

The Role of International Assessments and School Inspections in the Reform of Education in Dubai

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> About the KHDA

The Knowledge and Human Development Authority (KHDA) is responsible for the future growth, direction and quality of education and learning in Dubai. We aim to support the people of Dubai in achieving their potential from birth and through life's journey as we work towards achieving the goals set out in the Dubai Strategic Plan 2015. The KHDA was set up as the successor to the Dubai Education Council (DEC). In addition to assuming the roles and responsibilities of the DEC, the KHDA administers through its School Agency all Dubai public schools (K-12) and regulates, licenses, inspects and otherwise monitors the quality of all private schools (K-12) as well. Additionally it is mandated to develop and attract, monitor, license and inspect all institutions of higher and tertiary/vocational education in Dubai's Free Zones.

Dr. Abdulla Al Karam: Chairman of the Board of Directors, Director General

Dr. Abdulla Al Karam is the Chairman of the Board of Directors and Director General of KHDA. Dr. Al Karam also serves as the Chairman of the Dubai Government's Human Resources Committee and is a member of the Dubai Knowledge Fund, an endowment fund that finances educational initiatives. Previously, he was Secretary General of the Dubai Education Council, the forerunner organization to KHDA, and before that, he was Chief Executive Officer of Dubai Knowledge Village.

Fatma Al Marri: Board Member, CEO of School Agency

Fatma Al Marri joined KHDA from the Dubai Education Council when it was established in 2006. Starting her career as a teacher in Dubai, she soon became the principal of a government school and participated in the Ministry of Education's planning for secondary and basic educational strategies. Fatma heads KHDA's Dubai School Agency which oversees the development and management of the school-based educational services in Dubai. Fatma is a member of the Federal National Council, the legislature of the United Arab Emirates.

Jameela Al Muhairi: Board Member, Chief of Dubai Schools Inspections Bureau

Jameela Al Muhairi joined KHDA from the Dubai Education Council when it was established in 2006. A graduate in management from UAE University in Al Ain, she worked for the Ministry of Education for several years before being appointed as a director responsible for the private schools sector in Dubai Knowledge Village. Jameela has spent more than 10 years studying quality assurance schemes from around the world. As Chief of the Dubai Schools Inspection Bureau, Jameela aims to provide parents in Dubai with a choice of schools providing quality education for all children.

> Introduction

The development of Dubai by government and private industry has focused on the construction of buildings and infrastructure with the rapid growth of the emirate capturing headlines around the world. The role of Dubai's Knowledge and Human Development Authority (KHDA) is to look at the development of Dubai's soft assets; the knowledge and education capabilities of its people. This paper explores the reform of the education sector in Dubai and some of the specific initiatives adopted by KHDA.

Education is often trumpeted as the most vital source of sustainable investment for societies. For developing economies such as Dubai, education is crucial for continued progress into developed economies. Developed economies have a far greater proportion of their economy directed towards services and the knowledge economy which require higher educational attainment on behalf of their citizens. Education also serves as an important element in developing social cohesion, promoting national identity and improving understanding of religious and cultural values.

Dubai's history serves it well for becoming a leading player in the global knowledge economy. Its heritage as a trading hub due to its attractive geographical location and lowered trade taxes brought many new merchants to the region. The later discovery of oil brought an array of foreign workers to the city. This history has resulted in Dubai having a cosmopolitan population built on trading links with neighboring countries. Dubai's lack of large oil reserves was the catalyst for a major shift in the underpinnings of its economy. The transformation from a pearling and trading hub just a couple of generations ago to a leading 21st century tourism, logistics and financial centre requires a similar transformation of its people. Education is the key to affect this change.

Within the Dubai Strategic Plan 2015, human capital excellence in preparing Dubai's workforce for the high-value knowledge-driven economy is one of the strategic thrusts. Another is improving the achievement of students and ensuring all nationals have access to quality education. These strategies provide KHDA with the overarching directions for it to pursue education reform in Dubai so that Dubai students receive high-quality education for the future knowledge economy.

