

سائل ثم يتقلص مرة أخرى في شكل خلد
الفراشة طعامها. وتفضل الفراش رحيق
بعض الفراش على السوائل الموجودة في
الأشجار وهي تفضل تناول طعامها في ضوء
الهواء الطلق.



المتبع للأمر يعتقد أنه لا توجد حياة بهذا الكيس نسبة لعدم
وجود حركة ولكن على عكس ذلك فإن عملية التغيير من
مرحلة الحشرة إلى مرحلة الفراشة تتم في هذا الطور، وعلى
ذلك الكيس. والفراشة لا تأكل، وبدلاً عن ذلك تعتمد في
الحصول



وتتم
ب
الشتا



من المراحل الحياتية التي تمر بها الحشرات
مجموعة ذوات الأجنحة القوية
من الفراش عدد هائل من الحواس
جميلة وألوان ناصعة. وقد اكتسب الفرا
هذه الحراشف. وككافة الحشرات، للفراش
جسمها إلى ثلاثة أجزاء هي الرأس والصد
ي استشعار و هيكل عظمي.

فراشة هي مرحلة من المراحل الحياتية التي
التي تنتمي إلى مجموعة ذوات الأجنحة
أجنحة هذا نوع من الفراش عدد هائل من
المصطفة في أشكال جميلة وألوان ناصعة. و
جماله من أشكال هذه الحراشف. وككافة
سته أرجل وينقسم جسمها إلى ثلاثة أجزاء
والبطن ولديها قرني استشعار و هيكل ع
حياة الفراشة على المراحل الحياتية من ال
وتمر الفراشة بمراحل تسمى الانسلاخ. وه

دورة حياة الفراشة



Education for a New Era A Brief Outline on Reform Policy

Change is everywhere in Qatar. From sparkling new buildings that seem to appear overnight to thousands of first-time visitors from all over the world, the country is alive with innovation and fresh ideas. The world is watching Qatar's unprecedented political, social, and economic reform. Everybody is benefiting, but the smallest citizens are poised to gain the most from reform. Children are a country's most vital resource; the future leaders who will continue Qatar's transformation throughout the 21st century.

الفراشة
الفراشة
غير في
ة بأربعة
الأولى ه
ألوان ور
وتبيض
نبات الت
ة الفراش
جل غير
ت لكي
حي الغلي
طرح حي
رح قبل

In 2001, the State of Qatar declared education reform a national priority and launched a comprehensive education reform initiative.

It sought sustainable, Qatari-driven change that models and instills the highest civic ideals of cooperation, reciprocal respect, and popular participation.

The government envisioned an education system that:

- Makes classrooms exciting places to learn
- Encourages all students to make the most of their talents
- Holds schools measurably accountable to high performance standards
- Involves and is responsible to parents
- Graduates young men and women who are in demand with universities and businesses – at home and abroad
- Nourishes faith, values, and national aspirations

The centerpiece of the reform would be new government-funded Independent Schools. These schools, run by operators under contract to the Supreme Education Council, would determine their own teaching philosophy and methods – and hire their own staff, as long as the schools meet rigorous curriculum standards in Arabic, English, mathematics, and science. The government is determined to offer a variety of school alternatives, but to maintain consistent performance standards. In the future, parents would have the freedom to choose the schools that best suit the needs of their child.

The dream is already reality. In September, 2004, Qatar opened the first of 12 Independent Schools. Today children are learning at more

than 30 such schools throughout Qatar. In these classrooms, students don't merely memorize information and listen to teachers read aloud from textbooks. Through hands-on-learning, debate and lively discussion, they are learning to be creative and critical thinkers.

Classrooms and hallways are full of energy, purpose, and the joy of learning. Parents know they are partners in their children's education. And teachers and administrators are collaborating in new ways—from choosing textbooks to making joint budgeting decisions. The State of Qatar has established four new organizations to oversee education reform, help it grow, and objectively monitor its progress—

The Supreme Education Council is Qatar's leading authority on education policy and is responsible for setting broad and comprehensive goals for the school system.

The Education Institute directly oversees the Independent Schools and supports them in a variety of ways — from drafting curriculum standards to encouraging "best practices" through professional development programs for teachers.

The Evaluation Institute develops and conducts periodic, standardized assessments of student learning, monitors student progress, and evaluates school performance.

The Higher Education Institute advises individuals about career options and opportunities for higher education in Qatar and abroad, and administers scholarships and grants for further study.

