Education in the Middle East & North Africa: A Strategy Towards Learning for Development

April 1999

World Bank Group

Human Development

Middle East and North Africa

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Human Development Sector
Middle East & North Africa Region

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FOREWORD

Education is a cornerstone of development, the foundation on which much of economic and social well being is built. It is key to increasing economic productivity and social cohesion. By increasing the value and efficiency of their labor, it helps to raise the poor from poverty; by increasing the overall productivity and intellectual flexibility of the labor force, it helps to ensure that a country is competitive in world markets characterized by changing technologies and production methods; by increasing a child's integration with disparate social or ethnic groups early in life, it contributes significantly to nation building and interpersonal tolerance.

The past decades have seen remarkable expansions in access to basic education throughout the Middle East and North Africa. Many countries are now poised to further increase access to secondary and higher education and to effect dramatic improvements in the quality of education offered at all levels. But countries in the Middle East and North Africa face an unusual set of challenges that this report discusses.

One challenge facing countries in the Middle East and North Africa is born of the region's success over the past decades. In most countries, central governments made great efforts to extend access to basic education to all children while also dramatically expanding tuition-free post-basic education. As increasing numbers of students complete basic education, their demand for higher levels is similarly increasing. Public expenditures for education are rising exponentially and will soon be unsustainable. Creative solutions to the problems presented by the financing challenge will be needed, including allowing a greater role for the private sector, relying more on local communities for school management, and using technological solutions for delivery of higher education.

A second challenge is increasing the educational attainment of girls and women, particularly among the poor. Girls' education is probably the single most effective investment a developing country can make, whether or not women work outside the home. It creates a host of positive benefits for families including better family health and nutrition, improved birth spacing, lower infant and child mortality and morbidity, and enhanced educational attainment of children.

Countries in the Middle East and North Africa are increasingly integrated in world markets for manufactured goods. Their ability to compete in these markets and in globalizing service markets will depend on the quality of human capital they bring to the competition. Ensuring that all citizens are literate and numerate, that many possess a wide range of problem solving skills beyond that basic level, and that some have world class professional skills will require new curricula, improved teacher training programs, and pedagogic methods that encourage higher order cognitive skills. These demanding education reforms are crucial but often difficult to implement.

Building on the achievements of the past three decades, all countries in the Middle East and North Africa can use their education systems to continue developing internationally competitive human capital, extending social cohesion, and catalyzing further improvements in all aspects of social well being. This report will serve as a valuable resource to countries as they identify strategies in educational development to meet the challenges ahead.

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ACKNOWLEDGEMENTS

This regional Education Sector Strategy Note is one of six regional notes prepared as background for the Bankwide 1998 Education Sector Strategy Paper. It was prepared by the Education Team of the Middle East and North Africa Region's Human Development Group: Marlaine Lockheed (Sector Leader), Jon Avins (Human Resources Economist), Mae Chu Chang (Principal Education Specialist), Bill Darnell (Education Management Specialist), Vasilios Demetriou (Senior Implementation Specialist), Mourad Ezzine (Senior Human Resources Specialist), Patricia Maughan (Operations Officer), Beniot Millot (Principal Operations Officer), Meskerem Mulatu (Human Resources Specialist), Mari Parker (Consultant), Dung-Kim Pham (Operations Analyst), Francis Steier (Senior Education Economist), Takako Yuki (Consultant). Jane Schubert (Consultant) and Willem van Eeghen (Senior Economist, MNSED) made significant contributions, and Sue Berryman (ECSHD) and Stephen Heyneman (ECSHD) provided valuable comments. Karine Pezzani formatted the tables, graphs and many draft versions of the paper.

A draft of this paper was discussed at a regional meeting of UNICEF education officers and other experts in Muscat, Oman on May 18, 1998 and at a regional consultation meeting organized by UNESCO in Beirut, Lebanon on July 2-4, 1998. Special thanks are due to Frank Dall, Regional Advisor for UNICEF in Amman and Victor Billeh, Regional Director for UNESCO in Beirut. A revised draft version was distributed and discussed at the Mediterranean Development Forum II meeting in Marrakech, Morocco, September 3-6, 1998.

I. THE CONTEXT AND HISTORY IN WHICH THE WORLD BANK AND ITS CLIENTS OPERATE

Economic, Social and Political Background

The Middle East and North Africa (MENA) region of the World Bank comprises 19 countries[1] that abut and control key access routes to the Mediterranean, the Red Sea and Suez Canal, and the Gulf. Just 5 percent of the region's land is arable,[2] and water resources are limited. Over half of the countries in the region have significant oil reserves, with the region accounting for 31 percent of world oil production in 1997. Despite a general commonality of Islam and Arabic,[3] its constituent countries are diverse in ethnic composition, political orientation and levels of economic and social development. In the long run, given the exhaustibility of oil resources and the low and variable returns to agricultural and other raw commodities,[4] countries in the region will need to rely on strong human capital for social development and income growth.

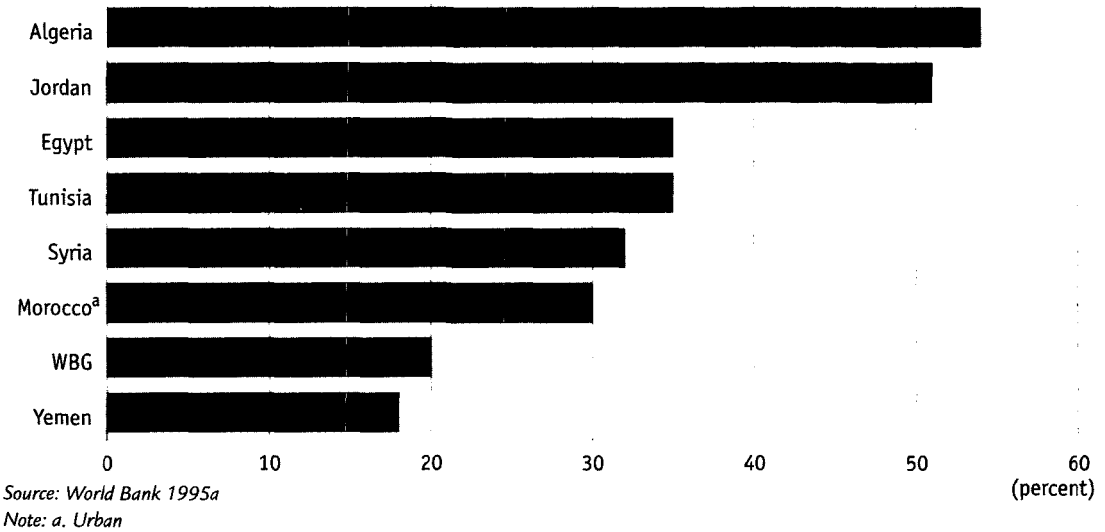
Rising oil prices in the 1970s fueled a major income boost for the oil exporters of the region. Oil wealth was used to rapidly expand social services and infrastructure, and improvements in social indicators followed. Non-oil producing countries such as Jordan, Morocco and Tunisia also benefited, chiefly by exporting skilled and semi-skilled labor to the oil producers, while Egypt and Algeria derived income from both sources. Income grew faster in MENA than in any region other than East Asia during the quarter century which began in 1960, but the boom did not benefit all and intra-regional disparities are great. Yemen's per capita income is among the lowest in the world while those of the Gulf oil producers are among the highest. The others, from Morocco on Africa's northwest corner to Iran at the gateway to central Asia, fall in the lower middle income (LMI) range. This paper focuses on the low income and LMI countries of the region.[5]

Central governments in the region have assumed a preeminent role in economic activity and social development since the early 1960s. Public revenues, expenditures and central government wages as a share of GDP are far in excess of those in other low and LMI countries — and economic competitors — such as Indonesia and Thailand.[6] Until recently, the public sector absorbed a large share of new secondary and higher education graduates, and total public employment ranged from 20 percent in Yemen to 55 percent in Algeria in the early 1990s. Parallel to their role in economic activity, Governments also assumed a dominant role in providing education services without direct costs to the recipients. This resulted in crowding out of private delivery through a lack of demand, and some consequent ossification in educational development.

The share of total private employment is considerable: while employment in the private formal sector[7] is typically smaller than in the public sector,[8] private informal sector employment is large, accounting for 30 percent of non-farm employment in Algeria, 40 percent in Egypt, 63 percent in Morocco, and 35 percent in Tunisia in the late 1980s.[9] Annual labor force growth of 3 to 4 percent from 1980 to 1995 in most countries exceeded population growth everywhere but

1. Countries included in the World Bank MENA region are: Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, the United Arab Emirates, Yemen and West Bank–Gaza.
2. Excluding the GCC countries, just over 7% of the region's land is arable, compared with 20% in the U.S., 22% in Western Europe and 38% in Eastern Europe.
3. Farsi Iran is an exception in terms of language.
4. *E.g.*, phosphates in Morocco and Jordan and natural gas in Algeria.
5. These are: Algeria, Egypt, Iran, Iraq, Jordan, Lebanon, Libya, Morocco, Syria, Tunisia, Yemen and West Bank–Gaza.
6. World Bank 1997a.
7. Usually defined as an enterprise with at least ten workers.
8. Richards and Waterbury 1996.
9. World Bank 1995a.

