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A New System for K—12 Education in Qatar

he leadership of the Arabian Gulf nation of Qatar, like that of many other countries, views education as the key to future economic, political, and social progress. Many have concluded that a country's ability to compete in the global economy and enable its citizens to take full advantage of technological advances relies on upgrading the quality of the schooling provided and ensuring that what is taught is aligned with national priorities and international developments.

In summer 2001, the State of Qatar's leadership asked the RAND Corporation to examine the K–12 (kindergarten through grade 12) school system in Qatar. The leadership was motivated by several concerns, the chief one being that the nation's school system was not producing high-quality outcomes for Qatari students in terms of academic achievement, college attendance, and success in the labor market. RAND's analysis identified the strengths and weaknesses of the existing system and pointed to two main pursuits for reform: improving the education system's basic elements through standards-based reform and devising a system-changing plan to deal with the system's overall inadequacies.

Examining the Existing System

At the time of the study, the Qatari K–12 education system served about 100,000 students, two-thirds of whom attended schools that were financed and operated by the government. The highly centralized Ministry of Education oversaw all aspects of public education and many aspects of private education.

There were several strengths in the 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 open to the idea of new schooling options.

But the weaknesses in the existing system were extensive. There was no vision of quality

Key findings:

- Qatar's K-12 education system lacked a vision for high-quality education and structures to support it.
- System reform focused on curriculum standards, new organizational structures, and a clear implementation plan.
- Critical to the reform was the creation of new, Independent schools based on the principles of autonomy, accountability, variety, and choice.
- Since 2002, standards have been developed, almost all students have been tested, and a growing number of Qatar's children have enrolled in learner-centered schools with improved facilities where better-prepared and better-trained teachers guide them in accordance with internationally benchmarked standards.

education and the structures needed to support it. The curriculum in the government (and many private) schools was outmoded and emphasized rote memorization, leaving many students bored and providing little opportunity for student-teacher interaction. The system lacked performance indicators, and there was no attempt to link student performance with school performance. Moreover, the scant performance information provided to teachers and administrators meant little to them because they had no authority to make changes in the schools. Finally, although Qatar has 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.

Most of the system's weaknesses were already well known in the country; and although previous modernization attempts had introduced specific innovations, they had lacked the strong vision and clear implementation strategy necessary to improve the whole system.

Designing the New System

The extensive concerns about the system and the past failures to introduce sustainable reform argued for system-changing solutions rather than incremental approaches, plus a well-articulated implementation plan.

Curriculum Standards

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 for clear curriculum standards oriented toward the desired outcomes of schooling. The new system's curriculum, assessments, and professional development would all need to be aligned with these clear standards, which would cover both content (what students should be taught in each grade) and performance (what students should know by the end of each grade). However, the standards would not dictate or even propose the curriculum itself, nor prescribe how information and skills were to be conveyed. To promote continuous improvement, the initiative called for education data to be collected, analyzed, and disseminated to the public.

New Governance Structure

RAND presented three governance options to the Qatari leadership for discussion: (1) a Modified Centralized Model, which upgraded the existing, centrally controlled system by allowing for some school-level flexibility with or without parental choice of schools; (2) a Charter School Model, which 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 decided to proceed with the second option, which was then refined and given a new name—the Independent School Model. This model would focus on well-aligned standards, curriculum, assessments, and professional development, and would emphasize the four principles shown in the box (next column). The adoption of these principles was notable in a region where such principles are rarely seen in government education systems.

Principles of the Independent School Reform Model

Autonomy. Independent schools operate autonomously, subject to the conditions specified in a time-limited contract.

Accountability. Independent schools are held accountable to the government through regular audits and reporting mechanisms, as well as student assessments, parental feedback, and other measures.

Variety. Interested parties may apply to operate schools, and diverse schooling options are to be offered, since each Independent school is free to specify its educational philosophy and operational plan.

Choice. Parents are allowed to select the school that best fits their child's needs.

