

Positive attitudes towards mathematics and science, school environment, and curriculum increase students' achievement

As a part of Qatar's effort to ensure that its children are equipped with the knowledge and skills they need to fully participate in an increasingly competitive global economy, the nation has for the first time participated in a series of international educational assessments. Among the examinations is the Trends in Mathematics and Science Study (TIMSS), the results of which were released by the International Association for the Evaluation of Educational Achievement in December 2008. Qatar was one of sixty-eight countries, including 15 Arab states that participated in the tests.

TIMSS is one of the world's most influential global assessments of student achievement in math and science. The examinations were administered for the first time in Qatar in March 2007 to more than 14,000 Qatari students in fourth and eighth grades. Students from 181 Independent, Ministry of Education and private schools sat

for the tests. The study includes a direct assessment of student skills, a student background questionnaire, a teacher questionnaire and a school questionnaire completed by principals.

The Evaluation Institute of the Supreme Education Council (SEC) released *"The TIMSS 2007 Study in*

Qatar: A Summary of Key Findings and Options for policy and Further Study" in December in conjunction with the international release. The report shows that Qatar's average proficiencies in mathematics and science rank among the lowest of participating countries. A majority of Qatar's students are classified at proficiency level one (lowest level),

and only a small percentage have skills that are sufficiently advanced to place them at level three or above in either of the two skill domains.

“The TIMSS results are similar to the results of the Qatar Comprehensive Educational Assessment (QCEA) tests that indicate low performance in both science and mathematics,” said Adel Al Sayed, the director of the Evaluation Institute. “The TIMSS 2007 provides baseline measures of mathematics and science skill and knowledge for fourth- and eighth-grade students in Qatar.”

While the scores are lower than what many in Qatar may have hoped, they were anticipated. The results underscore the urgency of the Education for a New Era initiative for the future of our country’s children and growing workforce.

There is also a reason for optimism: most of the elements are already in place to ensure a rapid and sustained improvement of student achievement over the coming decades.

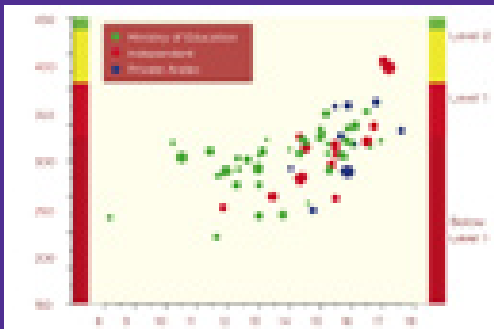
“The essential educational foundations, such as adequately-equipped school buildings, modern and demanding standards, curricula and textbooks, teacher qualifications, state of the art standardized assessment system, and committed financial resources, are generally on par with or even better than those typically seen in the most advanced economies,” said Mr. Al Sayed. “Moreover, we possess three major assets - adequate resources, an ambitious vision, and sheer political determination to succeed - that can ensure school improvement and accelerate development, so Qatari students can reap the benefits and improve their performance on future exams.”

2007 Progress In Reading Literacy Study (PIRLS) and the OECD PISA assessment represents an important, complementary step in building the knowledge base needed to drive the education development.

The report also indicates that students at some schools in Qatar are already achieving significantly higher levels of knowledge and skills than other schools. These findings can help frame and focus teacher training, so the teachers, themselves, feel empowered to drive educational development.