Figure 1 Public Sector Workers' Share of Total Employment, Early 1990s

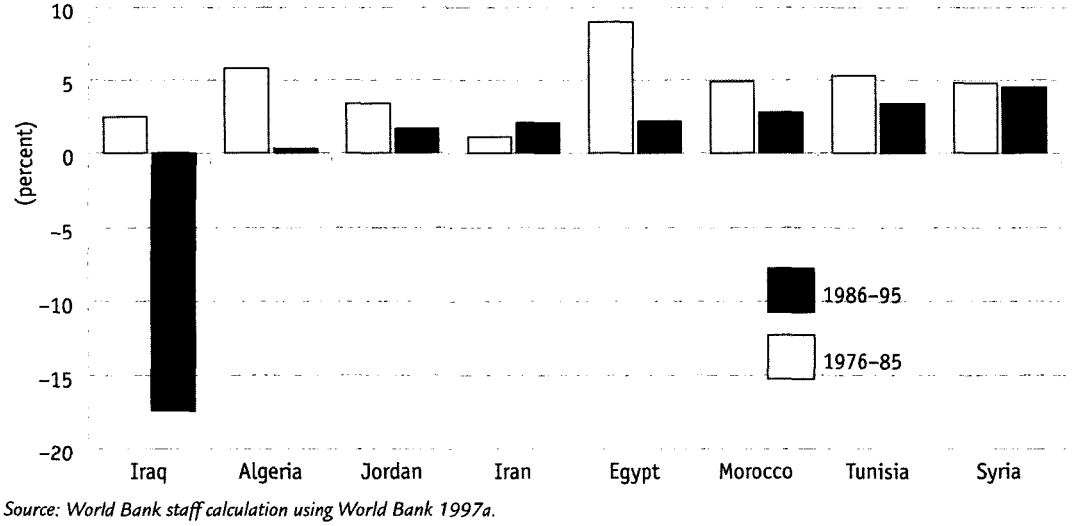


Source: World Bank 1995a
Note: a. Urban

Jordan. The proportion of female workers increased by a total of only 1 to 2 percent in most countries over the same 15 year period, except in Jordan where it jumped 6 percent.

The region faces slow growth and low employment, endemic international and civil conflict, and limited knowledge transfer capacity, all of which affect or are affected by education systems. Economic growth slowed as oil prices peaked and fell from the mid 1980s. Annual growth of 2.4 percent from 1986–95 was half that of the previous 10 years. With rapid labor force growth, regional countries have been unable to generate enough well paying jobs to absorb graduates. Through the early 1990s growth was lower than in all but Sub-Saharan Africa and crisis ridden Eastern and Central Europe.[10] Combined with rapid labor force growth, declining output growth contributed to the highest official unemployment

Figure 2 Average GDP Annual Growth



Source: World Bank staff calculation using World Bank 1997a.

10. World Bank 1997b.

rates (around 15 percent) among all developing regions. Since the early 1990s, stabilization and financial sector reforms backed by the Bretton Woods organizations have moved ahead in nearly all MENA countries. Modest structural reforms — including trade liberalization — have continued in Egypt, Jordan, and the Maghreb countries, particularly under agreements with the EU. Remittances are expected to stabilize or decline as European demand for immigrant labor continues to fall and the Gulf oil countries encourage greater labor force participation of nationals while increasingly shifting to low wage Asian workers to meet import labor demands.

International and civil conflicts have caused much waste of human and physical capital. Populations are displaced, some temporarily and others permanently, and social infrastructure destroyed. During the years of sectarian conflict in Lebanon, teachers were unable to cross between zones of control to reach their schools. In Yemen, schools were destroyed in the 1994 civil war. The destruction of education facilities in the Iran-Iraq and Gulf Wars has yet to be fully reckoned. Moreover, social infrastructure is not always the first priority for rehabilitation resources in post conflict situations.

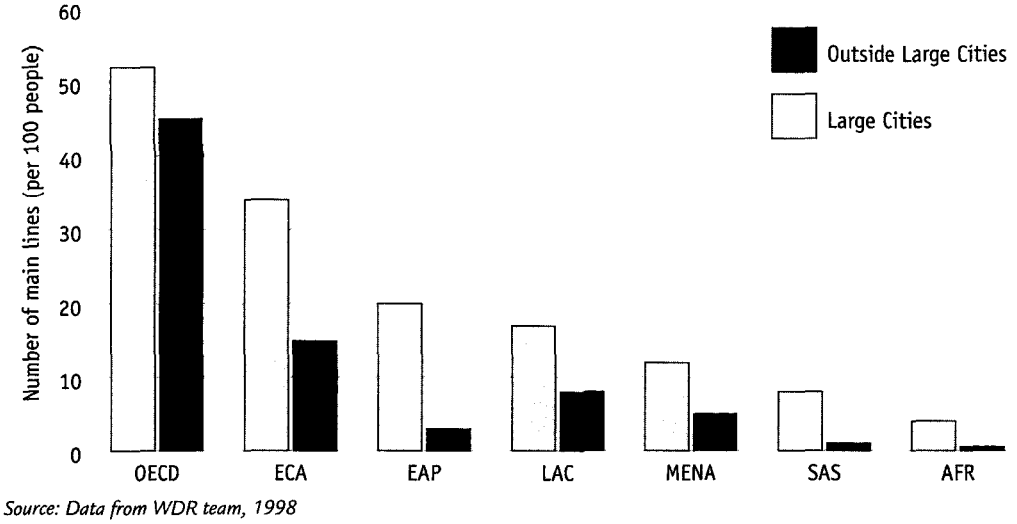
The region is also characterized by low research and development for knowledge creation and limited communications infrastructure for knowledge transfer. MENA accounts for only about one tenth of one percent of the world's R&D spending, less than any other region save sub-Saharan Africa. The relative paucity of such simple communications technology as telephones indicates that the velocity of information flow is suboptimal. With fewer than 15 main lines per 100 people in major cities — and fewer than five main lines per 100 people in rural areas — MENA has less than half this basic communications infrastructure as does ECA and less than 25 percent that of the OECD.

Education Status and Evolution of Education Systems

Access

Free education, publicly provided, has been a central tenant of the social contract in every MENA country since independence. Post-independence governments significantly expanded their education systems, driven by rapidly expanding youth populations and the need to build nationhood and to establish political legitimacy and popular support for new regimes through making education a fundamental right of citizenship. As a conse-

Figure 3 Low Telephone Coverage Impedes Knowledge Transfer



Source: Data from WDR team, 1998

Table 1 Education Indicators

	Ministries with education authority*	Years of compulsory education	Percent of Children 6-10 in school, mid-1990s	Adults' Mean Years of Schooling, 1990	Primary GER, 1995	Secondary GER, 1995	Tertiary GER, 1995
Algeria	4	9	95	4.0	107	62	11
Egypt**	4	8	84	4.3	100	74	18
Iran **	4	12	97	3.9	99	69	15
Iraq	2	6	79	4.0	90	44	-
Jordan	4	10	100	6.0	94	65	18
Lebanon**	3	6	96	-	109	76	29
Morocco****	3	6	54	2.5	83	39	11
Syria	3	6	91	5.1	101	44	18
Tunisia	3	-	97	3.9	116	61	13
WBG***	2	10	-	8.0	92	66	-
Yemen	2	9	50	1.5	60	27	10

Sources: UNESCO 1997, Barro and Lee 1996, World Bank 1997, Palestinian Authority 1996, National Center for Human Resources Development (www.hchrd.gov.jo), World Bank 1998, World Bank staff calculation using data from FAFO 1993 and 1996.

*Notes: * Technical Ministries (e.g., Ministries of Agriculture or Public Works) responsible for technical training programs applicable only to their own areas are not included. Ministry of Health Authority for medical education is included. For Egypt and Syria, Ministries responsible for religious education are included.*

*** Egyptian tertiary GER and all Iranian GERs are 1994 data; Lebanese secondary and tertiary GERs are 1993 data.*

**** WBG years of schooling for 1992. GERs are arithmetic averages for females and males.*

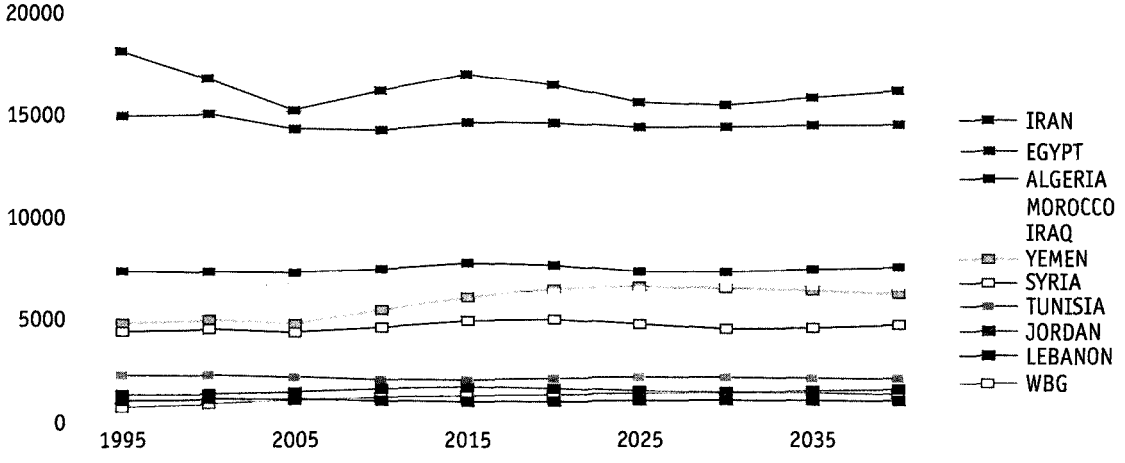
***** In Morocco basic education starts at age 7.*

quence, education systems in the region, with few exceptions, now provide basic education to most children and opportunities for upper secondary, vocational training and tertiary education to many. Education is compulsory through the primary level everywhere except Tunisia, and through lower secondary in six countries. Most countries have achieved universal primary enrollment and significant secondary enrollment rate increases. Growth in tertiary enrollment rates has been less dramatic and a few countries even saw slight declines between 1975 and 1995. However, given expanding tertiary cohorts, even a constant rate implies a large increase in students.

