation models - and then to hold schools accountable for quality through the provision of information about schools, parental choice, and minimal government oversight” (Brewer et al., 2007:58).

The system that was selected by the Qatari government included internationally benchmarked curriculum standards, national testing based on those standards, independent government-funded schools, and parental choice of school using annual school report cards. This program of reform was consistent with the goal of improving global competitiveness via the educational system; as Harris (2005, cited in Davies, 2005) states, educational reform worldwide has embraced standardization as the solution to raising standards and improving economic competitiveness. The aim of ENE is "to create an educational system based on an internationally benchmarked curriculum, global best practice and Islamic values in a technologically emerging society. ENE did not just adopt modern technology; it attempted to provide leaders in future technology and research" (Anderson, Alnaimi & Alhajri, 2010).

The reform has been implemented gradually, in three distinct but overlapping phases (see Figure 2). The RAND plan called for a system that would work in parallel to the old system (MOE), in order to minimize disruption. Ministry-operated schools were unaffected during the early years of the reform efforts. According to Brewer et al. (2007:xxxv), independent schools are "a publicly funded, privately run school (similar to a charter school in other countries) established through the education reform in Qatar. The first independent schools, referred to as the Generation I schools, were opened in fall 2004". The Education and Evaluation institutes were also established during Phase I, to build the organizational and policy infrastructure required for the first cohort of schools that were opened in 2004.

Phase II began with the opening of the first cohort of schools. During this phase, the RAND team collected data to help the Qatari leadership decide whether or not to move to an independent school model. During Phase III, the Qatari leadership themselves would have to determine the continuation of the new model, based upon the Ministry's response to the reform. All the MOE schools were phased out in 2009. According to the SEC, there are presently 98,332 students enrolled in independent schools for the academic year 2013-14, with 47 kindergarten, 101 primary schools, 56 preparatory schools and 53 secondary schools.

Figure 2: Timeline of reform phases



(Source: Brewer et al., 2007, p. 81)

The vision of the SEC to improve the quality of education was to offer each school the opportunity to operate independently. The SEC's EFNE reform was dramatically different from the MOE system; it featured decentralized education that gave more autonomy to schools and developed an independent school model. The EFNE focused on four main principles: (a) autonomy for schools, (b) accountability through comprehensive assessment, (c) variety in schooling alternatives, and (d) a choice for parents, teachers and school operators (Brewer et al., 2007).

Ellilli-Cherif and Romanowski (2013) studied stakeholders' perceptions of the EFNE reform and found that principals, teachers and parents equally value the rich and varied contributions of the reform effort while recognizing marked improvements in leadership, teaching and learning. However, their research also suggests that all stakeholders still struggle to meet the requirements of the reform. The new reform led to improvements and noticeable changes to the leadership style of the principals, in addition to positively affecting their relationship with faculty and staff (Ali, 2009). The change also generated a ripple effect in which communication between the parents and the educators improved. It is noteworthy that the reform has, however, increased parents' participation in school activities because of sustained efforts from the school to encourage parent-teacher interaction and communications (Ali, 2009).

Challenges of the educational reform

Research indicates that implementing change called for by reform depended eventually on the inclinations and motivations of teachers (Lieberman & Pointer-Mace, 2008; Spillane, 1999; Fullan & Miles, 1992; as cited in Ellilli & Romanowski, 2013). As regards EFNE, teachers made changes to their pedagogical strategies and integrated technology in their teaching. Over 90 percent declared the reform affected their teaching, and 96 percent indicated they had to make a change to adopt different strategies and teaching styles to meet the requirements of the reform (Ali, 2009). These new teaching techniques and strategies placed an emphasis on student-centered learning. The improvements in teaching style involved changes in methodology, particularly in the areas of technology (40 percent), new teaching strategies (31 percent), integrated active learning (20 percent), and individualized instruction (12 percent) (Ali, 2009).

This new student focused approach to teaching generated a split among those who favored the new methods and those who did not. Lesson planning took more time, but teachers were better organized and prepared for the students. As key stakeholders in the reform, teachers cited several challenges they faced in the transition to the new pedagogical approaches. The challenges started with an increase in workload and an additional set of administrative tasks that impinged on their personal lives and the ability to effectively teach their students (Ellilli & Romanowski, 2013). The SEC is expecting a lot from the education reform, and teachers face increased pressure to perform. Amid the changes in the approach to instruction, teachers face the added challenge of dealing with parents. Some teachers made statements such as, “parents do not care about education,” and “the parents are not supporting the teachers”. There was also a lack of motivation among the students; almost 27 percent of teachers voiced their concerns over student behavior (Ali, 2009).

As with many reforms, ENFE introduced innovations, including a standards-based curriculum, professional development programs for teachers and leaders, and a new assessment system. A study conducted in 2007 by the RAND team to evaluate the implementation of the initial reform, found that “despite the many positive effects of the reform, more change is needed to support schools and teachers” (Zellman et al., 2009, p 1). I conducted a qualitative study in four schools to explore school principals’ and teachers perceptions and practices of the educational reform in Qatar. The main challenges identified are (Al-Fadala, 2014):

- The educational reform increased school principals' workload, both at school and outside. The ensuing amount of work was similar in both boys' and girls' schools, but the problems that this caused were worse in the latter because women also had additional responsibilities at home. Qatari society in the twenty-first century remains gendered. The society's gender-based norms are largely informed by traditional Islamic thought, as well as local custom, in which men and women fulfill distinct but complementary roles. Specifically men are expected to financially support the household, while women carry out all of its day-to-day tasks. In the last two decades many initiatives encouraged Qatari women to take a more prominent role in public and professional life. Nevertheless, the expectations of Qatari society, as confirmed by the participants in this study, demand that managing the private, domestic sphere remains the sole responsibility of Qatari women. Some schools principals and teachers can manage to cope with their tasks, but others become more stressed by them.
- Research into school culture, change, and improvement finds that success is more likely when teachers are collegial and work collaboratively on improvement activities (Levine & Lezotte, 1990; Fullan & Hargreaves, 1991). Collegial relationships among and between staff are an important feature of those collaborative schools more successfully implementing the reform. When teachers and administrators work together, the level of commitment, energy, and motivation is likely to be higher and reforms thus more easily implemented. In all the four schools in this study, the senior management were working well as a unit, however each school was struggling with collaboration in one or two departments.
- School principals and teachers already have a compelling reason to make that change a success, however they are fighting a constant battle because of the varying ways in which they struggle with its implementation, due to lack of clarity in regard to appropriate methods to implement policies. This affects other areas of their professional and personal lives, resulting in increased stress, diminished focus and ensuing lack of value ascribed by teachers to the requested change. Principals and teachers have solutions in place to deal with change initiated by their own schools, however the change that comes from the SEC has not been clarified in terms of processes and procedures. These factors therefore make everyone's jobs harder and their acceptance of change incredibly difficult.

