Developing



BACK IN THE EARLY 1980s, young men like Mostafa Khattab could expect great things from the publicly sponsored universities in Egypt. Although his father was a train engineer, he had four siblings and he came from a middle-class Cairo family, Khattab studied for free at Helwan University, won government money for his high grades, graduated in 1983 with an engineering degree, immediately landed a teaching job, earned a Ph.D. in the United States and now teaches at Colorado State University.

Khattab is the product of a quality of instruction that was once the hallmark of higher education in Egypt. Today, more than two decades later, very few university students in the country get to experience the same trajectory.

Similar other developing regions of the Middle East, Egypt has governmentsponsored universities that are crammed, a dwindling supply of quality professors at affordable colleges, courses that fail to address the influx of private companies into the economy and their demand for graduates trained in many disciplines, and students who graduate without the skills needed to land a steady job. The result is high unemployment, young adults who buy their first homes and start their families later in life, and others who resort to the extreme religious fanaticism by which an entire population is sometimes stereotyped.

"I understand what the students in Egypt are missing today," says Khattab, assistant head of Colorado State's College of Applied Human Sciences. "I recognize the value of higher education in Egypt, and I can see it's not taking place anymore."

According to a 2005 World Economic Forum survey, "an inadequately educated workforce consistently ranked among the most glaring obstacles to doing business in the Middle East and North Africa."

"There is little indication that the region will make up the 80 million to 90 million new jobs that will be required over the next two decades," states the report from the Forum, which placed the remedy in large part on the shoulders of the region's higher education institutions. With "new education initiatives, better inter-generational dialogue, and innovative technologies, the youth of today can become the region's civic-minded leaders of tomorrow."

Whether the educational system is up to that challenge remains to be seen.

EDITOR'S NOTE: This feature article is the first in an occasional series on higher education trends in developing regions around the globe.

OPPORTUNITY IN THE MIDDLE EAST

Nations across the Middle East strive to improve their higher education systems so university graduates can be successful in today's global economy.

BY DANA WILKIE





Economic Disconnect

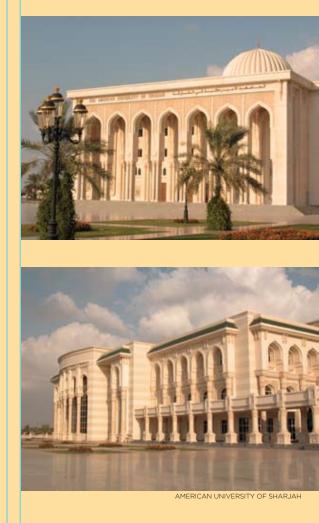
According to the same Forum survey, more than half the Arab world is under 18 years of age, and over one-third is under 13, a demographic that poses tremendous challenges for the region's educational system.

Enrollment levels increasingly exceed the capacity of the public university departments. As a result, students frequently cannot even find a seat in their classes, which are typically taught by overtaxed professors with little time for research or scholarship. Many students attend classes only to take the required exams, often participate in lectures with limited, if any, applied experience and have little opportunity to work on projects, participate in team efforts or engage in university-offered extracurricular activities. University libraries tend to lack resources and to have outdated laboratories, while university administrators lack autonomy, with most institutions directly controlled by the regime of the particular country.

Moreover, higher education in the Middle East has been dominated more than most parts of the world by rote learning and little emphasis on writing, analysis, or discussion.

While there is a new appreciation for the need to teach critical thinking and communication skills, programs that cultivate research skills, transparency, and individualized and creative approaches to problem-solving are "still viewed with considerable suspicion, especially by national governments," said Gordon Brent Ingram, who is associate dean for environmental projects at George Mason University and who has worked on international higher education projects for 20 years. Majors are often chosen by families, not by individuals, and are based on economics and social values.

"Most of the students have been trained to take notes and memorize," said William Heidcamp, dean of the College of Arts Various sites from the American University of Sharjah campus in the United Arab Emirates, from top: classrooms and offices, main building, and library



"The kids and teens in the Middle East are exactly the same as in the United States," said Mastafa Khattab, assistant head of Colorado College's College of Applied Human Sciences.

and Sciences at the American University of Sharjah in the United Arab Emirates. "They are very pragmatic and... are impatient with things like reading and writing. They see their task as getting the diploma that gets them the (job) that their family has planned for them. This can make it difficult in a more traditional liberal arts program such as the one I lead."

As such, students graduate with limited computer and other technology related experience, with little internship or service learning experience. A significant number of students also graduate lacking sufficient knowledge and skills in their field of study to secure a related job.