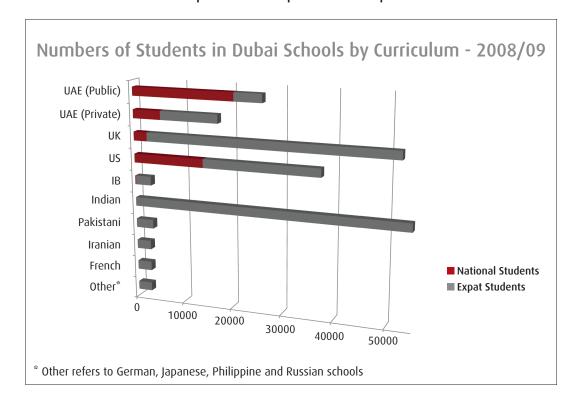
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> Reforming Dubai's Schools

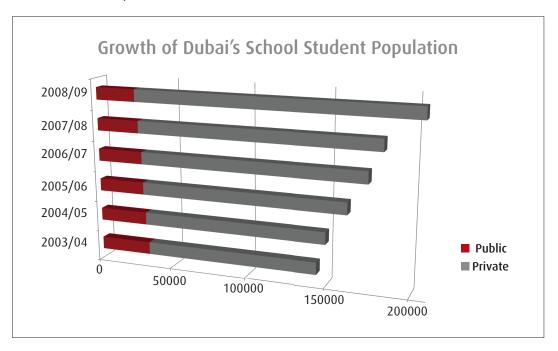
Dubai's rapid growth during the late 1990s and the early part of the first decade of the twenty-first century created the need for new decentralized governance arrangements to manage the build-out of local infrastructure and the economy. For the education sector, the initial approach came in 2005 when a Dubai Education Council was established to make suggestions to the Dubai Executive Council on suitable systems for improving education in the emirate. However, early on, it was apparent that a significant proportion of schools were not ready for a process of self-audit and hence it was recognized that a more interventionist approach would be required to generate the needed education reform. KHDA was one of the first authorities established as part of this decentralization process. The name Knowledge and Human Development Authority denotes that our organization does not solely focus on schooling and higher education but also early childhood development and workforce development to cover all age groups in society.

Historically, the Federal Ministry of Education has been responsible for the running of all aspects of public schools throughout the United Arab Emirates as well as the regulation of private schools. The establishment of KHDA saw some of these responsibilities transferred to KHDA. On its inception, a number of key issues were identified with respect to the education system in Dubai:

- A high proportion of Dubai's school students were in private schools (85%)
- An increasing and high proportion of Dubai school students (approaching 80%) are expatriates
- An increasing proportion of Emirati students are in private schools (approaching 50%)
- Rapid growth of student population requiring more schools to be established
- · Many different curricula on offer across the school system
- Anecdotal evidence of poor results in English in public schools
- Anecdotal evidence of poor teaching of Arabic and Islamic Education in private schools
- Lack of information for parents on comparative school performance



These issues were quite different to those in other Emirates which have lower proportions of students attending private schools and are unique with respect to the rest of the world. The rapid growth in the population of Dubai required new schools to be established to house the students of expatriate families. Numbers of students in Dubai have been increasing by approximately 12% per year and totaled around 205,000 students in the 2008-09 academic year. Unlike many other educational systems, private schools in Dubai range from some high-fee-charging schools offering schooling on par with that of high quality schools in the USA or Europe, while a number of low-fee-charging schools offer education of variable quality with limited resources. The high proportion of private schools is due to the large numbers of expatriate students who are not able to attend public schools which cater more for young nationals (local citizens) and some Arab expats.



Affecting education reform in this setting is challenging and is further compounded by the fact that only some of the functions have been transferred from the Ministry of Education. Within KHDA's first year, we recognized that a new policy route was required and at this time the World Bank MENA Development Report on Education Reform in the Middle East and Africa was released ¹. This timely report provided some key concepts for school reform in the Arab world. It notes three building blocks for education reform;

- Engineering (change curriculum, improve physical resources, improve administration)
- Incentives (evaluation/monitoring, rewards, information on the education marketplace)
- Accountability (improved design of decentralization, enhancing voice for different groups)

¹MENA Development Report (2008) The Road Not Traveled: Education Reform in the Middle East and North Africa, World Bank, Washington DC

Most education authorities in the region have gone down the reform path using engineering solutions. With the high proportion of students in private schools and the Ministry of Education retaining responsibilities for funding and staffing public schools, the design of a reform program that contained many engineering-type policy approaches was not possible. Instead, the KHDA needed to focus on the innovative use of incentives and accountability to ensure that Dubai's school student population receives education of the highest calibre.