The reform initiative in education is clearly critical to achieving the broader goal of a knowledge-based economy.

2. ABU DHABI, THE UNITED ARAB EMIRATES (UAE)

Educational Reform Structure

Formal education was introduced among the seven emirates in the 1950s, and expanded rapidly from about 20 schools with less than 4,000 students in 1962 to over 750,000 students in 2013 (UAE National Qualifications Authority, 2013). Today the United Arab Emirates (UAE), established in 1971, has made significant progress towards UNESCO's Education for All goals, including achieving a pre-primary enrolment of 79.4 percent, nearing universal primary education, and increasing the adult literacy rate to 90 percent (UNESCO, 2015; World Bank, 2015). Public education is free at all levels for UAE nationals, which include pre-primary (KG1-2), primary (grades 1-5), preparatory (grade 6-9), and secondary (grades 10-12) (Al Qasimi Foundation, 2015).

The United Arab Emirates consists of seven emirates: Abu Dhabi, Dubai, Sharjah, Ras Al Khaimah, Ajman, Umm Al Quwain and Fujairah. Though small in size (similar to the size of Scotland), the UAE has become an important player in regional and international affairs. In 1971, the late Sheikh Zayed bin Sultan Al Nahyan of Abu Dhabi unified the small, underdeveloped emirates into a federation—the only one in the Arab world. With his visionary leadership, oil wealth was used to develop the UAE into one of the world's most open and successful economies. In 2004, His Highness Sheikh Khalifa bin Zayed Al Nahyan succeeded his father to become President and has since continued to strive towards an ambitious vision for the UAE. Education remains a priority for the nation and is identified in the UAE Vision 2021 National Agenda as a driver for transforming the nation into a knowledge economy (Government of UAE, 2015).

The Ministry of Education (MOE) is responsible for education legislation at the federal level, and oversees all emirate-based education authorities – which include the Abu Dhabi Education Council (ADEC), the Knowledge and Human Development Authority (KHDA), and regional education zones across other emirates (UNESCO IBE, 2011). The following section focuses on the reform in the Abu Dhabi Emirate, which has the largest share of the country's public school student population. Abu Dhabi Education Council (ADEC) was established in 2005 in accordance with law No. 24 of 2005, issued by UAE President HH Sheikh Khalifa bin Zayed Al Nahyan, as the regulator of public, private and higher

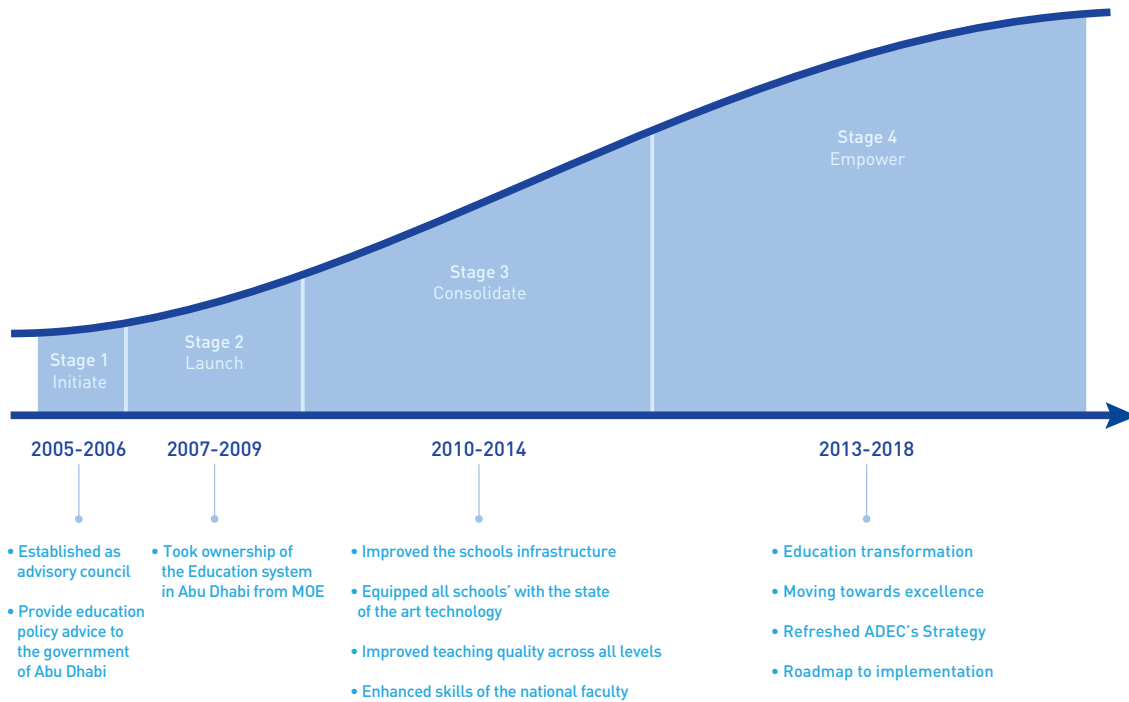
education sectors in the Emirate of Abu Dhabi (ADEC Website, 2015).

In line with its mission to “produce world-class learners who embody a strong sense of culture and heritage and are prepared to meet global challenges,” ADEC embarked on an ambitious reform movement to develop an internationally competitive education system (ADEC Website, 2015). In 2008, a rigorous analysis of the existing system was undertaken by a taskforce consisting of local and international education experts, as well as stakeholders from government and industry, to identify key systemic challenges and improvement needs. These challenges (some are noted in the next section) were found to contribute to students performing below grade level, and graduating without the academic proficiency necessary for success in post-secondary education or the Abu Dhabi labor market (Badri and Khaili, 2014).

Based on this analysis, ADEC created an Education Policy Agenda that framed the principles and goals of education in the emirate, and informed the strategic plans for each of public, private and higher education sectors. For P-12 public education (pre-primary to Grade 12), the P-12 Strategic Plan set out an aggressive, ten-year strategy to achieve dramatic quality improvements across all stages of schooling, with an implementation period of 2010 to 2018 as shown in Figure 3 below (ADEC, 2009).

Figure 3: ADEC's Transformation Journey

ADEC has undergone substantial transformation since its inception, in 2005, and is now at the "Empower" stage - moving towards excellence



(Source: Abu Dhabi Education Council, 2015)

The foundation for an improved education system set out by ADEC's P-12 Strategic Plan centers on a new approach to teaching and learning – the Abu Dhabi School Model (ADSM). The ADSM aims to support all students by placing emphasis on deeper learning and improving their learning experiences (ADEC, 2009). The model is based on a student-centered active learning approach, and its key features include: an outcomes-based curriculum and assessment system, a resource and technology-rich environment within modern school facilities, language of instruction in Arabic and English, and inclusive support for all learners. Developing the student as a bi-literate learner, a communicator, thinker and problem solver, and a global citizen rooted in national cultural heritage, rounds out the expected graduate profile of the Abu Dhabi School Model (ADEC Public Schools Policy Manual, 2015). In accordance with the phase-in schedule, the ADSM was deployed in September 2010 in KG-Grade 3, with a grade added each successive year, reaching Grade 8 in the current school year.