Education is largely publicly provided and financed in all countries other than Lebanon, even though only one country in the region — Algeria — bans private education. Education is also largely managed centrally, but most Governments support separate Ministries for each major education subsector (i.e., basic, higher and vocational). These ministries lack incentives to coordinate their activities, so that investment and current spending, teacher deployment and other resource use issues are rarely considered on a sector wide basis. As a result, potential tradeoffs and economies of scale and scope are lost. Non-education Ministries in sectors with substantial training needs (e.g., Health) also operate substantial programs (e.g., all of medical education), further fragmenting planning and resource use.

The era of demographically driven investment in education is over for basic education in many MENA countries. School-age cohorts (roughly ages 5-14) will begin to shrink around 2015, and the present teacher corps and classroom stock will be sufficient for the demands of the 21st century in most of the region. In Jordan, Iraq, West Bank-Gaza and Yemen however, the size of the school age cohort will continue to grow for at least 15 years (25 to 30 years in West Bank-Gaza and Yemen). Moreover, the need for post-basic education opportunities will continue to grow in all countries, as few have reached the participation levels in secondary, vocational or tertiary education to which they aspire.

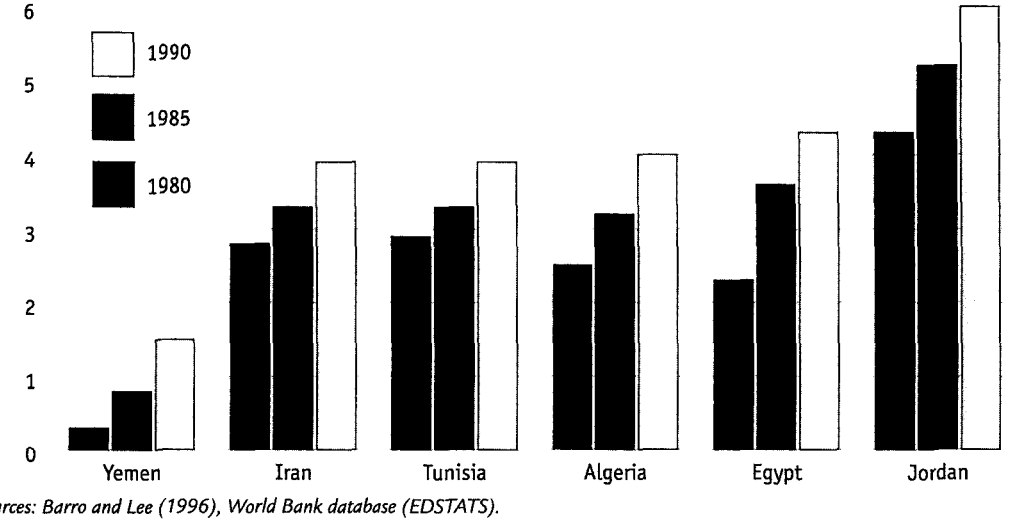
Figure 4 Demographic Trends: Ages 5–14 (000s)



Source: World Bank staff estimates.

Opportunities for access to secondary and higher education are rationed through national or regional examinations at the end of primary and secondary cycles (except in Jordan, where admission to secondary education is not conditioned on performance in the primary stage). In Tunisia, for instance, a predetermined pass rate of 35 percent for the secondary completion examination is used to control university admissions[11] and in Iran only 10 percent of university candidates are admitted.[12] In Algeria selection examinations are used to control access to secondary education, with the limit set at 50 percent of grade 9 completers.[13] In Jordan, excess demand for higher education is partially satisfied by a vigorous private education sector.

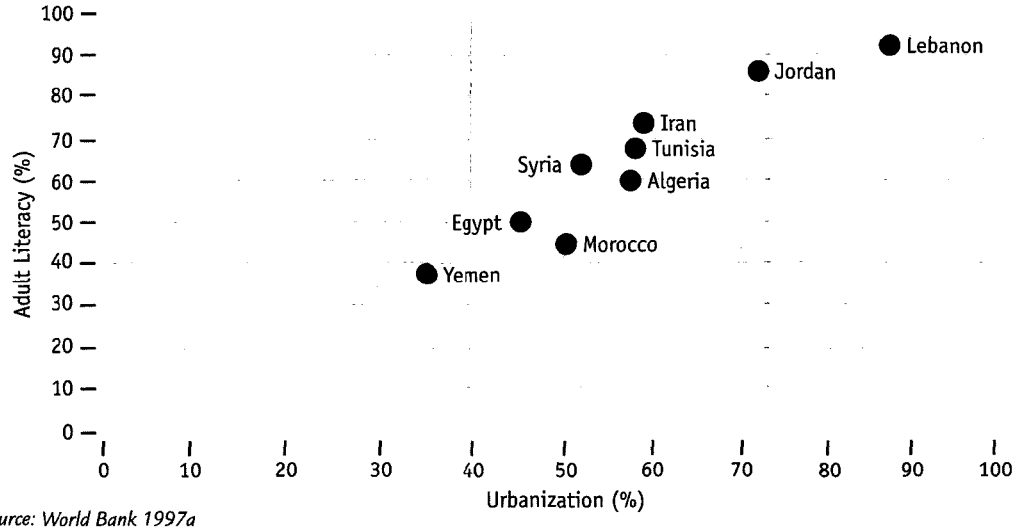
Figure 5 Adults' Average Years of Schooling—various years



Sources: Barro and Lee (1996), World Bank database (EDSTATS).

11. World Bank 1997c.
12. World Bank 1995c.
13. World Bank 1993.
14. Azariadis and Drazen 1990; Lau, Jamison, and Louat 1990; World Bank 1997d.

Figure 6 Urbanization and Literacy Rates, 1995



Source: World Bank 1997a

Education Attainment and Literacy

One consequence of government investment in education has been a significant increase in the average educational attainment of the labor force. During the 1980s the mean years of schooling among adults increased significantly, so that by 1990 it was at or above four years in most countries. In conjunction with some research capacity and higher education attainment, this level represents an approximate "takeoff" point, a threshold of education in the workforce where increasing returns to scale for human capital begin to accrue.[14] When this minimum average attainment is present, the quality of labor attains a critical mass allowing greater overall productivity. While not a final system goal, it is thus an important national achievement.

Literacy improved dramatically in almost all countries from 1960 to 1995, more than doubling in every country which started with a low base. Improvement in literacy was larger than in any other region. However, because literacy increases more rapidly in urban areas, countries with very significant rural populations (Egypt, Morocco and Yemen) also have lower adult literacy rates — around and above 50 percent. Moreover, because literacy in the region is everywhere (except Lebanon and Iran) at least 20 percent lower among women, females in predominantly rural countries such as Morocco and Yemen are at a distinct disadvantage: only one in ten rural women can read and write in Morocco, and only one in nine can in Yemen.

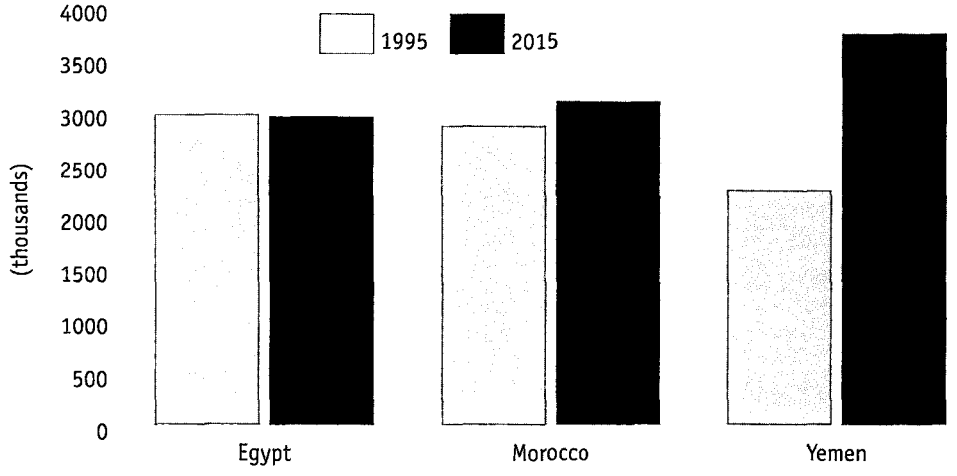
Equity

Nonetheless, nearly 5 million children aged 6–10 and another 4 million children aged 11–15 regionwide were out of school in 1995; by 2015, these numbers are expected to grow by over 40 percent, to 7.5 million and 5.6 million respectively. Over 70 percent were in Egypt, Morocco and Yemen. Many children drop out before completing compulsory education. In Tunisia about a third of those who entered first grade dropped out before completing the 7-year basic cycle in the early 1990s and in Iran primary school dropouts averaged 14 percent in 1991/92. Female dropouts are sometimes more significant than male. In Yemen, higher dropout rates among girls reduce their share of total enrollment from 31 percent in first grade to only 25 percent in sixth grade.