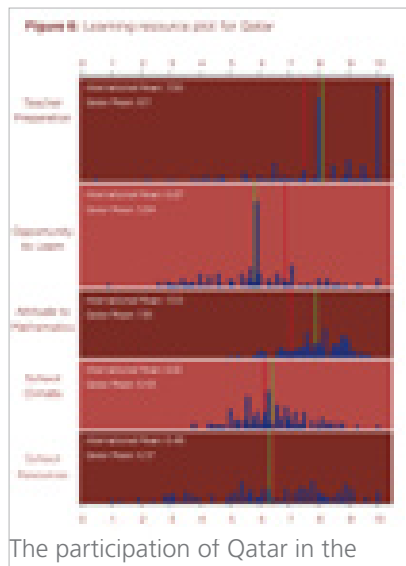
The international release accompanying the TIMSS results highlighted a number of the following key findings:

- Students with more positive attitudes towards mathematics and science, school environment, and curriculum performed better on the exams. Students who reported speaking the language of the test at home also had higher scores.
- At the Eighth Grade level, higher levels of parental education and the presence of books, computers and Internet access in the home were associated with higher mathematics and science achievements.
- Achievement was highest among students who attended schools that reported few attendance problems, few shortages or inadequate resources.
- There was a positive association between achievement and students’ perception of being safe in school.
- At both the Fourth and Eighth Grade levels, achievement was highest when principals and teachers had a positive view of the school climate, including high levels of teacher job satisfaction, high expectations for student achievement and parental support.



At the fourth-grade level, all Arab countries including Qatar are classified at level one - the lowest level - in mathematics. Hong Kong SAR and Singapore were the top performing countries followed by Chinese Taipei and Japan. In mathematics achievement at the eighth grade level, only three Arab countries – Lebanon, Jordan, and Tunisia - achieved level two, while students from Chinese Taipei, Korea, Singapore, and Hong Kong SAR were the top performers.

Arab countries did not achieve any level in science achievement at the fourth grade level. Qatar was one of 11 Arab countries to achieve the second achievement in eighth grade science. Singapore and Chinese Taipei scored the highest average achievement followed by Japan, Korea, and England.



Positive reflection of schools in Qatar according to annual report



A majority of parents reported being satisfied with their involvement in school decisions, mirroring student opinion. The highest level of satisfaction occurred at the primary school level

The Evaluation Institute of the Supreme Education Council (SEC) recently released its fourth annual Schools and Schooling in Qatar report 2007 - 08, which provides an objective snapshot of the state of Qatar's schools. The report's data helps the SEC and school operators identify overall strengths and weaknesses and track progress over time. This year's report also utilizes comparative data, examining selected indicators from 2004 through 2008.

The report is broad, covering a variety of educational parameters. It includes survey results from students, parents, teachers and principals and examines attitudes toward school governance, leadership, services and facilities, educational provisions and approaches, teaching practices, assessment methods, homework, and student achievement. It also includes information on student attitudes and behavior, parent interactions and involvement, and parent and student satisfaction.

"This statistical compendium is designed to provide those who are involved in, and others who are interested in, school education in Qatar with an array of summary

information about Qatar's schools, principals, its students and their parents," said Mr. Adel Al Sayed, the director of the Evaluation Institute. "The information is extensive, but informative in nature. It allows for the identification of similarities and differences between the stages and types of schools operating in Qatar. This year's report also provides some data on additional aspects and, for the first time, contains illustrative graphics ."

In all, the report includes data summarized from 299 schools, 14,970 teachers and 151,050 students in Independent, Ministry of Education, and private Arabic schools at different stages of the learning

process (primary, secondary and preparatory) in Qatar.

"Overall, the picture is not entirely positive but there is room for improvement in certain areas," said Dr Yousuf Al Mulla, Principal Evaluation Officer (Analysis & Reporting) in the School Evaluation Office at the Evaluation Institute. "The important issue is that data such as these help us identify areas of strengths and weakness, and allow us to chart our progress and identify any changes that are occurring over time. The release of such information illustrates Qatar's commitment to transparency, accountability and improvement in education."