Challenges of the educational reform

As with any systemic reform of this scale, the implementation faced a host of challenges. Perhaps most notably, principals —largely veterans of the former system— were often inadequately prepared to effectively lead their schools in the execution of the ADSM. A 2008 assessment conducted with the Australian Department of Education and Training revealed that around 70 percent of principals had a gap in the skills necessary to provide quality education leadership (Badri & Khaili, 2014). Another 2008 study estimated that annual instructional hours in ADEC schools was 29 percent below the average of the Organization for Economic Cooperation and Development (OECD) countries, due to a shorter school day and shorter school year; the effect of receiving less instructional time was compounded by a low student attendance rate (Badri & Khaili, 2014).

These and other issues were addressed by researching, developing and instating policies (respectively in the above cases, policies on professional development requirements, an extended school calendar and length of school day across all cycles, and positive student behavior management) throughout successive yearly cycles of policy review in parallel to the launch and rollout of the ADSM in 2009 to the present, among other measures (ADEC Public Schools Policy Manual, 2015).

The ADSM's dual language of instruction also presents unique challenges in recruitment and pedagogy. In pedagogy, institutionalizing the practice of team teaching between teachers of Arabic medium and English medium curricula is a continuing area for improvement, partly as a result of differences in pedagogical training and partly due to cultural and language barriers. Meeting staffing quotas for qualified teachers with native-level English proficiency to each English medium subjects has posed recruitment challenges particularly for male expatriate teachers in mathematics and science. These challenges continue to be mitigated through the refinement of policies and organizational processes, and through improved monitoring of compliance and performance targets.

There are many areas of development remaining to achieve the UAE National Agenda: for example, the proportion of university graduates at post-graduate levels in science fields falls short of targets, and the national output in science and technology in key measures of knowledge production, such as scientific publications, patents and technology start-ups, remains low (ADEC Strategy Launch Press Release, 2015). The government's vision for achieving sustainable economic prosperity calls for “a generation of innovators and entrepreneurs” in science and

technology and building a knowledge-producing society that competes on the world stage (ADEC Strategy Launch Press Release, 2015).

Abu Dhabi aims to create a world-class education and innovation ecosystem strongly connected to the business and industry communities. The full implementation of the Abu Dhabi School Model is expected to raise the academic outcomes of the emirate's students to the internationally competitive level necessary to achieve the Economic Vision 2030 (ADEC Strategy Launch Press Release, 2015).

Assessing progress and using education data to make decisions—from high-level policy to the operational classroom level—will be a critical success factor. ADEC currently uses key performance indicators to measure yearly progress (Badri & Khaili, 2014). Standardized external testing is administered annually to students in Grade 3 and up to measure student outcomes (ADEC Public Schools Policy Manual, 2015). Recent upgrades to the Irtiqa'a school inspection program and to the school staff performance appraisal system, are helping to increase a culture of accountability among ADEC leaders and educators (ADEC interviews).

On a national level, looking to challenges and priorities for education beyond 2015 involves making a “leap” in quality of education, as affirmed by the UAE Education Minister at the World Education Forum earlier this year (WAM, 2015). National school inspection data, international survey results, and other robust metrics for measuring student learning gains will prove essential in assessing this progress.

3. THE KINGDOM OF SAUDI ARABIA

Educational Reform Structure

When the Kingdom of Saudi Arabia was established in 1932, formal education was considered a luxury and only a few of the wealthy families living in major cities had access to a school. Saudi Arabia is approximately 2,240,000 square kilometers in area and the capital city is Riyadh. Formal education was introduced in Saudi Arabia in the 1930s—earlier than in other Gulf countries. By 1945, the country's founder, King Abdulaziz bin Abdulrahman Al Saud, started an impressive program to establish schools throughout the kingdom. In less than seven years, there were over 220 schools with just under 30,000 enrolled students. The Ministry of Education was established in 1975. The first school for girls was built in 1964, and by end of the late 1990s girls' schools were established throughout the kingdom. Currently, more girls are enrolled in schools than boys. Today, however, the education system on the whole includes a system of over 50 public and private institutions of higher education. KSA provides a free public education to all citizens and residents, in addition to providing comprehensive health services. The overall goal of the education system, according to the Saudi government, is “to ensure that students are prepared for life and work in the modern world, while meeting the country's religious, social, and economic needs” (Saudi Arabian Embassy, 2015).

The educational administration in Saudi Arabia consists of four agencies that have the authority to operate and run the educational system: Ministry of Education, the General Presidency of Girls' Education, the General Organization for Technical Education and Vocational Training and the Ministry of Higher Education. Students are required to attend six years of primary, three years of intermediate and three years of secondary schooling in order to complete their education. All these levels are free of charge for the students of this nation as stated by the government (Document of the educational policy of the kingdom of Saudi Arabia).

The King Abdullah bin Abdul-Aziz Project for Public Education Development (Tatweer) was established to reform the Saudi education system in 2007. Tatweer—a \$2.4 billion program aimed at changing the way the country's nearly 5 million students are educated. The aim of Tatweer is to transform the education system and provide all students with the knowledge and skills they need in the twenty-first century and to improve the quality

of graduates in Saudi Arabia. As the country's population explodes (more than 70 percent of Saudis are under the age of 30) and oil revenues dwindle, the kingdom needs more critical thinkers prepared to enter a modern, diversified workplace. Tatweer schools initially set up 25 girls' secondary schools and 25 boys' secondary schools across 25 provinces in Saudi Arabia, in the first phase of the project. The vision that guided this phase was a focus on school development (King Abdulla bin Abdul-Aziz Project for Public Education Development, 2011). The second phase of this project was called the School Development Model. Tatweer Schools are innovative in terms of embedded theories concerned with Professional Learning Community, self-planning and evaluation and professional development (King Abdulla bin Abdul-Aziz Project for Public education Development, 2011).

In the first phase of the reform, the Tatweer Schools offered a new option for schools to change their role from traditional to a "smart learning school". This meant a shift from being only a conventional school to a holistic education environment for learning-- including modern education technology, an active education leader, and qualified teachers to assist, facilitate and direct learning processes using safe and appropriate methods (King Abdulla bin Abdul-Aziz Project for Public Education Development, 2011). However, because this model was considered too costly to replicate in all Saudi public schools, the pilot scheme was modified. A new model was planned for phase two.