"This is a major competitiveness challenge for the (region) as it seeks higher economic growth and aggressively pursues policies to attract foreign investment and increase export levels," said Elizabeth B. Khalifa, regional director of the Middle East and North Africa Regional Office for the Center for Leadership Excellence at the Institute of International Education in Cairo. "In varying degrees, this trend exists across the region and is expressed by government and private sector stakeholders as an imperative area of reform."

Khattab further noted, "Building a relationship between the material being taught and the future is just not there. Some of the companies that work in the Middle East, they actually bring students from overseas, so they're not really taking advantage of students here. They hire those who understand multidisciplinary issues. Students in Egypt may be highly educated in their [area of] expertise, but they aren't trained as multidisciplinary graduates who can address the company's needs today."

To address unemployment in the region by better matching regional companies with the skilled workers they need, the Forum suggested that existing education programs be overhauled to incorporate private sector input and vocational training. It suggested benchmarks for achievement, peer-to-peer counseling initiatives and "second-chance" safety nets so that "every student has ample opportunity to learn and develop vocational skills." Finally, it recommended the encouragement of critical thinking and dissenting viewpoints, and suggested that Arab societies stop stifling creative and entrepreneurial impulses among young people.

Such changes are critical, Colorado State's Khattab said, if the region hopes to steer disillusioned youths away from nonproductive distractions, including religious extremism by which an entire culture has come to be defined.

"The kids and teens in the Middle East are exactly the same as in the United States," he said. "The only difference is that people there graduate from universities, find no jobs, no opportunity... and you end up with someone with extreme views that pulls you to his or her side."

Egypt

Khattab's native Egypt recorded an overall unemployment rate of 9.2 percent in 2001, with a youth unemployment rate of 25.8 percent. Unemployment is as high as 43.8 percent among young females.

During the elections of 2005, President Mubarak named unemployment as one of his major concerns in this presidency term, and he promised to create 4.5 million jobs for youth in six years. Public universities are under government administration, and public higher education is free for Egyptian students, who pay only nominal registration fees. There are 17 public universities. Almost all the public universities provide rented accommodations, although the majority of local students live in their parents' homes, in marked contrast to U.S. schools.

In 2004 the Egyptian government announced its plan to create new public universities by splitting multi-branch schools such as Cairo University and Tanta University, to allow the expansion of neglected smaller rural branches and to provide space for increasing numbers of students.

Before 1996 only two private foreign institutions were established—the American University in Cairo and the Arab Academy. New Egyptian private universities were established beginning in 1996. They are accredited by the Egyptian Supreme Council of Universities every three years, and by foreign educational bodies in the United States and Europe. There are currently 19 such universities, where tuition and fees range from \$1,000 to \$5,000 per semester.

But in a nation where the average income of 40 percent of the populace is about \$2 a day, private education is often not an option. As a result, Khattab worries about the inability of the nation's public education system to meet the enormous student demand.

"The culture in Egypt values higher education," he said. "They push everybody to receive a degree from the university. So you have a large number of students, but you don't have enough institutions that can absorb the students."

Moreover, he said, the quality of a public-university education is suffering as professors are lured away by higher paying jobs at private schools.

"You have now a competition between government-run higher education institutions and private institutions that hire the best qualified faculty," he said.

Several reforms are being studied, including canceling the free tuition rule for Egyptian students in public universities. In the meantime, there are efforts such as President Bush's Middle East Partnership Initiative (MEPI), an effort to support economic, political, and educational reforms in the Middle East and to expand opportunities for the region's people, especially women and youth. Grants from the program fund partnerships between U.S. and Arab universities, with the goal of improving the quality of instruction, research and materials, and enhancing Arab universities' administration and management.

Khattab was principal investigator on such a collaboration between Colorado State and Helwan University to develop online courses integrating business administration and engineering education. This August, he will begin another collaboration with a \$320,000 university scholarship that brings Egyptian students to Colorado State to study for their master's in construction management. The students will serve as teaching assistants, work at a construction company, and hopefully return to Egypt with the sort of practical, multidisciplinary training sorely missing in their own nation.

A similar MEPI-funded effort is underway between Virginia Polytechnic Institute and State University and Egypt's Arab Academy for Science and Technology to build capacity in information and communication technology in computer-related courses.

The World Economic Forum has also launched the Egypt Education Initiative, whose first phase is designed to benefit 820,000 children in 2,000 schools and more than 300 colleges. The initiative, launched last May, is a public-private partnership that aims to improve education in Egypt through information and communication technologies.