A disproportionate share of out of school children are poor rural children and girls. Poverty affects access dramatically. In Egypt, net enrollment

14. Azariadis and Drazen 1990; Lau, Jamison, and Louat 1990; World Bank 1997d.

Figure 7 Children Age 6–15 Out of School



Sources: World Bank staff estimates using data from Republic of Yemen 1996, Royaume du Maroc 1996, World Bank 1996a.

rates for children in the top quintile of household wealth remain above 80 percent until they reach age 15, and even those of the third and fourth quintiles remain at 75 percent until age 16. In sharp contrast, enrollments of children in the poorest one fifth of the households drop to 70 percent at age 11 and below 50 percent at age 14. In 1994, Moroccan net primary enrollments were 58 percent in rural areas and 85 percent in urban areas, and Tunisian secondary enrollments in rural governorates were as low as 19 percent while in Tunis they were 78 percent. Gender gaps are significant in three countries. In Yemen they are wide, with just over four girls for every ten boys in primary education and fewer than three girls for every ten boys in the secondary stage. In Morocco there are about seven and a half girls for every ten boys in both stages, while in Egypt a little over eight girls are enrolled per ten boys in both stages.

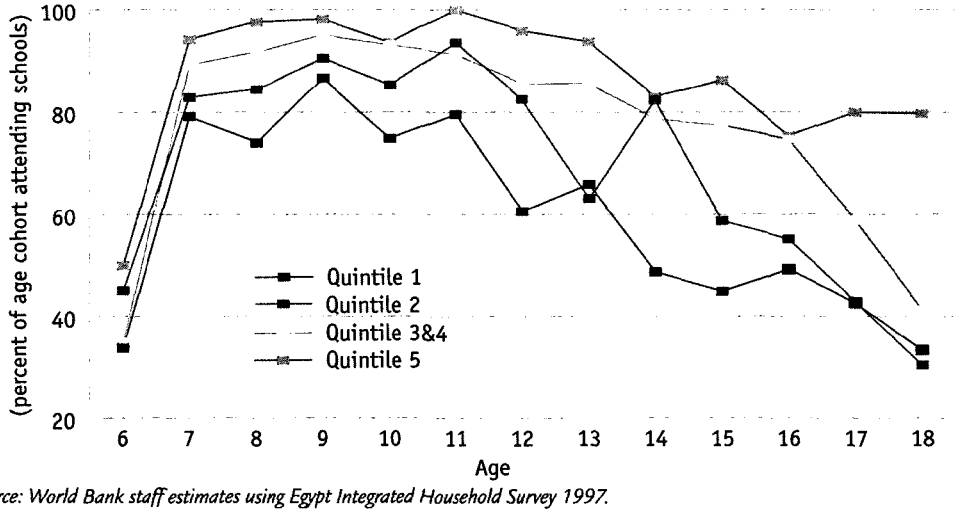
Language and cultural diversity are substantial and have a large impact on education systems and learning. Students enter school with diverse language backgrounds, including low and high dialects with very different grammatical structures and vocabularies. For students from poor areas, classroom instruction may be the first sustained exposure to classical Arabic. Moreover, different cultures coexist inside national borders, as suggested by the severity of obstacles to girls' enrollment in some areas (*e.g.*, rural Upper Egypt or mountain villages in northern Yemen) and the lack of these obstacles in others (*e.g,*. cosmopolitan Cairo, Aden or Beirut). The cultural divide between rural and urban areas is also significant in creating teacher shortages in rural areas, affecting not just girls but all students. Finally, the perceived value of education also varies widely: among some segments it is as high as among any people in the world, while among others time in school is seen as imposing an unwarranted opportunity cost on child labor.

Quality

What is known about the quality of education — defined as learning achievement[15] — is not encouraging. Among middle-income countries in the region, only Iran and Jordan have participated in recent international assessment studies. Iran participated in the 1995 Third International Mathematics and Science Study (TIMSS) and Jordan in the 1991 International Assessment of Educational Progress (IAEP).[16] However, Iran,

15. Lockheed and Verspoor 1991.
16. Kuwait participated in TIMSS and Oman participated in IAEP.

Figure 8 School Attendance by Income Level

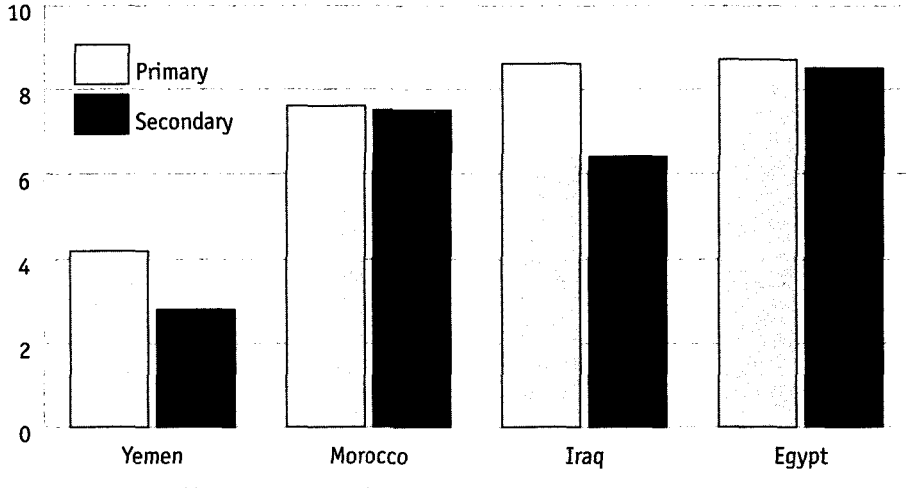


Source: World Bank staff estimates using Egypt Integrated Household Survey 1997.

Jordan, Morocco and Tunisia have decided to participate in the repeat of TIMSS for 1999. Iran and Jordan were near the bottom in math and science in the international assessments in which they participated, and in Jordan a national assessment found that students are not meeting learning objectives in Arabic, math and science. While end of stage promotion exams provide some national information on quality, they cannot be used for cross country performance comparisons. In Egypt, one study suggests that acquisition of basic literacy and mathematics skills has deteriorated since the late 1980s[17] and in Morocco recent studies suggest a decline in learning performance in French and science.

Most importantly, education in the region does not effectively impart the higher-order cognitive skills such as flexibility, problem solving and judgment needed by workers who will face fre-

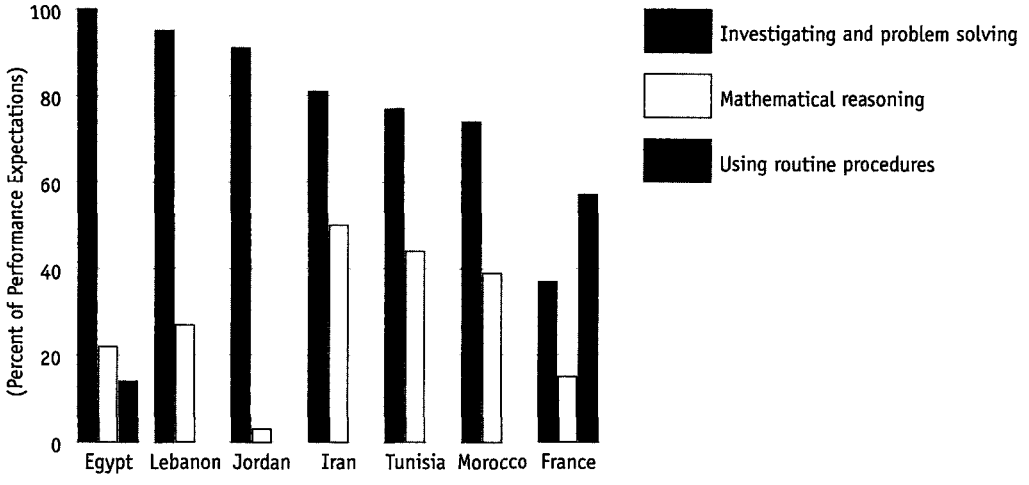
Figure 9 Number of Girls Enrolled for Every 10 Boys Enrolled



Sources: UNESCO 1997; Republic of Yemen 1996 and 1997

17. Fergany 1996.

Figure 10 School Leaving Examinations for Mathematics in the Region Emphasize Rote Learning



Source: Valverde, Schmidt, and Bianchi 1995

quently changing tasks and challenges in increasingly competitive export markets. Instead, the systems teach students how to learn and retain "answers to fairly fixed questions in problem situations with little or no meaningful context," and thus reward those who are skilled at being passive knowledge recipients.[18]

Limited data suggest that the quality of teaching and learning has suffered as teaching forces in most countries expanded to meet growing enrollments. While the number of secondary education teachers has doubled in Iran over the past 10 years, the percentage of teachers with university degrees fell from 85 to 77 percent.[19] Likewise, expansion of teaching forces has been accompanied by falling average compensation levels.[20] Across the region, primary and secondary student-to-teacher ratios are not high, but these averages hide extreme urban/rural variations. This is due in part to difficulties in staffing rural schools, particularly in remote areas where housing is difficult to find (as in some areas of Morocco).