For the second phase of the model, started in 2011, schools had to be capable of self-evaluation and planning. Unlike the plan in phase one in which schools were provided with high advanced technology, these schools were required to conduct the project from their own resources. The school development model is based on the following set of principles:

- Excellence for all: every student deserves to excel and reach his/her maximum capacity. Each teacher also deserves to be excellent and to develop in his career in order to efficiently perform his role in the school.
- Commitment from everyone: all school employees are committed to school values, and believe in its mission, dedicated to achieving its objectives, and following policies and regulations.
- Accountability for all: everyone in the school is responsible for his performance; the school employs reinforcement (positive and negative) according to the quality of performance for all school employees.

- Professionalism from everyone: school employees' practices are derived from reliable knowledge and practices, and decisions are based on scientific frames of reference.
- Transparency and clarity expected from everyone: in showing results and performance levels, and display of negatives and positives in the school's performance to stakeholders.

(King Abdulla bin Abdul-Aziz Project for Public Education Development, 2011)

Challenges of the educational reform

The strategy brief by the Ministry of Education in KSA highlights that despite remarkable achievements such as access to free education in all regions of the country, increased student population irrespective of gender, KSA continues to face challenges with the impact of globalization and technological advancements (King Abdulla bin Abdul-Aziz Project for Public Education Development, 2011). However, the government of KSA continues its efforts to meet the demands of the twenty-first century and transform KSA students to compete globally. KSA's new vision views student growth from a holistic lens. It focuses not only on the academic aspects but also "on dimensions related to their physical attributes, mental predispositions, citizenship, and their ability to engage with the rest of the world" (King Abdulla bin Abdul-Aziz Project for Public Education Development, 2011: 5).

School principals in KSA are continually challenged with complex changes in the education system and at the global level. Principals are faced with increased pressure to measure the success of students at intermediate levels in order to gauge the overall success of these reform initiatives. The challenge, however, is that principals often do not have the requisite training and/or skill sets to provide a comprehensive assessment of their overall progress and productivity, despite being regarded as having a strong leadership background. Alshehri (2014) believes principals still require intense professional development in order to raise their ability to support the staff and faculty during the change process. Education change efforts notwithstanding, if students are not motivated to learn, the reform effort will be stifled. Some Saudi teachers report a substantial lack of student motivation to learn and become proficient in speaking English (Alshehri, 2014). This trend is disturbing given that English is highly regarded as a requirement to compete effectively on a global scale.

Alyami (2014) identifies the challenges of the Tatweer program with the aim of providing policy-makers with insights into actual practice and the real-life context within such schools. Alyami's study uses qualitative data obtained in semi-structured interviews, focus groups and documentary analysis. Alyami's research finds that the majority of the participants have a positive attitude about the Tatweer Programs. Tatweer represents a major shift in Saudi education policy; moving from centralization to decentralization, from focusing on the individual to team learning; from being isolated schools to being open schools in partnership with local communities. Despite these significant developments, the level of student achievement has not improved. The main challenges are as Alyami (2014) identified:

- **Human resources:** schools lack resources needed for additional employees and more incentives to undertake these programs.
- **Provisions:** There is a lack of technical provisions for schools in the second phase.
- **Change resistance:** some participants reported that almost 70 percent of staff at schools resisted the change, and some transferred to other schools. The attitude was attributed to the belief that the changes would be an additional burden.
- **Teacher turnover:** There was an incident of teachers dropping out. The head teacher did not have authorities to stop hiring teachers from her school.
- **Technology access and implementation challenges:** Some families did not have Internet at home, or were afraid of using it. As a result, 50 of 360 students dropped out. Parents rejected the idea of having a laptop with Internet access for each student.

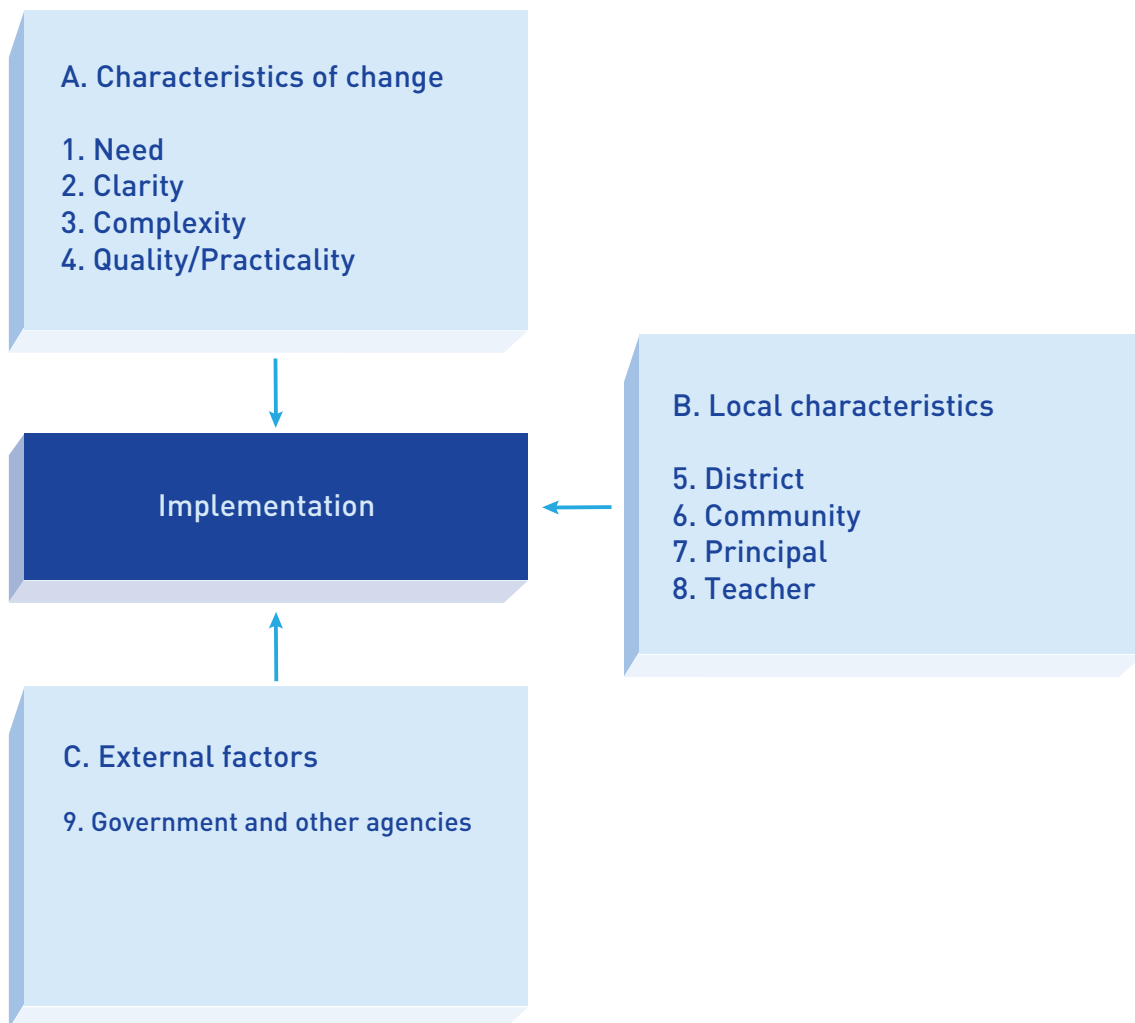
The late King Abdulla initiated several education and economic reforms with the intent to help Saudi Arabia become the national and global market leaders of tomorrow. However, since tomorrow's workforce is reliant on the preparation of today's students, there are major concerns about the general lack of student motivation (Alyami, 2014). Clearly, further empirical research is required in order to better understand the full scope and breadth of this troubling reality.