> Identifying approaches that will have most impact

Incentives and accountability are the principal instruments of Dubai's policy reform program. Yet these beg the question: Which particular policies should Dubai's education authority employ from the large array of policy instruments that are used throughout the world, and more to the point, in which order should they be used? The key to answering that question is to gain a more detailed picture of the education landscape in Dubai and to identify and implement policies that suit Dubai's particular context and will have the most impact.

At the commencement of its operation, senior policymakers had only scant and anecdotal information on the Dubai school system. There were three main issues identified:

- · A high diversity of schools and curricula on offer
- Many schools had been in operation only for a short period of time and many students had only recently commenced their schooling in Dubai from other countries
- Continued and significant growth of the Dubai private school sector

These issues of diversity, newness and growth provided a unique context and made selection of policies more troublesome. While information on the school system was found relatively quickly, more detailed information about what was happening within schools and their relative levels of performance was less forthcoming. To design a robust plan for education reform, more information needed to be found. KHDA decided to focus on two main approaches; the use of international assessments to understand how Dubai's school system performs in relation to the rest of the world and in relation to different forms of curricula within Dubai, and a system of school inspections to clarify what is happening within schools with recommendations for improvements. Each of these approaches would be characterized by a mixture of incentives and public accountability; incentives through rewarding higher performing schools such as in the short-term allowing them to increase their fees more, and public accountability through the provision of information to the public on the performance of schools for parents to have an informed choice and to promote transparency on school performance.

> International Assessments

The need for comparative international assessments serves as a baseline for KHDA to understand education performance and as a platform for improvements. Early in the establishment of KHDA, we were aware that a TIMSS (Trends in International Mathematics and Science Study) assessment was being carried out during 2007. KHDA approached the administrators of the program and requested to be included as a benchmarking participant in the program. The conduct of TIMSS gave us our first indications of how Dubai school students compare with others around the world and how different schools within Dubai compare with each other.

The TIMSS assessment identified that while Dubai outperforms its Arab neighbours, its overall score was below the global average in Year 4 and Year 8 mathematics and science subjects. In addition, the scores demonstrated a wide disparity in the performance of schools offering different curricula within Dubai. Generally, Dubai schools that offer a UK curriculum perform better than those providing either a US or Indian curriculum which perform better than those that follow the national curriculum. Possible reasons for the poor performance of schools that follow the national curriculum include the shorter school day (hours of instruction per day) and school year (numbers of school days per year), the low proportion of instructional time devoted to mathematics and science, and a reliance on rote memorization and teacher-centered learning methods. Interestingly, the scores for private schools that offer the national curriculum were significantly lower than public schools in Grade 4 but significantly higher in Grade 8, demonstrating that each type of school could benefit from the other with teaching methodologies and learning approaches.

Dubai TIMSS 2007	achievement by cu	rriculum ²	
Type of Curriculum	% of students	Mathematics Mean	Science Mean
Year 4			
Public schools			
National Curriculum	16	398	404
Private schools			
National Curriculum	7	374	367
CBSE (Indian)	27	422	458
US	9	461	465
UK	41	480	469
National Average		444	460
Year 8			
Public schools			
National Curriculum	22	378	427
Private schools			
National Curriculum	8	424	453
CBSE (Indian)	26	474	507
US	9	471	488
UK	35	505	522
National Average		461	489
International Average		500	500

²More analysis of TIMSS 2007 results is available on the KHDA website at http://www.khda.gov.ae

The TIMSS study has provided us with concrete data on where we stand internationally and the challenge that lies ahead of us in education reform. By making the information on TIMSS public, we have increased the transparency of information in Dubai, an important aspect of good governance by KHDA. By outlining the issue, we aim to further influence and incentivize schools to improve their performance so that our scores for TIMSS 2011 show an increase from both TIMSS 2007 and against international benchmarks. TIMSS has now been taken up by the Ministry of Education for schools across the UAE. Dubai will now be able to compare its educational performance with school systems from other Emirates.