In addition to Independent Schools, the cornerstone of reform, other key elements of K-12 education reform include:

Curriculum Standards

Curriculum standards are the academic goals and expectations for each grade level – what students should know and understand.

The Education Institute has developed curriculum standards in four subjects: Arabic, English, mathematics and science. These standards are internationally benchmarked, based on academic expectations of countries where students achieve at high levels.

For example, first graders studying science should be able to collect and classify simple sets of data; they might be asked to group, identify, and label pictures of native animals and plants.

Provided they adhere to curriculum standards, Independent School administrators have considerable latitude in determining how teachers help their students learn, with the freedom of using any materials and learning resources.

Each student's mastery of the knowledge, concepts and skills established in the curriculum standards will be evaluated through mandatory annual assessments. In fact, in the spring of 2004, 80,000 Qatari students participated in the first-ever assessment – four different tests in Arabic, English, mathematics, and science. Assessments are not intended for determining promotion or graduation. Rather, the assessment provides educators, parents, and the government with a clear picture of educational progress.

Parental involvement is crucial to education reform

Student Assessment

Periodic assessments are the best way to ensure that students are learning. Starting in Spring 2004, all students enrolled in all public and private Arabic schools took an annual series of standardized tests, the Qatar Comprehensive Educational Assessment. These tests assess and monitor the learning of students in grades 1 through 12 in Arabic, English, mathematics and science. The unique Assessment differs from the high school seniors' national exit exam and other tests currently administered in Qatar. It uses a multiple choice format and, for some grades, an additional essay format. Other formats may be developed for future tests. Student test scores are essential to the Evaluation Institute's ability to measure student progress and school performance. The Assessment will not be used to determine promotion or graduation. In addition to providing vital feedback to schools and teachers to improve student learning, annual assessments will help parents make informed and thoughtful decisions about the education of their children.

School Evaluation

The Evaluation Institute is also responsible for another massive project: ensuring that schools are accountable for providing quality education. This involves a program of surveys seeking the views on Qatari education of principals, teachers, social workers, parents and students.

The Evaluation Institute's School Evaluation Office has responsibility for designing, implementing and overseeing processes for evaluating all public and private Arabic schools in Qatar. Data is obtained from many sources including students, parents, teachers, principals, school social

workers and school reports, as well as information independently obtained by Evaluation Institute staff during school visits. This data is analyzed and evaluated as part of a report on the overall performance of schools, individually and collectively.

On an annual basis, the Evaluation Institute will publish a school report card with comprehensive information about each school's performance and characteristics, as well as collective tests scores of the students at each school. This information will allow review and comparison of each school's accomplishments and student performance, as an indication of the quality of teaching and the level of learning at each institution. These report cards will be available to the public online.

Professional Development

Teachers are at the core of education reform. The new Independent Schools will rely on classroom leaders who possess a deep understanding of subject matter, employ proven techniques in contemporary teaching, and can motivate students to perform to their highest potential. Each Independent School will have the freedom to hire its own staff.

To support Independent School teachers in their professional growth and development, the Education Institute offers a variety of teacher training programs. Topics being addressed include "best practices" for teaching the new curriculum standards, preparing students for annual assessments, and the special needs of new teachers. There are also programs designed to enhance the skills and knowledge of experienced teachers, who may then be invited to develop coursework, lead training, mentor new teachers, and become master teachers.

Data Collection and Management

Data collection and dissemination are crucial to successful education reform. Data can be used to track progress of individual children, aid parents in making appropriate school choices, identify weaknesses and strengths of schools, improve programs and teaching methods, and evaluate school quality and the overall educational system. The Evaluation Institute is responsible for all data collection, while the Qatar National Education Database System will serve as the "data warehouse" for storing, analyzing and disseminating collected data from tests and surveys. To make sure documents and information remain confidential, the Institute's Data Collection and Management Office is constructing a secure production center with facilities for printing and document storage.

All Qataris have a stake in reform

One of the major goals of reform is to better engage parents in the education of their children. For the first time, Independent Schools have elected boards of trustees, composed of parents and other members of the community, to help oversee and provide support to these schools. Parents and other community members now have a say in all aspects of school policy.

Although Qatar's historic K-12 education reform is still in its infancy, the government is proud of the progress made so far and impressed with the energy and enthusiasm that infuse how children learn at Independent Schools. Qatar remains convinced that the creative and critical thinking skills embedded in students' curriculum will engender intellectual curiosity, solid decision-making, and confidence to last a lifetime.