#3 PRINCIPALS' AND TEACHERS' ROLES IN IMPLEMENTING EDUCATIONAL REFORM

Further questions may be raised in any education reform or innovative program. Was the innovation ever really implemented? Once implemented, did the innovation maintain its integrity and purpose? Have students been positively and significantly affected? Was the innovation integrated into the school's mission and organization? Were successful programs maintained? Could the innovation be transferred from one school context to another? (Riley & Louis, 2000)

The likelihood of success in a reform depends on effective strategies for implementation. Although there is not a 'one size fits all' for success, dividing the project into manageable pieces helps to prioritize its various elements. This ensures ownership and creates a consensus among the stakeholders. The results can then be systematically measured (Maroun et al., 2008). Fullan (2007) identifies three factors affecting implementation: the characteristics of change, local characteristics and external factors (government and local agencies).

Figure: 4 Fullan's factors affecting implementation



(Source: Fullan, 2007, p. 87)

At the heart of education reform is change, therefore a change agent is to be appointed to oversee and measure the progress of the change and guide the staff toward achieving the overall objective. Change agents can be organizations, such as governments, or they can be external agencies or individuals, such as principals and teachers. In the literature, change agents can refer to leaders, managers or others who are leading a change (Fullan, 1991). Change agents play important roles in the process. In particular, they influence the direction of the innovation decision. But change, in any context, is not always welcome.

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CHANGE RESISTANCE IS COMMON IN EDUCATION, THEREFORE BUY-IN FROM EDUCATORS, ADMINISTRATIVE STAFF AND THE PARENTS IS CRUCIAL FOR SUCCESS. IN MOST CASES, CHANGE IS GRADUAL, WITH EACH CHANGE SERVING AS A STEP TO THE NEXT WITH AN EXPECTATION OF MEASURABLE IMPROVEMENT AT EACH LEVEL.

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Of all the stakeholders in education, teachers appear most prominently on the frontlines. Because of their intimate understanding of how students learn most efficiently and effectively, they are the catalysts for change who can offer immediate and substantive feedback. Moreover, teachers can help to reflect on what specifically needs to be changed and how those changes could ultimately effect student success. Teachers may be the main deliverers of change as they have knowledge of the local context; but they can also decide what and how much change to implement. Schmidt and Datnow (2005) find that many reform efforts realize teachers' critical role in reform and on the need to develop teacher knowledge and skills in order to adapt to the reform. Nevertheless, reform does not generally consider the emotions of change for teachers.

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ULTIMATELY, THE TEACHING PROFESSION BEARS THE NOBLE GOAL OF EDUCATING STUDENTS AS LIFE-LONG LEARNERS AND PREPARING THEM FOR FUTURE LEADERSHIP ACROSS THE FULL RANGE OF SECTORS IN AN ADVANCED, COMPETITIVE SOCIETY, DISREGARDING THE IMPACT OF CHANGE IT CREATES ON THE TEACHERS.

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Teachers may not be able to adequately prepare students as life-long learners and for future leadership across the full range of sectors in an advanced, competitive society unless teachers also are supported in adapting to change and its impact on their practices and routines.

The school leaders as the orchestrators of the school-level change play a crucial role and their commitment is critical to the overall success of any reform program. The implementation of the reform is likely to incur changes in administrative duties. In addition to various changes to staff and faculty responsibilities, it is also crucial to understand the way students perceive and play their role as the campus leaders. The principal also serves as the link between the school staff, the faculty, the parents, and the students as well as connecting to the Ministry of Education officials. This allows the principal to create and maintain a professional environment while working to help improve communication between all stakeholders.

The primary stakeholder in education reform is the principal; but it is the classroom teachers on whom the overall success of reform efforts rests. The school principal being the one of the main stakeholders in the reform process; his or her role as administrator is becoming more complex, encompassing an increase in various activities such as teacher performance evaluation, developing and writing strategic plans, and establishing professional development programs to name a few. Parents play a crucial role by encouraging their children in the process in addition to being voices of concern in the entire reform process.

#4 CRITICAL REFLECTION: LESSONS LEARNED FROM REFORM EFFORTS

This section reflects on the key challenges and lessons of the reform efforts portrayed in the GCC case studies, and review widely acknowledged prerequisites of successful reform.

Education quality is strongly correlated with a country's economic growth (Maroun et al., 2008). All the GCC governments acknowledge a growing public demand for learning at all ages and levels. Increasingly, young people desire to transform themselves through quality education. Moreover, closer economic linkages to global economic changes has added to the pressure for change in education priorities and systems. The GCC countries are more vulnerable to macro-level changes including dramatic swings in demand for oil, regional or other conflicts around the world (Maroun et al., 2008). The three GCC governments have formally and explicitly created strategies to support improvements in the structures, processes, and outcome of education systems.