KHDA is not limiting its international assessment program to TIMSS. We participated recently in PISA 2009 (Programme for international Student Assessment), will continue to participate in TIMSS in 2011 as a benchmarking participant, and for the first time will participate in PIRLS 2011 (Progress in International Reading Literacy Study). Each of these assessment programs will provide us with further indications of our relative performance. Ideally, we would like to benchmark our performance in Arabic or Islamic Education but at this stage, no international assessments in these subjects have been established.

> School Inspections

Alongside international assessments, the other primary policy instrument used by KHDA was the inspection of all schools commencing in the 2008-09 academic year. This was the first time that an educational authority in the Arab region has set up a comprehensive and systems-wide school inspection regime. For many school principals, there was significant apprehension at having government inspectors visit and appraise their school and to have their school performance compared publically with others. Yet most school principals and owners welcomed the inspection regime as it was something they were comfortable with from similar procedures in their home countries.

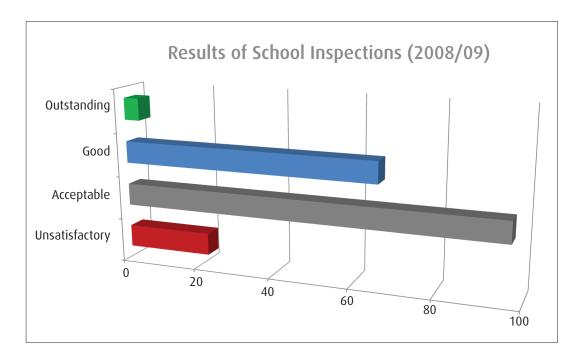
The school inspections needed to cover all of the different curricula and for that purpose, KHDA developed a set of comprehensive quality criteria. The seven criteria are:

- 1. The students' attainment and progress in 5 key subjects: Arabic, Islamic Education, English, mathematics and science
- 2. The students' personal and social development
- 3. Teaching quality and how well the students are learning
- 4. How well the curriculum meets the educational needs of the students
- 5. How well the school protects and supports the students
- 6. The quality of the leadership and management of the school
- 7. The school's overall performance

These criteria are based on international best practice in education quality assurance and were developed with the engagement of the local school community. They were then further refined through a series of pilot inspections to ensure that the framework reflected and harnessed the diversity and the unique and varied curricula that exist across the 220 schools in Dubai.

The findings from the inspections showed that although nine out of every ten Dubai schools provide an education of at least acceptable quality, more than half the schools

are providing an education that is not yet of the good quality expected. Each school was provided with a report listing its strengths and the areas that required improvement. As an incentive, schools that received a higher rating from the inspection were permitted to increase their private school fees by a larger margin than those that were not performing as well. Schools that were performing at an unsatisfactory level received follow up inspections to ascertain whether they are rectifying the problem areas identified by the inspectors. Schools that have successfully dealt with the issues that led to them being found to be unsatisfactory will proceed to receive full inspections again in the following academic year while those that still have outstanding issues will continue to be dealt with separately until those issues have been resolved. KHDA retains the power to close or limit the expansion of private schools that continue to be rated as unsatisfactory and where sufficient progress is not being made.



The use of school inspections enabled KHDA to go inside private schools and understand where common issues were arising and take concrete action with the support of schools to resolve them. Some of these common issues included:

- Change from teacher-centered to student-centered teaching approaches and for better recruitment of qualified teachers,
- Improve Arabic, Islamic Education and English,
- · Improve leadership and governance at schools,
- Improve the national curriculum and compare student's achievements against international standards
- Improve the management of behavior in schools where it is unsatisfactory.

The next round of school inspections commenced in early October 2009 for the new academic year. Schools that follow Indian and Pakistani curricula will be inspected for the first time in this round due to the different timing of their academic year. With this next set of inspections, KHDA is raising the bar for schools and has refined the detail within its quality indicators framework. In particular, inspectors will take into consideration how well school management has met recommendations from previous inspections. We will also be focusing on a school's ability to self-evaluate its own performance as a tool for improvement and we will have increased links with the community with surveys of all parents of children at school in Dubai to take on board their views.³

> Other Reform Elements

The two approaches detailed above, international assessments and local inspections, are only two elements of the reform program that KHDA has adopted. Other elements include a complete licensing system for private schools, additional inspections of school facilities and improved transparency of information. Our licensing system includes the regulation of the setting of tuition fees. Compliance with licensing requirements for private schools is necessary for permits to be issued allowing the school to admit students.