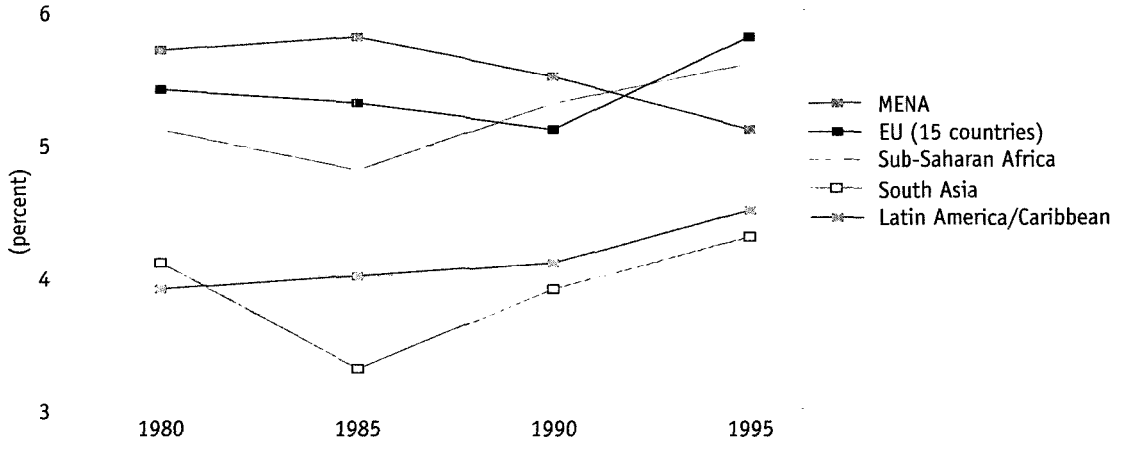
Moreover, even where spaces are available there are significant problems with school facilities. Double and triple shift primary and secondary schools are not uncommon in Iran, Jordan, and Gaza. In Egypt students lose five hours a week of instructional time in multiple shift schools.[21] At the other end of the spectrum are small rural schools lacking laboratories, libraries, and workshops. In Jordan for instance, about 46 percent of public schools enrolled no more than 200 students in 1991.[22] While most countries provide basic inputs,[23] maintenance is usually poor and severe deterioration of physical infrastructure is common throughout the region.

Financing

In 1995, most countries of the world allocated about 5 percent of GNP to education.[24] Public financial commitment in MENA is strong and higher than the world average, with expenditures well over 5 percent in all but three countries (and in one of these, Lebanon, private financing dominates). While education's share of GNP fell through

18. Golladay, Berrryman, Avins and Wolff, 1998.
19. World Bank 1995c.
20. Heyneman 1997.
21. World Bank 1996a.
22. World Bank 1995b.
23. Berryman 1997.
24. UNESCO 1998.

Figure 11 Public Education Expenditures as Share of GNP, 1980–1995



Source: UNESCO 1993 and 1998.

the late 1980s, it fell more slowly than GNP rose, so that real spending rose despite the proportional decline. Real per student current expenditures for primary education in purchasing power parity (PPP) terms[25] were lowest in Yemen at US$210, while Morocco, Egypt and Iran spent under US$400, Jordan US$517 per student, and Algeria and Tunisia about US$620 and US$700 respectively. Per student spending in secondary education varied widely by country in the mid 1990s, from US$371 in Yemen and about US$525 in Jordan, Egypt and Syria to US$1,320 in Morocco and US$1,366 in Algeria (all in PPP). At the tertiary level, per student current expenditures are about ten times those at the primary level, ranging from about US$1,400 in Yemen and US$4,000 in Morocco to about US$6,000 in Jordan and over US$8,200 in Algeria.[26]

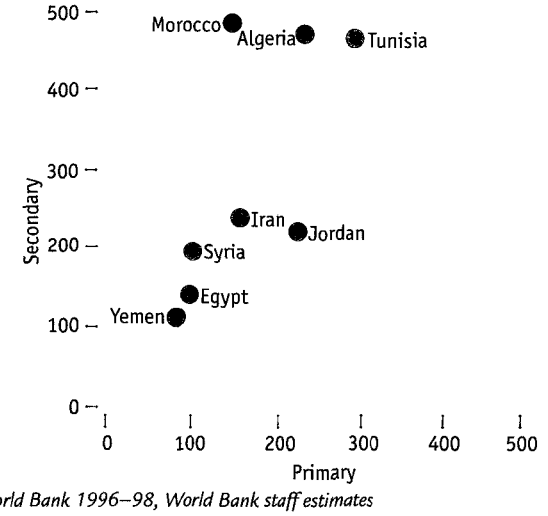
The sacrifices made for education by Governments are reflected in per student expenditure's share of per capita GNP. For primary education, most countries spend between 13 and 19 percent of per capita GNP, with Iran and Tunisia as outliers on the low side. Yemen makes the largest sacrifice for primary education, with per student spending at 27 percent of per capita GNP. There is more significant variation in secondary education. The balance between primary and secondary in all countries favors secondary slightly. For Morocco, Algeria, Lebanon and Syria, however, secondary unit costs are double to triple those at the primary level. For OECD countries, by comparison, the average ratio of 1.37 between public expenditure for secondary and primary education is much smaller.[27] Tertiary students, by contrast, receive over 170 percent of GDP per capita in public and private spending combined in Jordan, Algeria and Yemen, and about 100 percent in Syria, Tunisia, and Egypt.

Private Participation

Private participation includes both provision and finance. Private provision of education varies widely within the region. Private schools outnumber public ones in Lebanon and are prohibited in Algeria. On average, private primary and secondary

25. In the context of widely different relative price and wage levels between the U.S. and other countries, purchasing power parity represents more accurately than do exchange rates the basket of goods a given amount of U.S. dollars will buy. PPP dollars for the MENA countries discussed here are generally 3 to 5 times exchange rate dollars. For exchange rate figures for all spending categories discussed herein see Annex Table C7.
26. Tertiary per student spending is calculated here on a different basis than are primary and secondary, due to limited data availability, and the calculation of PPP dollars for tertiary is somewhat less exact than for the other levels. However, as an order of magnitude indicator the numbers here present an accurate view.
27. OECD 1997.

Figure 12 Per Student Current Expenditure in Primary and Secondary (US$), mid-1990s



Sources: UNESCO 1997, World Bank 1996–98, World Bank staff estimates

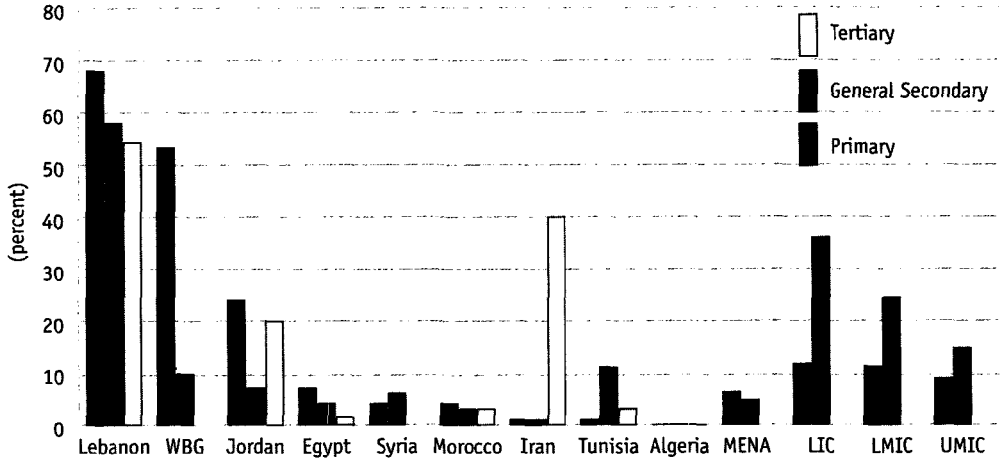
Box 1

EMPHASIZING RELEVANCE IN TERTIARY TECHNICAL EDUCATION THROUGH LINK WITH ENTERPRISES

In 1995, seven Higher Institutes of Technology (HIT, or ISET in French) established under the Bank supported Tunisia Higher Education Development Project opened their doors. In the early 1990s, Tunisian higher education graduates did not have the skills demanded by the labor market, where a shortage of staff needed to moderate between middle management and blue collar workers prevailed. Internal efficiency was also low, and costs per graduate high. HITs addressed these issues in technical education through five innovations in faculty status and career path, and in the organization of studies.