Finally, the Center for Egyptian Business Entrepreneurship is being established within Egypt's Arab Academy of Science Technology and Maritime Transport. It aims to show Egyptian youth how to start their own businesses by using tutorials, case studies and guest speakers from local businesses. The first year of the project started last fall.

Turkey

A Muslim country of nearly 70 million, Turkey has experienced inflation shock and turmoil in its financial markets, making the nation vulnerable to an economic crisis that has translated into strapped funds for public universities struggling to accommodate immense demand for higher education.

The Turkish higher education system includes 68 state and 25 nonprofit private universities, with a total enrollment of 2.3 million students and almost 85,000 academic staff. About a third of students are in distance education programs. Female students account for 42 percent of the total enrollment in Turkish higher education. Women account for 39 percent of the academic staff and 27 percent of those at the full professor level, which is one of the highest percentages in the world.

The pressure on the Turkish higher education system is immense, as participation in primary and secondary education is constantly on the rise, and a steady movement of people from the country to the city translates into a steady number of young adults seeking a college degree. In 2005 1.9 million high school graduates applied for a place in higher education. Only 401,937 could be admitted to the two- and four-year full-time programs.

With enrollment in private universities only about 4.6 percent, state universities are expected to shoulder the responsibility of



educating the vast majority of young adults in Turkey. Yet public funding has its drawbacks in a nation now suffering under economic crisis: Teacher to student ratios are high, with the ratio of instructors holding doctorates to full-time bachelor's level students at 1:32, and the ratio of lecturing academic staff to these students at 1:81; public schools are constrained by state rules on how they can spend money; and nominal student tuition fees are spent mostly, not on education, but on subsidized meals, lodging, medical services, and extracurricular activities for students.

"The biggest challenge faced by students is at the entry level, where there is fierce competition for places in the more prestigious universities," said Kemal Gürüz, former president of the Turkish Council of Higher Education and a former fellow at the Weatherhead Center for International Affairs at Harvard University. "The admission system, which gives little credit to high school performance, has led to a phenomenal growth of private coaching and absenteeism in high schools. Students thus come to higher education having spent considerable sums for private coaching, yet mostly lacking the intellectual skills that are the pillars of world-class higher education."

The biggest challenges Turkish university administrators face include maintaining international-level teaching quality and research in the face of increasing student numbers and decreasing financial resources. The national research and development system has not fully evolved into a national innovation system that has the capacity to contribute to the competitiveness of the Turkish economy in the global knowledge economy.

Some are urging the government to give state universities more freedom in how they spend public money so they might better compete with private institutions, while advocating for more precise academic assessments that might help consumers better weigh the choices between public and private schools. Others believe educa-

Jordan requires students graduating at the top of their class to apply to U.S. graduate schools, and to attend on university scholarships if accepted. There are now 800 Jordanian students studying abroad, the majority in the United States, the United Kingdom, or Australia, primarily in science, engineering, and medicine.

tional systems in Turkey must move toward a more "entrepreneurial" model, which could lead to higher tuition fees, a more international student body and greater resources for research and development.

"The Turkish Constitution explicitly bans for-profit higher education," notes Gürüz. "Yet, (American for-profit providers are) trying to enter the lucrative Turkish market by circumventing this requirement. This is causing resentment even in persons like myself, who are in principle not opposed to for-profit higher education, and are advocates of American higher education."

Jordan

The Hashemite Kingdom of Jordan is a nation with nearly 5 million people, one in 10 of them illiterate and nearly one of every eight living below the national poverty level.

The country's community colleges offer two- or three-year programs in areas that tend toward practical fields such as education, computer studies, pharmacology, hotel management, interior design, social work, and nursing.

The Al-Balqa Applied University supervises about 45 community colleges. There are 23 universities in Jordan, 10 of them public and 13 of them private, and another three private university colleges.

The nation requires students graduating at the top of their class



Middle East Tech University

to apply to U.S. graduate schools, and to attend on university scholarships if accepted. There are now 800 Jordanian students studying abroad, the majority in the United States, the United Kingdom, or Australia, primarily in science, engineering, and medicine.

Private institutions began taking root in the 1990s in part to accommodate the increasing demand for higher education—a demand public universities are not able to meet thanks to limited financing. There are now 200,000 students in Jordan's higher education system, with the vast majority in public university programs and some 60,000 in private schools.