The findings include:

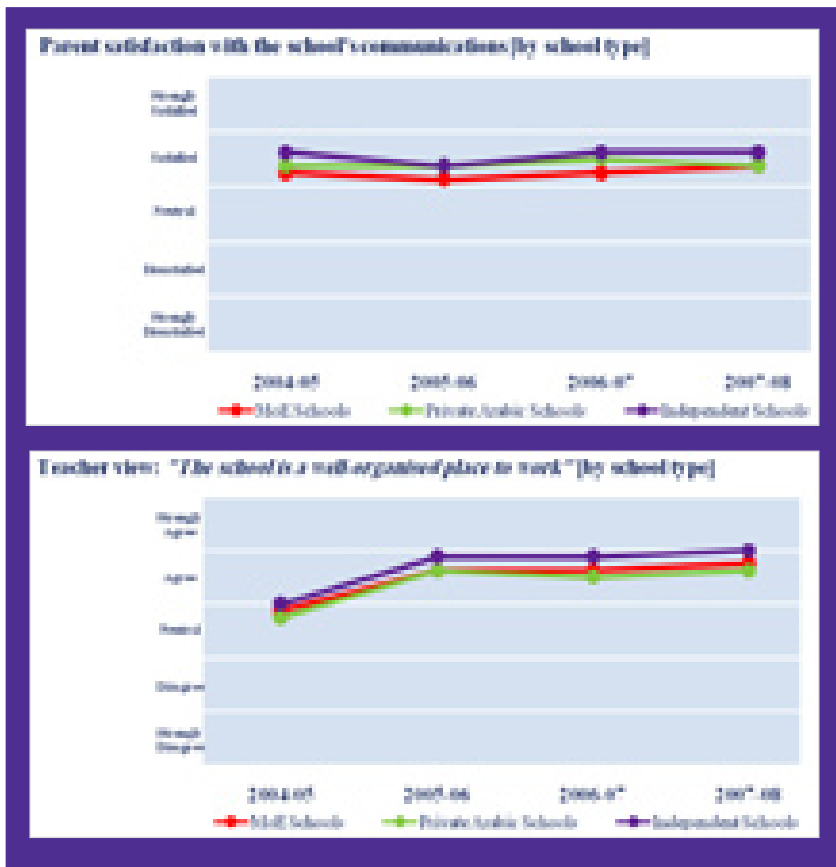
- A significant majority of principals (80 percent) express satisfaction with their level of autonomy; this maintains similar levels to the prior two years, much higher than those expressed in 2004 - 05.
- Well over half of principals surveyed (63 percent) indicated that they had undertaken professional development during the 2007 - 08 school year. A sizable majority of Independent school principals - 89 percent - had undertaken professional development in 2007 - 08.
- Eighty-two percent of parents expressed satisfaction with the education offered by the schools with satisfaction being at similar levels to that of previous years.
- Absenteeism continues to be high. Students reported being absent from school on about 13 percent of school days.
- Eighty-three percent of parents were pleased with schools' maintenance of good discipline and order, similar to levels from 2004 to 2008.
- A majority of parents reported being satisfied with their involvement in school decisions, mirroring student opinion. The highest level of satisfaction occurred at the primary school level.
- Parents' satisfaction with school communication has improved, with 68 percent expressing satisfaction. Parents of children attending Independent schools reported higher rates of satisfaction than their counterparts from Private Arabic and

Ministry of Education schools.

- Similarly, a substantial majority of parents 80 percent reported that they felt their child enjoyed school. Sixty-six percent of children indicated that they enjoyed school. Student enjoyment levels were substantially higher in primary schools than in preparatory schools, which were higher than in secondary schools.

- The amount of time spent on professional development by teachers continues to increase with an average of 42.5 hours spent on professional development in the 2007 - 08 , compared to 39.1 hours, 29.8 hours and 8.3 hours reportedly spent in 2004 -2005 and 2006 - 07 respectively. As with previous years, the teachers in Independent school report by far the greatest amount of time spent on professional development.

- Slightly more than half of teachers (55 percent) surveyed said they feel their opinion is valued within school decision-making; this proportion is slightly higher than in the previous two school years.



Other educational aspects assessed include school governance structures, within-school relationships, school facilities, school services and activities, class and school structures, computers and computing, assessment practices and uses of assessment information.