- Created specifically for the HITs, the technology faculty teach about twice as many hours as university professors, and (unlike university professors) are available for student counseling on a weekly basis.
- Success in developing links with enterprises is a factor in career advancement.
- The regular course of study was shortened to 5 semesters after the Baccalauréat, and leads to a Technicien Supérieur diploma.
- Studies are organized by semester, allowing students to enroll twice a year.
- Interaction with local enterprises is emphasized, with students working and preparing end-of-studies projects in local enterprises. The first HIT class graduated in February, 1998. So far, the system has three important successes:
- 75% of graduates found employment within two months of graduation, and the employing enterprises maintain contact with the HITS on a regular basis.
- The HIT internal efficiency rate, at 88%, is much higher than in the rest of Tunisian higher education, offsetting high technical education input and process costs. Per graduate costs are thus about equal to those in the rest of the system.
- Because a high share of HIT students are from the local areas, the Institutes contribute significantly to community development.

Figure 13 Private Sector Share of Total Enrollments, early 1990s



Source: UNESCO 1995; Palestinian Central Bureau of Statistics and Ministry of Education 1995–96; World bank 1997; Egypt Five Year Development Plan 1997.
Note: Date in primary education are for basic education of 1–10 grades in WBG and Jordan.

enrollments are lower than the world average for lower middle income countries. As in most developing countries, pre-university private education caters mainly to a high and middle income urban clientele. In Jordan, Iran, and West Bank–Gaza the private sector plays a substantial role in higher education. Branches of Iran's privately funded non-profit Azad University are located in rural areas and it has a higher share of female enrollments than do other public institutions.

Private spending's share of total education spending was 17 percent in Iran (1990) and 25 percent in Jordan (1986), which is low in comparison to the 1990 worldwide average of 30 percent.[28] Private spending data is not available for other countries. Because private provision is minimal (other than in Lebanon) and tuition is free for nearly all levels of public education, private spending on schooling is likely to be low. However, small school fees are often collected and provide additional resources for schools. For example, in Yemen, school fees provide virtually all resources available for school maintenance and various non-salary recurrent costs. Moreover, in some countries private expenditures for out-of-school tutoring are high, but may be evidence of rent seeking behavior by teachers.

II. FIVE DEVELOPMENT OBJECTIVES FOR EDUCATION IN MENA

Modern education systems are undergoing three key reforms. First, they are increasing the level of professional authority and autonomy in classrooms and schools and raising national standards for students' learning achievements. Second, they are developing national capacities for vigorous self reflection through increasing collection, analysis and dissemination of data. They recognize that there is no rational reason to keep information on expenditures and achievements secret and that without informed public debate countries will fall behind in educational quality, achievement and relevance. Third, systems are undergoing far reaching reexaminations of regulatory frameworks in the educational sector. In doing so, they are redefining the State's role in education.

For MENA, these general trends imply the need to rethink key assumptions. First, both governments and citizens will need to recognize that States cannot finance all educational goods for all people. Throughout the world, individuals purchase specialized educational services. The State's legitimate role in ensuring that a quality basic educa-

28. Psacharopoulos and Nguyen 1997.

tion is available to all citizens will be compromised if it attempts to also finance higher services for everybody. Second, governments cannot ensure through minute regulation that everyone is equal in educational opportunity. While determination, provision and enforcement of a minimum level of standards (in basic, secondary and tertiary levels) and access (through basic) is essential, over-determination cripples public and private actors and ensures only that all students receive a subpar education.

Rebalancing regulatory frameworks in MENA countries will require addressing the degree of control the State exercises as well as what it controls. In many instances, the wrong areas are regulated. In Egypt, regulation of private higher education prevents development of that sector; throughout North Africa, mandatory specialization in upper secondary is used to ration access to tertiary levels. Where some control is needed, it is often too stringent or too lax. Many systems are rule-driven, with a command and control management culture preventing the school and classroom initiative needed to foster learning. Decisions as essential as the language in which to teach are determined by regulation. While areas such as these are over-determined, the regulatory frameworks and accreditation mechanisms needed to ensure quality and equity if systems are to become open to private provision and financing are largely lacking.

Rethinking key assumptions and rebalancing regulatory frameworks is important for the mission of MENA education systems: engendering social cohesion in spite of difficult internal circumstances while responding to changing external constraints. MENA's competitors for Western Europe's commodity markets, the countries of Eastern and Central Europe, are closer to their customers not just in geography but in learning achievements. To avoid falling wages, the ability to meet constantly shifting demands for quality goods and services must rise. This in turn depends on a labor force which can continuously adapt and learn as it works.

Policymakers and donors need to remember that the best long run hope for improving and extending public education services lies in economic growth. Public sector revenues and the expenditures which depend on them are very sensitive to output levels and are more important than foreign grants or borrowing. As long as GDP expands, negotiations among competing Ministries over budget resources are easier and outcomes more acceptable. With a constant level of resources, increasing education's share of total spending while reducing those of other Ministries is difficult; when the total resource envelope grows, this becomes much easier because growth in education spending does not require a real reduction in other sectors.

Building on the achievements of the past three decades, all MENA countries can focus on using education systems to continue to develop an internationally competitive human capital base, extend and solidify social cohesion and spur further improvement in all aspects of social development. The countries in the region differ greatly with respect to educational development, short and medium term priorities and economic environments and prospects. As a result, the strategies appropriate to particular national environments will differ. Countries lacking significant natural resources that center their economic strategies on human capital will select different education strategies than countries for which agriculture or extraction industries remain central. For both education will be important, but their specific objectives will vary. In the long term horizon relevant to education planning however, a number of common key objectives emerge. In this section, each is discussed in turn.

Emphasize "Learning to Learn" and Reach Internationally Competitive Performance Standards

Twenty first century production processes and economic competition will demand learning achievements beyond simple memorization and repetition.

An indispensable starting point for this — a *sine qua non* of twenty first century education — is solid achievement in the core competencies of literacy and numeracy. Beyond this, workers will need to respond to ever changing tasks so that problem solving will be the next century's primary worker virtue, in contrast to the assembly line worker's ability to endlessly carry out rote tasks. Education will need to impart skills enabling workers to be flexible, to analyze problems and to synthesize information gained in different contexts. This requires focusing students on the process of learning — on learning how to learn — as well as on particular subject content.

By all indications, education systems in MENA do not reward these skills. Countries that focus on raising relevant achievement will develop national capacity to compete in international markets. While each country will need to determine its own particular needs, all will need to focus on learning outcomes which, when achieved, enable workers to continually learn. Lifelong learning will be a necessity to accommodate the fast changing needs of modern society. With accurate measures of student and system performance, educators at all levels can also identify needed system changes. Moreover, information about learning outcomes can be used by national planners to modify education programs and interventions.

Improve System Effectiveness in *Building Human Capital and* Engendering Social Cohesion

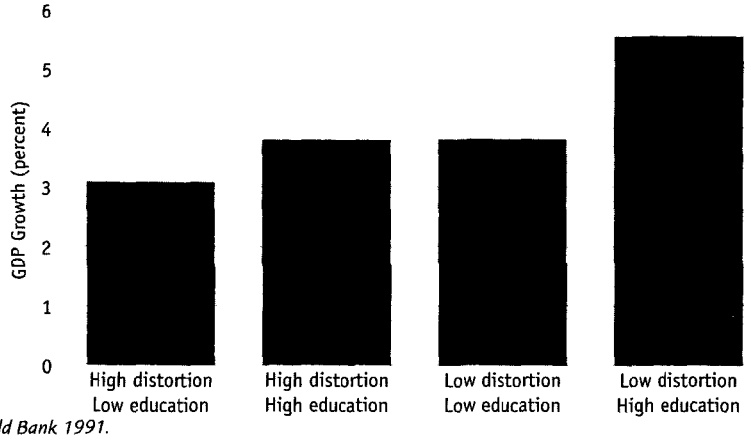
The ordering and structure of economic life in MENA is changing. Countries are shifting from closed, protected systems to more open environments encouraging new investment, expanded trade and increased reliance on the market to direct production, trade and distribution of national incomes.[29] Within this environment, education systems can contribute to economic growth by providing appropriately skilled labor. Education systems will face rising demand from both the private business sector and individuals to provide the skills which make each competitive. To meet this demand, the gap between school leavers' skills and market demands needs to be reduced. Skills for increased productivity will be needed at all levels, from electricians to computer programmers to accounting clerks to financial managers.[30] This in turn will require a population skilled in numerical and logical problem solving and in complex literacy skills. All levels of education will be affected — basic, secondary, vocational and technical, and tertiary.