Following are some specific, school-based challenges of the reforms revealed in the case studies:

- Low attendance rates and lack of student motivation
- Substantially increased workload for women struggling to balance work and home life; linked to cultural pressures
- Teachers and staff are unaccustomed to collaboration
- Added stress to all stakeholders including, principals, teachers, students and parents, due to lack of clarity on methods of implementation
- Pressure to witness quick results
- Gaps in leadership skills among school principals
- Lack of resources: for qualified teachers, technical support, and incentives to innovate

- Resistance to change; linked to high rates of “teacher turnover”
- Cultural and economic resistance to technological advancements

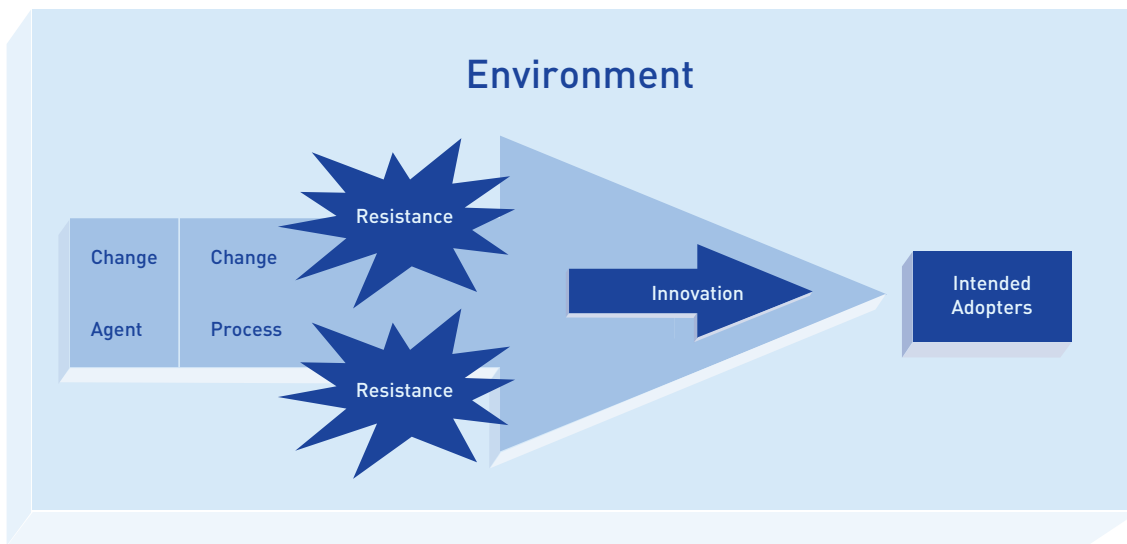
Taking a more holistic view of the challenges, the reforms examined in the case studies appear to reflect twenty-first century skills and current trends in instruction and learning such as problem based learning and teamwork. Nevertheless, while objectives may be clear, the approaches to learning are often new to GCC schools. Reform fundamentally shifts the roles of the teachers and relationships within the school community. The need for quick results, coupled with the urgency to show strong ties with national economic goals, brings new pressures to school leadership, often resulting in resistance from a variety of stakeholders. Therefore, more time is needed to fully implement strategies calling for structural change.

Having considered these formidable challenges, it is important to return to the key requirements for successful school reforms. Objectives must be concise, measurable, and achievable. Moreover, any initiative under educational reform should foster a learning environment that is student-centered, and garner the support of teachers, families, and the community. It should encourage critical thinking, collaboration, and other skills through consistent, rigorous teaching methods and relevant pedagogy that produce clearly defined learning outcomes. In the GCC, reform should help students develop Arabic and English proficiency and strengthen cultural identity. It should integrate continuing professional development for teachers, robust teaching resources, and curriculum guides. Supporting teachers in developing new practices is often prioritized in GCC countries (Abu Dhabi Education Council, 2012). Finally, GCC leaders should have a vision for their citizenry to aspire to global leadership through educational achievement, and for their respective nations to emerge as centers for higher education and innovative research. Despite the key requirements of the reform that GCC countries are continually undertaking, these countries need to understand the underlying theories of change and the complexity of change that comes with the reform.

As the case studies have indicated, change can be a complex process. Scholars have described the complexity of change across many fields, and have produced a variety of definitions. Ellsworth (2000) creates a helpful framework that organizes several models and ideas into a more accessible format. Ellsworth’s framework (Figure 5) may be summarized as follows: when a change agent wishes to communicate

an innovation to an intended adopter, the change process is often impacted by resistance in the change environment. This resistance can disrupt the change process and/or distort how the innovation appears to the intended adopter (Ellsworth, 2000). In other words, the intended adopter may not always receive a full or complete understanding of the change process as intended by the change agent.

Figure 5: The change communication model



(Source: Ellsworth, 2000, p. 27)

It is clear from the discussion that successful reform not only requires visionary, motivated, capable individuals who initiate change, but skilled adopters who understand the importance of minimizing resistance in the larger change environment. In schools, this includes school principals, teachers, and parents. Change is not an event but a “process of transformation, a flow from one state to another... involving individuals, groups or institutions, leading to a realignment of existing values, practices and outcomes” (Morrison, 1998, p. 13). Principals or teachers might be resisters, adopters or change agents --or all three and the acceptance of change initiatives occurs at various rates.

As explained in the case studies, the three GCC countries embarked on ambitious changes to improve the quality of their education results in the context of the demands of a more connected, global information age. While their paths and experiences of reform are unique, there are marked similarities among the three. To achieve their objectives, all three systems sought to redefine the roles of schools, teachers, and principals in directly supporting student improvement and growth.

The leaders of implementing the reform in all three systems encountered resistance from various stakeholders. In Qatar (and likely in both the KSA and the UAE as well), significant resistance among principals was stemmed from the uncertainty of the objectives of change and their lack of clarity. School leaders and teachers reported increased workload, impeding and reducing the success of initial implementation. In the UAE, lack of English and ICT skills among principals and teachers required to manage the reform amounted to a resistance because of incapacity rather than disinclination or confusion. Similarly, in Saudi Arabia, principals often lacked leadership skills as well as the knowledge needed to introduce and implement change at their schools.

At the school level, without adequate training and support, resistance to change is the obvious result. The common thread in these examples in all three systems is the lack of a clearly planned process providing generous lead time for introducing the changes to all responsible participants. Although each of the three cases were different, it seems clear that, in general, there were inadequate (or no) efforts to enroll, inform, or educate school leaders and teachers in the benefits of the changes and the reforms well in advance of implementation. They were not given adequate time to study and to fully understand the imminent changes, their roles within the reform, nor to discuss and comment on the plan or the process. The details of the three cases may differ; but the overall results are the same: when the principals and teachers are not actively engaged and enrolled as partners and collaborators in the enterprise of reform, the whole plan is in jeopardy.

Managing people successfully is a key leadership skill requiring sensitivity and responsiveness to diverse perspectives and priorities. Leaders must ensure that participants' perceptions, attitudes, values, and beliefs are fully informed (Morrison, 1998, p. 15). Change managers must help others to deal with change, and be adopters of change themselves; they too may need to be managed and supported. The role of the principal is to create a supportive atmosphere for experimentation and sharing, to encourage communication among teachers, including observing colleagues' classroom practice. This supportive environment helps teachers understand change, work effectively together, and cope with the emotional nature of change. It helps principals understand teacher needs. Such an understanding of managing change becomes crucial in enrolling committed stakeholders in positive outcomes. In Qatar (and likely in the both KSA and the UAE as well), there was a lack of culture of collaboration between teachers within and between subject departments. As teachers used to work individually under the MOE system, working together as a team is a new role for them. According to Hall and Hord (2006), change as a process involves the

adoption of new ideas about improving educational outcomes. The process of effective change requires many supportive factors and conditions within an organization or a system to facilitate its successful and intended implementation. Successful change depends on how well the participants understand and implement innovation.