Perhaps the greatest fallout from this enrollment demand has been a degradation of education quality, with crowded classrooms, high fees for evening programs, a dearth of research being conducted by faculty and a saturation in the sociology, psychology, history and philosophy disciplines, with students in these studies unable to land jobs after graduation, according to Khaled Toukan, minister of education for the Hashemite Kingdom of Jordan.

The influx of international universities has helped somewhat, as has a new emphasis on computer skills, with education authorities aiming to make Jordan an IT hub for the Middle East. While private institutions have helped accommodate the increasing demand, they are also profit-making ventures that the government eyes with some suspicion. As a result, the government of Jordan is requiring strict accreditation, quality assurance rules and more testing and evaluation in such establishments.

"The overall approach to education in Jordan is to transform programs and practices for teaching and learning supported by reform of the management of the general education system to produce graduates with the skills necessary to be successful in a knowledgebased economy," said Toukan.

The nation is collaborating with the Educational Testing Service (ETS) in the United States, adopting the latter's measurement field tests and subjecting students to these tests in the areas of computer science, computer engineering, physics, chemistry, biology, mathematics, pharmacy, and business.

In addition, the Jordan Ministry of Education last year launched the National Education Strategy, a \$500 million program that aims to train young Jordanians from their early school years with the knowledge and skills necessary for competing in the global economy. And this past September, the government passed a law collecting one percent of the profits of public and private shareholding companies and channeling the money into a fund to stimulate higher education research and development. Not participating in the knowledge revolution presents a risk to the region for being further marginalized. As the knowledge gap between developed and developing economies widens, the potential for successfully competing in the global economy shrinks."

Rankings

Research from the World Economic Forum published last October ranked 125 countries according to how well their education systems prepared residents for the new economy. Using a scale of one to seven, with one meaning the country does not meet the needs of a competitive economy and seven meaning it does, the Forum found that Jordan ranked 44 with a score of 4.0; Turkey ranked 43 with a score of 3.2; and Egypt ranked 104 with a score of 2.7. By comparison, the United States ranked No. 15 with a score of 5.0, with Finland and Singapore vying for the No. 1 spot with scores of 6.0.

When considering the quality of math and science education, the forum found that Jordan and Turkey ranked 56 and 57, respectively, with scores of 4.3; while Egypt ranked 93 with a score of 3.2.

"At least some attention needs to be paid to removing the barriers that insulate the region from globalization, so that the incentive structure for educational attainments to have their greatest effect on economic and social development is in place," said World Bank official Mustapha Nabli at a 2002 "Conference on Higher Education in the Middle East and North Africa." "Not participating in the knowledge revolution presents a risk to the region for being further marginalized. As the knowledge gap between developed and developing economies widens, the potential for successfully competing in the global economy shrinks."

Religious Influence

Some suggest that a strong religious component to higher education may be preventing the globalization necessary to help translate education into a more competitive economy, with national leaders fearing that globalization could lead to cultural dissolution and the rejection of long-held values.

Most universities in the Middle East have a long history of either extreme state-control or considerable censorship that can limit the types of texts that instructors make available to students. Moreover, state governments can sometimes stop courses and degree programs that they do not approve—without much explanation.

In one country, for example, "Islamic Ideology" is a compulsory course every semester in every institution. Other schools are under the direct control or indirect influence of Islamists, who are not necessarily violent but nevertheless still incompatible with academic values "in the sense we understand them," said Gürüz.

The situation is exacerbated in Turkey by the first Islamist government in the country's history, which makes no secret of "allowing graduates of religious secondary schools access to all programs at the tertiary level, in particular law, public administration, and teacher training programs," said Gürüz, who believes education can serve humanity and contribute to civilization only when it is provided in a completely secular atmosphere.

"The religious schools... have evolved into a religious secondary stream existing in tandem with the secular one, threatening the basic tenet of the Republic," he said. "The Islamist party in power is promising an archaic concept of university autonomy based on elected rectors and deans as a carrot to lure the academics, and free access to all types of programs at the tertiary level regardless of the program followed at the secondary level to consolidate the support of its electoral base."

Women

Perhaps nowhere are the influences of religion and culture more evident than in what happens with the region's highly educated women.

A 2004 report by the World Bank—"Gender and Development in the Middle East and North Africa: Women in the Public Sphere—states that for the past decade, the region's governments have spent an average of 5.3 percent of their GDP on education, the highest allocation in the world. This investment has closed the gender gap—at least in education—with women outnumbering men in higher education institutions in several countries.