Good education does not however guarantee economic development. An educated workforce in a dysfunctional economic environment will produce high unemployment, not high growth and wages. Public sector employment policies aimed at absorbing excess labor, while creating distortions, inefficiencies and fiscal drain, also do not create growth or good wages. From 1965 to 1987, economic growth in a sample of 60 developing countries was strongest where high education levels coincided with macroeconomic stability and openness.[31] In conjunction, the two form a virtuous circle. In East Asia, rising skilled labor wages in tradables sectors created demand for education. The resulting increase in skilled labor led to rising productivity and thus made exports even more competitive.[32] A study of over 1,200 World Bank projects found that in those countries which had both more open economies and higher levels of schooling in the labor force, economic rates of return were significantly higher than in countries which did not. Variation between projects in countries with neither or only one of these factors was insignificant.[33]

Returns to education differ by level more in MENA than in any other region. Low returns to primary

29. Pritchett 1997.
30. Berryman 1997.
31. World Bank 1991.
32. World Bank 1993.
33. Thomas and Wang 1997.

Figure 14 Policy Distortion, Education, and GDP Growth in Sixty Developing Countries, 1965–87



Source: World Bank 1991.

Note: High distortion reflects a foreign exchange premium of more than 30 percent; low distortion, a premium of 30 percent or less. Education is measured by the average years of schooling, excluding post secondary schooling, of the population age 15 to 64. High education is defined as more than 3.5 years; low education, 3.5 years or less.

education are driven by factors related to education quality and labor demand.[34] Returns to secondary and tertiary education are high in part because graduates have captured rent wages in the public sector for four decades. With structural economic reform, this situation is gradually changing and unemployment among workers with secondary and higher education has increased. As the structure of labor demand becomes increasingly determined by private employers, the mismatch between the skills imparted by education systems and those needed by graduates will, in the absence of significant change, become more pronounced. This mismatch is due to the historical widespread guarantee of public sector employment, poor quality vocational and technical education and training which fails to teach the skills required in private production and service industries, and to systems which emphasize rote learning over reasoning, adaptability and initiative.[35]

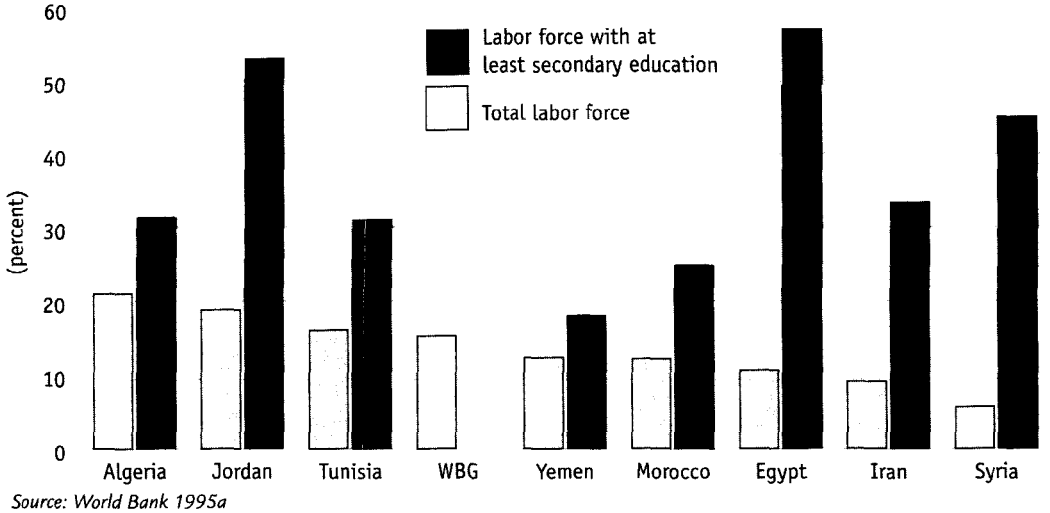
All countries need more than a competitive labor force to survive and prosper. They also need the social resilience which allows a nation to confront difficult times and to peacefully distribute the fruits of easier times. In MENA as in all modern societies, education is crucial in preventing social conflict and fragmentation by giving students a firm understanding of the content of social contracts, that complex web of relations among actors in society. Through introduction to the unifying society of the school, students throughout the world learn how to fulfill their roles in society and how to peaceably repair the social fabric of relations when it breaks down. In large part education accomplishes these tasks by introducing children to society through the microcosm of the school, where they first take on a structured role and confront expectations, stylized behaviors, responsibilities and consequences. As students, children and young adults in MENA thus meet types of people they have never encountered before, and learn to see strangers with different backgrounds as fellow citizens in a broad society.

Ensure Universal Completion of Compulsory Education of Good Quality

While basic education[36] is everywhere a right rather than a privilege in MENA, universal participation and completion of the basic cycle is not

34. Gillespie 1997.
35. Gillespie 1997.
36. Basic education comprises the primary and lower secondary stages (approximately grades 1-9) in most MENA countries.

Figure 15 Unemployment Rates: Total and Among Workers with at Least Secondary Education, early 1990s



Source: World Bank 1995a

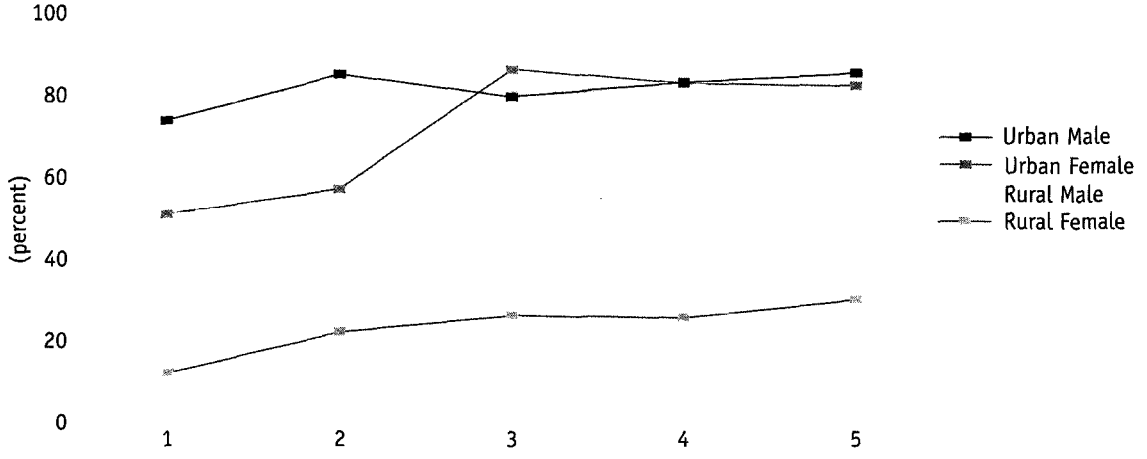
everywhere an accomplished fact. In Tunisia and Morocco, where the first nine years of education are not compulsory, GERs are 52 percent and 45 percent respectively. Where the opportunity cost of child schooling is significant, such as in Yemen and Egypt, this can contribute to decreasing upper basic enrollments; however even where child labor is not an important factor, as in Jordan and Algeria, upper basic GERs are only about 75 percent.

Focusing on basic education does not imply that secondary enrollments are unimportant; indeed the lower secondary stage is part of the basic cycle. In many countries, secondary education is important to raising enrollments in lower levels. In Yemen, there are not enough female secondary graduates to train as female primary teachers, with the effect that girls' primary enrollment suffers. In Egypt, the possibility of progressing through the secondary stage to higher education provides an important incentive for participation even in basic schooling. Geographic and gender gaps in higher levels will decline with increasing female and rural candidates for those levels resulting from universal completion of basic education. More concentrated attention to closing gaps in higher levels also becomes feasible as the completion agenda is closed in the basic cycle.

Significant obstacles to participation come from both the demand and supply sides. Direct and indirect costs of education (e.g, transport and supply costs, and the opportunity cost of child labor, respectively), as well as the reluctance to expose girls to the public world all dampen demand. Each of these factors normally play a larger role in rural areas where distances can be longer, child agricultural labor more important, social attitudes more conservative and people, in general, poorer. Moreover, if quality is low enough, parents can make an entirely sensible decision not to partake of the service provided. At the same time, various mechanisms used to ration limited spaces and maintain quality impose supply obstacles to participation (e.g, repetition and up-or-out, age calibrated promotion rules). These demand and supply obstacles interact in various combinations with differing effects on different populations. Poor students are more severely affected by direct costs, rural students by opportunity cost factors, and girls more by distance and social conservatism. As these groups overlap, the obstacles increase: poor, rural girls are at a distinct disadvantage.

Universal completion of compulsory education would create higher levels of literacy and numeracy in society and wider dissemination of individual life skills for national social development.

Figure 16 Share of Children aged 7–12 enrolled in school by expenditure quintile, gender and locale, Morocco, 1990–91



Source: World Bank 1994a

Increasing female completion of compulsory education would yield improvements in health and nutrition status for women and children and would raise women's stature in society. Increasing the general level of literacy and numeracy would provide countries with workforces capable of quickly learning new technologies and adapting to new production processes and demands, and with larger numbers of secondary and tertiary school candidates. It would narrow the gap between national standards and student achievement. In the long run, it would help Yemen reach an adult mean of four years of education, the approximate threshold or "takeoff" point for productivity gains. Universal participation will also impose burdens. Demand for materials, facilities and human resources would rise, as would the need for personnel training and for management and planning capacity. However, failure to continue moving toward universal participation in basic schooling will halt progress in social development and make economic competitiveness with nations in Eastern Europe and Asia unrealistic.