As a dynamic, often problematic process, reform may not produce its fruits for some period of time. Reform is most often a continuous process, benefitted by thoughtful change agents who monitor, evaluate, and are willing to try new ideas. Change and reform can be an intrinsic feature of a dynamic workplace, a state of mind. In the education community, patience and vigilance are virtues; collaborative innovators are welcomed.

#5 RECOMMENDATIONS: LOOKING TO THE FUTURE

There have been substantial efforts in the education sectors of the three GCC countries to improve schools and student outcomes, and some progress has been made. Of course, these countries are capable of achieving more. Drawing on Fullan's (2007) implementation of reform (as in Figure 4), recommendations are made that call for change at the policy level, school and teaching level, and at the level of the greater society. It is important to note that some changes may be appropriate for more than one level. The following recommendations for supporting reform efforts are broad in scope and are based on the scholarly literature and widely-acknowledged best practices. Specific recommendations for each GCC country will be provided in the follow up report as the second phase of this research will involve data collection from Qatar, UAE, and KSA. This data collection will serve as a concrete foundation for future recommendations in the second phase of the report.

1. POLICY LEVEL

Clarity and specificity of Objectives

Establishing clear objectives will keep the stakeholders (policy makers, school leaders, teachers, parents, students, the community, and others) informed about policy implementation. Fullan (1999) argues that clarity and complexity are often major problems in any reform. School principals in the three case studies are facing ambiguity in implementing the reform's requirements. Huberman and Miles (1984) found that abstract goals resulted in confusion, frustration, anxiety and abandoning of effort. To further support this view, Hall and Hord (2006) found that when leaders are facing innovation and change and lack understanding, actual implementation might well be inconsistent with the original plan. The policy process around curriculum and teaching should involve all stakeholders from the initial planning phase to facilitate their natural "buy-in" so they feel recognized as collaborators associated with the reform. Using precise terminology in developing objectives will enhance stakeholders' involvement in the reform. Policy makers need to ensure clarity of new policies, and effective communication at all levels, especially among the SEC, MOE and schools and between head of departments and teachers.

Consistency of policies and procedures

A state strategy to establish and demonstrate stability and consistency in government processes should be a high priority in order to ensure institutional structures, expertise, and capacity to effectively support the reform efforts. A strong commitment by all stakeholders is vital for any reform to progress. Educational reform cannot work in isolation, the society on the whole has a role to play. Although reform does not come exclusively from the education sector, it is largely driven by state policies, such as, for example, plans for employment. Fullan and Quinn (2015), in their Coherence Framework, offer a dynamic, customizable road map for policy change driven by student outcomes. The framework comprised of four essential components:

- Focused direction to build collective purpose
- Cultivating collaborative cultures while clarifying individual and team roles
- Deepening learning to accelerate improvement and foster innovation
- Securing accountability from the inside out

In focusing on the coherence of the system, this framework generates insights and tools to guide effective school leadership; Fullan and Quinn (2015) create an important narrative about direction, working together, deepening learning, and securing accountability.

There is a strong desire to evaluate the results of reform or innovation in education. However, too often reform falls victim to impatience and ideological divisions (Fullan 2007). To alleviate this, it is suggested to provide a forum for on-going, regular participative evaluation. Instead of punitive inspection regimes, governments should encourage peer review, local insights/innovations, and the sharing of knowledge through best practices. This approach has the potential to avoid errors made elsewhere, while building a professional and political consensus that creates an environment conducive to sustainable change.

Closing the gaps between national-level innovation and performance, and labor potential and education support

The GCC countries should use their respective education systems to ensure that students graduate prepared for a future that requires them to compete globally. In this regard, the Ministries of Labor, Education, Higher Education, and the private sector, should achieve an alignment of principles and goals so that current reform will effectively provide

the necessary skills required for future success. Career counseling and guidance should be provided to students; they should be familiar with labor market needs to better plan and prepare for their futures. The skills practiced in school should emphasize higher level functions such as creativity, critical thinking, purposeful writing, teamwork, problem solving, and research (Barrett, Suboh, and Bashir, 2013).

Build capacity of school principals to manage change

Even the most effective educational reform effort usually encounters some resistance. Resistance to change refers to any behavior furthering the maintenance of the status quo in the face of pressures to alter it. Resistance occurs when there is a lack of knowledge, information, skills and managerial capacity. School principals need to understand the change process in order to lead and manage change and improvement efforts effectively. They must therefore learn to overcome barriers that exist during the complex process of change. Moreover, in order to guide political and organizational actions during change implementation, it is important to determine who can oppose or facilitate change. Schools can manage resistance by:

- Principals need to communicate and consult with their teachers. Teachers must be given the opportunity to be involved in all aspects of the change process and they must be given the opportunity to provide feedback.
- Principals should facilitate teamwork, they should empower their staff to be involved and provide the right environment and the resources for staff to take part.
- Another big part of managing change is that after the change goes live, reward and recognition keep the momentum going. Reward and recognition help sustaining the change.

Understand and manage change efficiently

Create sophisticated strategies to communicate, understand and manage change. This could include change awareness and management training programs for all stakeholders to understand the process of change and ways to manage it effectively. As change agents can be either institutions or individuals, each stakeholder needs to take responsibility to handle and cope with the reform changes based on the unique needs of the local context. School principals need to

communicate and consult with their teachers. Teachers must be given the opportunity to be involved in all aspects of the change process and they must be given the opportunity to provide feedback. Principals also should facilitate teamwork; they should empower their staff to be involved and provide the right environment and the resources for staff to take part. Another big part of managing change is that after the change goes live, reward and recognition keep the momentum going. Reward and recognition help sustain the change.

2 - SCHOOL LEVEL

Building a collaborative culture in schools through collective decision making

Involving staff (as on-site change agents) more closely in the policy making process will help frame better policies through the reflection of school practices. Research shows that granting school more autonomy in its decision-making will lead to greater school effectiveness and help achieve desired goals (Al-Taneji, S. and L. McLeod, 2008). This can be achieved through grouping teachers into effective teams for effective collaboration (National Staff Development Council, 2003) as well as providing and encouraging opportunities for staff involvement in important decisions (Marks and Printy, 2003).

Raise teaching standards – Help teachers manage change and refine their skills

Teachers need to receive world-class on-going and meaningful professional training such as in-class coaching. Professional development should place emphasis on student-centered quality teaching and assessment. Teaching and learning standards should focus on the skills needed for life-long learning, and pedagogical practices that enable students to become self-directed learners. Moreover, teachers should be capable of critically understanding their role and reflect upon the meaning and power embedded in these standard-based reforms that in turn shapes their pedagogy. Teachers need to integrate their “thinking and practice” into daily teaching routines (Romanowski and Amatullah, 2014, p. 112).