During the 2009/10 academic year, an additional set of inspections will be undertaken in conjunction with the Real Estate Regulatory Authority. The purpose of these inspections is to examine the school facilities and to gain more stability and reduce variability in the setting of rents for schools with their landlords. Rents comprise a significant proportion of the outgoings of schools and just as residential rents are regulated in Dubai, a system is being designed for schools to ensure that certain schools are not being disadvantaged which flow on to higher fees for parents.

Another important reform element that should not be discounted is improving transparency by making information on schools publically available. Within Dubai, the development of schools has historically been the domain of school owners and government regulators with little input from other stakeholders, especially parents. Making information more widely available, such as the results of school inspections, provides parents with knowledge that they can use to discuss with the management of their school or to provide them with an informed choice on which school they should send their child for their education. Parents are being more actively engaged in the current round of school inspections when all parents will be asked to provide responses about their child's schooling.

³ More information on the results of schools inspections including our Annual Report is available on the KHDA website at http://www.khda.gov.ae

> Next Steps

The story of education reform of schools in Dubai by the KHDA is still in its early days but significant inroads have been made. The hard evidence we have gained from international assessments on where we stand and from school inspections on individual school performance has provided us with a launching pad for improvements to be made. KHDA aims to establish Dubai as a global centre of educational excellence and our revised strategy of quality, access and engagement provides the pathway for future reform.

We have selected only a small number of reform measures from the vast array that could have been adopted to ensure that the right tool was chosen for the right situation and that this was done well. Other measures like vouchers were not considered and engineering-type solutions like changing the curriculum or paying teachers higher salaries were not available as options for KHDA in our federated structure. Instead, we have chosen particular reform approaches and provided information to parents and other stakeholders so that they can make an informed choice. The higher quality of private schools and the slower pace of reform in the public school system have created a trend of more national parents transferring their children to private schools; a trend that is likely to continue until the public sector is seen as offering a comparable standard of education.

Dubai is considered to be a leader in the region by attracting global talent and investments. Many education regulators have a similar mix of issues that face Dubai: a need to reform education and a licensing regime for private schools. Importantly, the approach to reform needs to suit the particular context and in Dubai's case this is especially different with unique circumstances. Our journey of international assessments and school inspections has provided us with a roadmap for continued education reform as well as lessons for other education administrators to consider for their own reform policies.

> Useful Links

http://www.pisa.oecd.org

KHDA Website:
http://www.khda.gov.ae
Dubai Schools Inspection Bureau:
http://www.khda.gov.ae/En/DSIB/InspectionBureau.aspx
The Official Portal of the Dubai Government:
http://www.dubai.ae/en.portal
Dubai Strategic Plan 2015:
http://www.dubai.ae/en.portal?topic,hm_dxbstgplan,0,&_nfpb=true
UAE Ministry of Education:
http://www.moe.gov.ae/English
MENA Development Report from World Bank:
http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/0,,contentMDK:21617643~pagePK:146736~piPK:226340~theSitePK:256299,00.html
TIMSS and PIRLS at the International Association for the Evaluation of Educational Achievement:
http://www.iea.nl/
PISA:

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٧ روابط مفيدة

موقع هيئة المعرفة والتنمية البشرية KHDA: http://www.khda.gov.ae/ar/home/default.aspx
جهاز الرقابة المدرسية في دبي: http://www.khda.gov.ae/CMS/Pages/Ar/khdainspection.aspx
البوابة الرسمية لحكومة دبي :
http://www.dubai.ae/ar.portal
: 2015 غطة دبي الاستراتيجية 2015 : http://www.dubai.ae/ar.portal?topic,hm_dxbstgplan,0,&_nfpb=true
وزارة التربية والتعليم في الإمارات العربية المتحدة: http://www.moe.gov.ae/Arabic
تقرير البنك الدولي عن التنمية في الشرق الأوسط وشمال أفريقيا: http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/0,,contentMDK:21 617643~pagePK:146736~piPK:226340~theSitePK:256299,00.html
دراســة الاتجاهات العالمية في الرياضيات والعلوم (TIMMS) ودراســة التقدم الدولي في فُســتويات القراءة (PIRLS) من الهيئة الدولية لتقييم التحصيل التربوي (IEA): http://www.iea.nl

: PISA تقییم

http://www.pisa.oecd.org