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Education for a New Era

Design and Implementation of K–12 Education Reform in Qatar

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Prepared for the Supreme Education Council

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Summary

The Arabian Gulf nation of Qatar is a small country with a small population, but its ambition to be a progressive leader in the industrial and social realms is anything but small. In addition to oil resources, Qatar has one of the largest reserves of natural gas on earth, and it has invested heavily in industries that allow it to exploit its natural gas reserves to bring great wealth to Qataris. At the same time, Qatar is developing socially. Women are expanding their role in society, and a new constitution provides extensive personal rights and moves the nation toward democratic institutions, including an elected parliament.

In the realm of education, Qatar, through the Qatar Foundation, has attracted branch campuses of some of the best universities in the world. But to support both its economic and its social development, Qatar needs much stronger results from its elementary and secondary education system, which is widely seen as rigid, outmoded, and resistant to reform.

Examining the Existing System

In 2001, the leaders of Qatar commissioned the RAND Corporation to examine the nation's K–12 education system and to recommend options for building a world-class system that would meet the country's changing needs. The highly committed Qatari leadership was willing to consider radical and innovative solutions, and it was offering RAND a unique and exciting opportunity to help design and build a new education system. This monograph documents the design of the new system

and the first two years of implementation, covering the period from June 2001 to September 2004.

The initial study took place in 2001–02. At that time, the Qatari K–12 education system served about 100,000 students, two-thirds of whom attended schools that were government financed and operated. The RAND team found several strengths in this existing system. Many teachers were enthusiastic and wanted to deliver a solid education; some of them exhibited a real desire for change and greater autonomy. Additionally, parents appeared likely to accept new schooling options.

But the weaknesses in the existing system were extensive. There was no vision of quality education and the structures needed to support it. The curriculum in the government (and many private) schools was outmoded, under the rigid control of the Ministry of Education, and unchallenging, and it emphasized rote memorization. The system lacked performance indicators, and the scant performance information that it provided to teachers and administrators meant little to them because they had no authority to make changes in the schools. For a country with such a high per capita income, the national investment in education was small. Teachers received low pay and little professional development, many school buildings were in poor condition, and classrooms were overcrowded.

Designing the New System

Most of the system's weaknesses were already well known in the country; in fact, there had been previous attempts at modernization, all of which had been unsuccessful because they lacked a strong vision and a clear implementation strategy. Together, the extensive concerns about the system and the past failures to reform it argued for system-changing solutions rather than incremental approaches, plus a well-defined implementation plan.

RAND recommended that no matter what else was to occur, the basic educational elements of a standards-based system had to be put in place. The most fundamental need was clear curriculum standards oriented toward the desired outcomes of schooling. The new system's cur-

riculum, assessments, and professional development would all need to be aligned with these clear standards. To promote continuous improvement, the initiative called for education data to be collected, analyzed, and disseminated to the public.

These basic elements of a standards-based system—standards, curriculum, assessments, professional development, and data use—can be managed using different governance systems, ranging from centralized to decentralized and from limited choice and variety to significant choice and variety. RAND developed three specific system-changing options to present to the Qatari leadership for discussion: (1) a Modified Centralized Model, which upgraded the existing, centrally controlled system by adding or improving the basic elements; (2) a Charter School Model, which decentralized governance and encouraged variety through a set of schools independent of the Ministry and which allowed parents to choose whether to send their children to these schools; and (3) a Voucher Model, which offered parents school vouchers so that they could send their children to private schools and which sought to expand high-quality private schooling in Qatar.

The Qatari leadership rejected the first reform option as too similar to reform attempts of the past, which had produced specific improvements but left most of the system unchanged. It found the third option attractive but ruled it out as well, viewing it as riskier than the second option because of its reliance on the private market to open new schools. It decided to proceed with the second option, which would encourage parental choice, partially decentralize governance, and provide new school models. To better communicate the model's principles to the public, it was given a new name—the Independent School Model. This model was to include all the basic educational elements and was to be based on four principles: autonomy, accountability, variety, and choice. The adoption of these particular principles was notable in a region where such principles are both rare and poorly understood.

RAND then refined the basic design of the reform and developed a detailed plan for its implementation. The implementation plan specified that there would be four new institutions, three permanent and

one temporary, that would aid in changing the power and authority within the system:

1. *Supreme Education Council.* The SEC would be a permanent institution composed of members representing the end users of the education system. It would be responsible for setting national education policy.
2. *Education Institute.* This institution would also be permanent. It would have responsibility for overseeing and supporting the new, Independent schools and for
 - a. Contracting with the new schools and supporting their operation
 - b. Allocating resources to the Independent schools
 - c. Developing national curriculum standards for grades 1–12 in four subjects—Arabic, mathematics, science, and English
 - d. Developing training programs for teachers in the Independent schools and promoting a supply of teachers (either from Qatar or abroad) able to teach according to the curriculum standards.
3. *Evaluation Institute.* Also permanent, the Evaluation Institute would monitor all student and school performance in both Ministry and Independent schools and be responsible for
 - a. Designing and administering national tests for grades 1–12 for the four subjects in item c, above, as well as surveys focusing on students, teachers, parents, and principals
 - b. Producing annual “school report cards” for distribution to schools and parents
 - c. Operating the national education data system
 - d. Performing special studies on the schools and the reform’s progress.
4. *Implementation Team.* This institution would be temporary. Its role would be to assist in establishment of the other institutions and to perform oversight, coordination, and advisory functions during the transition to the new system.

This new structure was to run in parallel with the existing Ministry of Education. The Ministry staff and Ministry-operated schools would be unaffected for the most part during the early years of the reform. In this way, parents could exercise real choice as to whether to send their children to the new schools or keep them in the Ministry or private schools. The Evaluation Institute would test students in both the new schools and the existing government schools, as well as in some private schools; it would also survey the students, teachers, parents, and principals of all these schools about school practices and perceptions of quality. Parents thus would have access to objective information about the quality and characteristics of schooling options for their children.