Reduce workload

School leaders and teachers reported increased workload, impeding

and reducing the success of initial implementation. In the transition to the new pedagogical approaches, teachers are facing an increase in workload and an additional set of administrative tasks that impinged on their personal lives and the ability to effectively teach their students. Schools need strategies to reduce workload, specifically:

- Reducing the amount of time spent on schoolwork at home or outside school hours.
- Minimizing the number of meetings and using meeting time effectively.
- Prioritizing tasks and filtering demands from external activities and programs.
- Professional development training in time management (Alfadala, 2014).

3 - SOCIETAL LEVEL

Cultural Awareness

Members of the public, such as parents and others, as stakeholders in reform, should have opportunities to learn about imminent changes and reforms in schools. The public might even be given a comment period to provide an assessment and general reaction to potentially new ideas and approaches. Creating cultural awareness through media campaigns by MOE, TV spots, pilot studies in the schools about the changes that come with the reform will enable society to adapt to them, rather than being confronted with sudden changes.

Parental Involvement

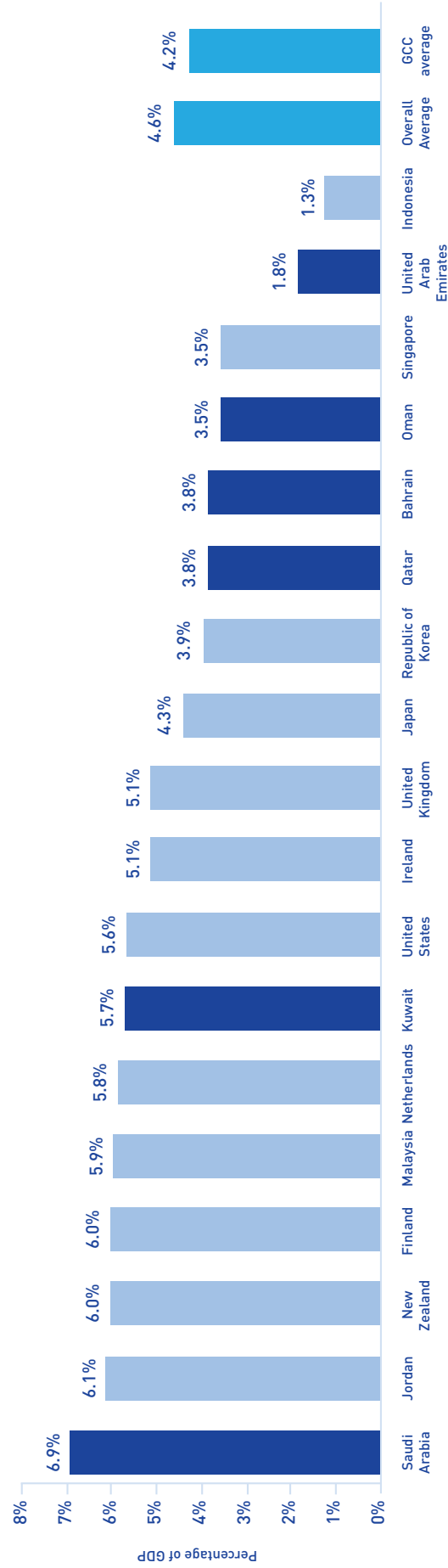
Lack of parental involvement is one of the biggest challenges; many parents have mindsets rooted in the traditional ways of the past, and often fail to recognize the value of education. This is a difficult issue, but despite perceptions, many will be open to different ways of approaching learning and teaching if given opportunities to understand more deeply what is being offered in the education of the younger generations. Young people themselves can and should be actively enrolled in taking new ideas to their older family members; indeed with their creative aspirations and talents, the young are the source of social transformation.

#6 CONCLUSION: OBSERVATIONS AND OUTLOOKS

Ultimately, the governments of the region would benefit in their overall economic strategy initiatives when there is a strong collaboration with schools, universities and the private sector. All reform must have a strong foundation that can continue once implemented and can be easily measured during evaluation. Such principles include celebrating and sharing practices that have proven effective, putting children and learners above all else, aiming for excellence in all outcomes, valuing diversity, and being aware of unintended consequences (Barrett et al., 2013). A long-established and accepted truth is that education is the avenue through which the region will emerge as a world leader in a world in which information and knowledge are the currency of the age (Maroun et al., 2008). The road ahead for the region in terms of education reform is doubtless long and full of challenge. But people of the region have already come a long way and have moved steadily toward their desired result. It is imperative to leverage the success achieved so far to motivate students to push further: they are the future of any education reform.

ANNEX A

Figure 1: Average Expenditure on Public Education as a Share of GDP, 1980-2005



(Source: Maroun, Samman, Moujaes, and Abouchakra, 2008).

ABBREVIATIONS

ADEC	Abu Dhabi Education Council
EFNE	Education for a New Era
GCC	Gulf Cooperation Council
ICT	Information and Communications Technology
KSA	Kingdom of Saudi Arabia
MOE	Ministry of Education
SEC	Supreme Education Council (Qatar)
UAE	United Arab Emirates
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund

LIST OF FIGURES

Figure 1	Average Expenditure on Public Education as a Share of GDP, 1980-2005	(Annex A)
Figure 2	Timeline of reform phases (Brewer et al., 2007:81)	Page 20
Figure 3	ADEC's Transformation Journey	Page 25
Figure 4	Fullan's factors affecting implementation (2007:87)	Page 35
Figure 5	The change communication model (Ellsworth, 2000, p. 27)	Page 42

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Disclaimer

Any errors or omissions remain the responsibility of the author.

About WISE

Qatar Foundation, under the leadership of its Chairperson, Her Highness Sheikha Moza bint Nasser, established the World Innovation Summit for Education in 2009. WISE is an international, multi-sectoral platform for creative thinking, debate and purposeful action that contributes to building the future of education through innovation and collaboration. With a range of ongoing programs, WISE has established itself as a global reference in new approaches to education. The WISE Summit brings together over 1,500 thought leaders, decision makers and practitioners from education, the arts, business, politics, civil society and the media.

The WISE Research Reports bring key topics to the forefront of the global education debate and reflect the priorities of the Qatar National Research Strategy.

These publications present timely and comprehensive reports produced in collaboration with recognized experts, researchers and thought-leaders that feature concrete improved practices from around the world, as well as recommendations for policy-makers, educators and change-makers. The publications will focus on topics such as system-level innovation, teacher education, early-childhood education, new ways of financing education, entrepreneurship education, wellbeing, twenty-first century skills and education reform in the Gulf Cooperation Council Countries.



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