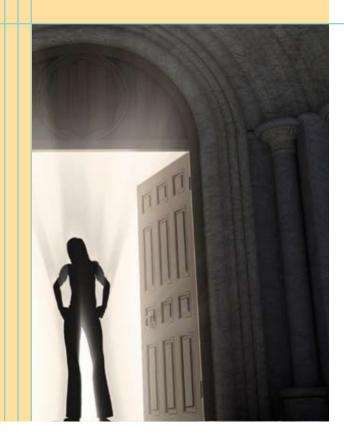
Despite this increase, the female labor force participation in the region for the year 2000 stood at 32 percent, the lowest in the world. In Egypt, no more than 23 percent of female university graduates are employed.

Experts believe much of this disconnect stems from religious and cultural norms, including the family's ambivalence about a woman's ability to combine work and family responsibilities; the tendency for female graduates to gravitate toward civil-service jobs now in high demand but diminishing; and a code of modesty that calls for the segregation of men and women, even in the workplace.

During a visit to Egypt last November, Colorado State University's Khattab met with several women studying construction management.

"Construction, even in the United States, is still a male-dominated industry," he said. "It's very difficult for a female graduating in this major, in these countries, to go to a construction site and direct a crew of mostly males."

Moreover, a growing number of young Muslim women around the world—many of them well-educated professionals—are adopting Islamic dress, covering their hair and wearing loose-fitting, modest clothing. In secularist nations such as Turkey, this has led



to the exclusion or suspension of thousands of female students from higher education.

Gürüz, who enforced the female head scarf ban during his time in office, believes that headscarves can be polarizing. The natural progression from the head scarf, he believes, is "girls sitting on one side and the boys on the other, no classes during prayer times and on Fridays... until all vestiges of the secular republic are eradicated."

Influx of U.S.-Style Universities

Post-September 11 barriers to studying abroad, as well as the enrollment pressure on the Arab region's schools, has led to a growing trend toward setting up American-style universities across the Arab world. In Qatar for example, a number of foreign universities, including the Weill Cornell Medical College—the first American medical school established overseas—have opened campuses and are attracting students from throughout the region. In Egypt, a number of private and national universities have established international exchange programs for faculty and students, and they increasingly collaborate with foreign universities for joint research and joint programs using available virtual technologies.

"In the past, it was assumed that children of the region would be sent abroad to either the United States or the United Kingdom for their university education," said Heidcamp of the American University of Sharjah. "That has become more difficult and less desirable for the families. The nation is building new schools at an amazing rate to accommodate the new interest and also appealing to the gulf region for added enrollment and diversity."

Khalifa sees this development as "critical to prepare students

for a global more competitive workplace, and also in terms of the diversity of partnerships being formed with foreign universities for exchange, research, and joint programs."

"I expect we will see increasing privatization of higher education, and expanded partnerships that internationalize specific programs or departments," she said. "We hope that this will also involve expanded opportunities for faculty and student exchange. The challenge of systematically improving the quality of higher education for all students in both private and public universities as well as the challenge of providing all students with an education that prepares them for the job markets in their countries will be harder to achieve."

Some fear the Americanization of universities will have unwelcome consequences.

"While American-type higher education is welcome, for-profit higher education is widely regarded as anathema by many, and is likely to remain so unless quality assurance mechanisms are put in place at the international and the national levels to regulate forprofit cross-border delivery," Gürüz said.

Lawrence T. Woods, professor of political science and international studies at the American University of Sharjah, acknowledges that U.S. schools can bring "new and useful ideas," but he adds that "the push to set-up for-profit U.S. campuses can feel like another form of imperialism and Americanization."

Moreover, there is some concern about the influx of Western scholars into the Middle East educational system. Western professors are sometimes unaware of the peculiar strengths, weaknesses and educational backgrounds of their Middle Eastern students, and "often the Western professor's first year here is a minor disaster as he or she learns what works and does not work," Woods said.

"A lack of understanding of how 'democracy' is different here is a problem," Woods said. "Every country in the region now has elections of some sort. This development is very recent, but does not seem to be understood by Western scholars, or is dismissed because these steps towards democracy do not look like those with which we in the West are familiar. The development of higher education in the region is a major underpinning of this democratization movement, even if the electoral process is still under development. You need an informed population able to think for itself before democracy in any form can work."

DANA WILKIE is a freelance writer in Washington, D.C. Her last article for *IE* was "Security Walls and Suicide Bombers" published in the July/August 2006 issue, which covered educational peace and conflict resolution initiatives among Israelis and Palestinians.

A full interview with Jordanian Minister of Education Khaled Toukan about the nations' higher education system was published in the January/February issue of *IE* and can be read online at **www.nafsa.org/ie**.