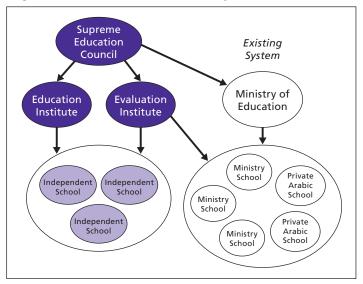
Implementation Plan

RAND developed a detailed plan for implementing the chosen reform model. This implementation plan specified that there would be four new government institutions, three permanent and one temporary, to aid in changing the power and authority within the system:

- Supreme Education Council. A permanent institution representing the "end users" of the education system (such as employers and higher education) and responsible for setting national education policy.
- Education Institute. A permanent institution responsible for overseeing the new, Independent schools and allocating resources to them; developing national curriculum standards in Arabic, mathematics, science, and English; and developing teacher training programs to ensure a supply of qualified teachers for the new schools.
- Evaluation Institute. A permanent institution responsible for monitoring student and school performance in both Ministry and Independent schools; designing and administering national tests and surveys of students, teachers, parents, and principals; producing annual "school report cards"; and operating the national education data system.
- Implementation Team. A temporary institution responsible for helping to establish the other institutions and performing oversight, coordination, and advisory functions during the transition to the new system.

As illustrated in the figure (next page), the new system was designed 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

Organization of Qatar's Education System



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.

Implementing the New System

The Qataris began implementing the reform in 2002, once the Supreme Education Council and the Institutes were established by Qatari law.

Achievements

What was achieved in just a few years was remarkable:

- Standards. Qatar now possesses curriculum standards in Arabic, mathematics, science, and English for all 12 grades—and these standards are comparable to the highest in the world. Of particular note are the new standards for the study of Arabic, which stress practical language skills using texts from a wide variety of sources.
- Tests and surveys. 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 as part of the ongoing accountability system. The tests are the first standardized measures of student learning available in the Arabic language.
- **Independent schools.** Potential school operators responded enthusiastically to the call to open the new 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, and in 2006, 13 more opened.

Challenges

As is usual in a reform this ambitious and rapid, there were challenges. Since Qatar has a small population, staff and contractors had to be recruited from around the world to fill specialized positions. Foreign experts brought needed experience but sometimes found it difficult to collaborate across culture, distance, and time to implement the reform's many programs.

The wide scope of the reform created additional challenges. One ongoing, key challenge has been 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 stakeholders in the education system.

Recommendations

As members of the team that supported these efforts over four years, RAND researchers developed insight into what worked, what did not work, and why. Based on their experiences in Qatar, as well as a more general knowledge of reform efforts elsewhere, the RAND team offered four recommendations for strengthening the reform as it moves forward:

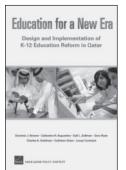
- Build more local capacity to manage the reform. Increased expertise is needed in Qatar's teaching workforce and among the Institutes' staff. Non-Qatari specialists are likely to be required in the future, but it is important that they find the means to transfer knowledge to Qataris to build local human resources.
- Continue to promote the principles of the reform. The four principles of the reform—autonomy, accountability, variety, and choice—are new to education systems in this region and thus need to be widely promoted and developed within the Supreme Education Council, the Education and Evaluation Institutes, and the schools. It is particularly important to reinforce the principles of decentralized autonomy and accountability for results.
- 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 and should provide ongoing support to school operators as they develop 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 ensure employment for most Qataris. These broader policies must be aligned with the leadership's modernization objectives if the country is to achieve its vision.

As a result of the K–12 reform, some of Qatar's children are now 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.

Some of the principles of this new reform are already spreading 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. Also, the Secretary General of the Gulf Cooperation Council praised Qatar's initiative, especially its curriculum standards. Since these 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. •



This research brief describes work done within RAND Education under the auspices of the RAND-Qatar Policy Institute documented in Education for a New Era: Design and Implementation of K–12 Education Reform in Qatar, by Dominic J. Brewer, Catherine H. Augustine, Gail L. Zellman, Gery Ryan, Charles A. Goldman, Cathleen Stasz, and Louay Constant, MG-548-QATAR, 2007, 216 pp., \$30.00 (available at http://www.rand.org/pubs/monographs/MG548/), ISBN: 978-0-8330-4007-7. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.

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