To promote flexibility, reliance on rules and hierarchy in the two new Institutes was intended to be less than in the Ministry, and a small number of staff were to be employed. Employees would be expected to support collaboration, teamwork, individual creativity, initiative, and personal accountability.

Implementing the New System

In 2002, the Qataris began implementing the reform. The accomplishments that occurred in only three years were remarkable. Shortly after the design of the reform was approved, the SEC and the Institutes were established in Qatari law. The SEC members and the core staff of the Institutes were identified and put in place within the first year. At the same time, many of the reform's programs began, with external consultants being relied on for a considerable amount of the development work.

Qatar now possesses curriculum standards in Arabic, mathematics, science, and English for all 12 grades. The standards are comparable to the highest in the world, and the mathematics and science standards are published in Arabic and English to make them accessible to the largest group of educators. Of particular note are the new standards for the study of Arabic, which stress practical language skills using a variety of linguistic materials.

In 2004, the Evaluation Institute tested every student in the Ministry schools and students in many private schools to document achievement levels before the reform's Independent schools began to open. It also surveyed all principals, teachers, and parents and most students in these schools. These tests and surveys were then upgraded and repeated in 2005 and 2006. The tests are the first objective, independent measures of student learning available in the Arabic language.

Potential school operators responded enthusiastically to the call to open schools. The Education Institute selected operators for the first generation of schools—the 12 Independent schools that opened in Fall 2004—from a pool of 160 initial applicants; all 12 opened under three-year renewable contracts. In 2005, 21 additional Independent schools opened as Generation II, and 13 more opened in 2006 as Generation III.

As usual in a reform this ambitious and rapid—whether in Qatar or elsewhere—there were challenges along the way. Since Qatar has a small population, staff and contractors had to be recruited from around the world to fill specialized positions. Filling all of the institutional positions in such a short time was challenging. Foreign experts brought needed experience, but many of the international organizations relied on staff at their home locations, which were separated from Qatar by great distances and many time zones. Teams had to find ways to collaborate across culture, distance, and time to implement the reform's many programs.

The reform's wide scope was responsible for additional challenges. One ongoing, key challenge was that of maintaining everyone's focus on the interrelated changes to the whole system, especially as the number of staff and contractors expanded. The reform's ambitiousness and scope also made it challenging to communicate the vision of the reform to the many constituencies interested in the education system.

Recommendations

As members of the team that supported these efforts over four years, we developed significant insight into what worked, what did not work,

and why. Based on our on-the-ground experiences, as well as a more general knowledge of reform efforts elsewhere, we are able to offer four recommendations for strengthening the reform as it continues to move forward:

- *Continue to build human capacity through knowledge transfer and investment.* Qatar needs more local capacity to manage the reform. Increased expertise is needed in the teaching workforce and among the Institute staff. Non-Qatari specialists are likely to be required in the future, but it is important that they find the means to transfer knowledge to Qataris to build local human resources and that the Qataris continue to invest in their human resources devoted to education.
- *Continue to promote the principles of the reform.* The four principles of the reform—autonomy, accountability, variety, and choice—are new in this region. As a result, the SEC, Institutes, and schools should continue to promote and develop these principles in their organizational structures, personnel policies, and activities. It is particularly important that the principles of decentralized autonomy and accountability for results be reinforced.
- *Expand the supply of high-quality schools.* The success of the reform's system-changing design rests partly on the establishment of high-quality Independent schools. Qatar should seek to attract the best school operators without regard to nationality. In addition, the reform should support school operators as they develop and expand their visions of quality education.
- *Integrate education policy with broader social policies.* The education reform resides within a broader social, political, and economic system, which includes social welfare policies and a civil service system that rewards people in government positions. These social systems and government policies must be aligned with the modernization objectives of the Qatari leadership if the country is to achieve its vision. The education reform is limited in what it can accomplish without reinforcement across these sectors of society.

Implications Beyond Qatar

For Qatar, this project offers the promise of greatly improved education for its children. Thanks to this reform, some of Qatar's children are in learner-centered classrooms within improved facilities where better-prepared and better-trained teachers guide them in accordance with internationally benchmarked standards. As the reform progresses, these benefits should extend to more children.

In addition, because the reform has provided a rich data system and a variety of schooling options, Qatar now has the ability to examine education processes empirically, measure outcomes objectively, and implement improvements as needed. Beyond Qatar, international educators and researchers can use the data system to learn how effective the different approaches chosen by Qatari schools are and to apply this knowledge to other situations and other societies.

The reform's design and its implementation offer an approach for developing a standards- and choice-based system alongside a more traditional system, an approach holding the promise of improved quality. Other countries can learn from this model of institutional change and its implementation.

Some of this new reform's principles are already spreading to other countries in the region. The emirate of Abu Dhabi in the United Arab Emirates recently adopted a strategy of public financing for private providers of education that is similar to that of Qatar. Additionally, the Secretary General of the GCC praised Qatar's initiative, especially its curriculum standards. Since these curriculum standards are the foundation for teaching, learning, and accountability, the Secretary General's praise, motivated by concern throughout the region about preparing students for later life, represents a major endorsement of the approach taken in Qatar.

The leadership of Qatar has embarked on a bold course to improve its education system. Qatar's example should serve to point the way for other countries to examine their own education systems, begin an improvement process, and incorporate some or all of this reform's principles into their plans for reform. The Qatar education reform and the strong interest it has elicited hold the promise that students in the

region will be better prepared to think critically and to participate actively in their workforces and societies.