Increase Country-Level Information on Education and the Effects of Reform

Effective education systems produce students whose academic achievement meets clearly defined standards. Systems must thus be able to identify weaknesses which impede the ability to either define standards or enable students to meet them, so that reforms can target areas where change is needed. Broad indicator information — e.g., school enrollment data, wastage rates, numbers of graduates — is not alone sufficient to illuminate system performance and target reforms. Information which reveals the more intimate processes and characteristics of schools and classrooms is crucial: how teachers and pupils use textbooks and other materials, the match between the language of instruction and the language pupils speak at home, the structures and patterns of interaction between and among pupils and teachers, the suitability of the learning environment to learning. In MENA, none of this is examined routinely or systematically. Without it, the target of education policy — school and classroom practice — is portrayed by various technical and political actors in conflicting ways, each of which can imply a different policy response. Such inescapably misinformed policy responses run a high risk of being misdirected.

Three types of information, discussed below, are needed to identify problems in the education system, to design appropriate technical reforms

Box 2

SYSTEMATIC REFORM EFFORT REINFORCES ITSELF THROUGH INFORMATION AND EVALUATION

When designing its 10 year Educational Reform Program, the Hashemite Kingdom of Jordan was careful to include as an integral part mechanisms to measure educational progress and monitor the effects of the reform. With the help of the Bank supported *Human Resources Development Sector Loan* Jordan instituted a multipurpose assessment program to provide regular information on both quantitative and qualitative aspects of the education system, track student achievement in cognitive as well as affective domains, and monitor the overall progress and efficiency of the education system. Baseline data collected on a myriad of variables at the beginning of the reform serve as benchmarks, and achievement monitoring of students who attend schools where reform measures have been implemented is conducted. Evaluation of the reform and the design of its subsequent steps is therefore based on objective data analysis, lending more certainty and credibility to analytic conclusions and operational plans. Initial assessment results showed improvement in fourth and eighth grade math performance (by 12% and 7% respectively), improvement in fourth grade Arabic performance (3.6%), and declined in science in both grades. Using the analysis as a basis for planning, a new secondary curricula was introduced in 1995 and a new examination system based on this curricula followed in 1997. A further national assessment has been conducted, and preparation for scoring the tests and analyzing the results are currently under way. Feedback from continuous assessment exercises has been essential in enabling the Educational Reform Program to identify and implement changes needed to improve the quality of pre-university education.

and policy responses and to generate support for reform.

Management information on the procedures and patterns of resource allocation. This includes inputs such as textbook availability and number and type of trained teachers by school, and basic broad indicators such as repetition and teacher absenteeism. This information provides teachers, trainers, curriculum and materials producers, administrators and Ministers with the tools to successfully perform their responsibilities. It *is needed to broadly identify needed system changes.* It permits increasingly effective use of resources through increasingly strategic allocation and promotes accountability by increasing the transparency of performance.

Rigorous, regular assessments of what students are learning at different levels of the system and within subject areas, compared with goals for student learning. Assessments can be carried out on many levels, and can measure cognitive achievement, values, attitudes and skills. They can be developed through national and international standardized and norm-referenced assessments, through curriculum-based measures and through criterion-referenced tests reflecting national standards and priorities. They provide information to policy makers about the extent to which individual schools, school clusters and the entire education system impart the skills students need to meet established standards. This knowledge *enables policy makers to identify where and what about service delivery and educational processes needs to be improved.* Results can also be shared with private and public employers, who will find the information it provides about the emerging labor pool valuable. This in turn will create incentives among system managers and political leaders to maintain and improve the quality of education.

Process effectiveness information can be gathered through pilots and monitoring of ongoing activities. This information can help gauge the appropriateness of grade level materials or specific technologies, the match between pre- and in-service teacher training activities and classroom needs, the adequacy of instructional time on task and the impact of family and community support.

Policymakers, headmasters, teachers and parent committee members can use this information to *determine how best to change areas that need improvement.* It is this information which gives substance to reforms indicated by management and learning acquisition information (above) and which gives them the highest likelihood of impacting learning.

Education reform is a long term process. Its success depends on the knowledge that system actors and the public have about the system, and this in turn depends on routine and systematic data gathering and examination of other, less quantifiable, information. When such process is used to learn how the system functions, all participants — officials, employees, students and parents — benefit from the improvements that become possible. Wide dissemination of information on the system is key, and national media can focus public attention on education issues and generate support for solutions.

Without mechanisms to inform policy makers and practitioners, attempts at educational reform will be futile. Reforms — from teacher training overhauls, to curriculum and textbook revision to decentralization of financing sources and budgeting — will be decreed, designed, adopted and discarded without anyone knowing what, how or indeed whether anything was accomplished at all. In such a context policymakers, teachers and parents would stand powerless to halt a process of learning decline and resource waste.

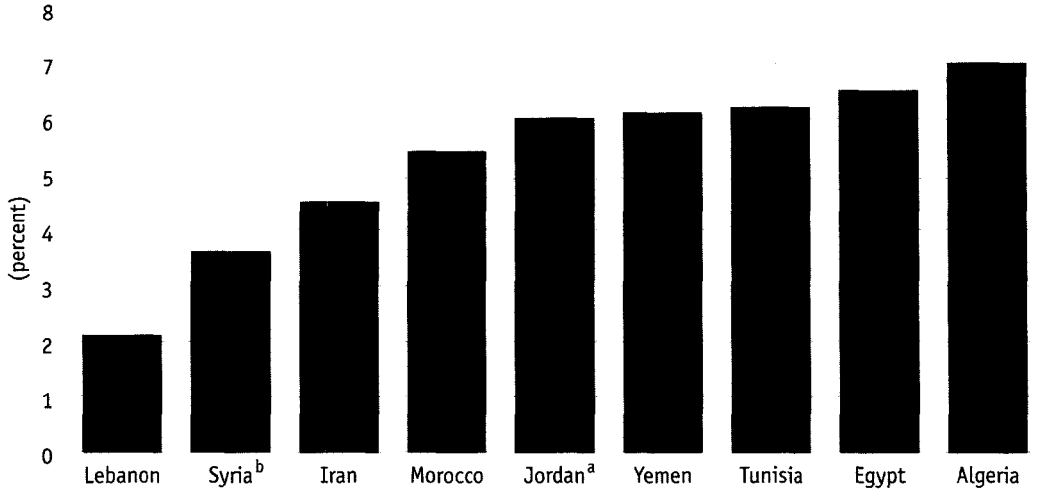
Maintain a Sustainable Financial Foundation for Education

Spending on education by MENA countries, typically about 5 percent to 6 percent of GDP, is in line with the rest of the world. Costs, largely assumed by the public sector, have been steadily driven upward by population growth and rising enrollment rates. Even though the momentum of population growth is about to stop for basic and secondary school age populations, which are expected to remain stable in most MENA countries, spending on education is projected to grow significantly. Spending growth in higher education is already exponential and will soon become unsustainable. In addition, financial pressure in primary and secondary will also remain intense. Completion of universal access to compulsory education, reductions in dropout rates, higher completion rates, and internationally competitive learning achievements will require continued strong public sector commitment.

Given Governments' commitment to education, its share in the public budget is likely to increase. However, when competing demands exceed growth in total public funds, each increase in education's share implies a decrease in other areas. While there are opportunities for budgetary restructuring (*e.g,* the share spent on defense is on average higher than in other developing countries), for all practical purposes there are limits to cross sectoral adjustments. How then can the above objectives be financed?

The first principle is to spend public resources for public goods. Basic education is a public good, and should receive public funding. Higher levels of education have a higher share of private value, and should therefore be financed in partnership with families and the private sector. On average in MENA, one student in higher education costs the government about as much as 10 students in primary education. Despite higher private returns to higher levels of education in the region, there are huge social pay-offs to basic education. It thus seems difficult to justify significant public subsidies for higher education as long as compulsory education is not universal, as in Egypt, Morocco and Yemen. Higher education may be needed, but public sector priorities will have to be chosen within the available budgetary envelope. The range of options for higher education funding should not be restricted to the public sector. From an equity perspective, there are strong grounds to increase fees for those who can afford it and to consider

Figure 17 Public Education Expenditure as Share of GDP, mid-1990s



Sources: UNESCO 1997, World Bank 1996, 1997, and 1998, World Bank staff estimates.
Notes: a. Data for 1995. For other countries data are for 1994. b. Data do not include expenditures on tertiary education.

student loans where establishing repayment mechanisms is feasible.

Cost projections for education that assume modest GDP growth of 2.3 percent and a somewhat generous growth in unit costs demonstrate that 5 percent of GDP would be adequate to support universal primary in all countries, 75 percent secondary enrollment rates in some countries and even 25 percent tertiary enrollments in Syria and Lebanon. Jordan, Iran, and Egypt will have financing gaps in tertiary education only, and shortfalls will be greatest in Tunisia, Yemen and Morocco where even secondary education could not be fully funded under this scenario.

III. SIX STRATEGIC PATHS FOR OBTAINING DEVELOPMENT OBJECTIVES

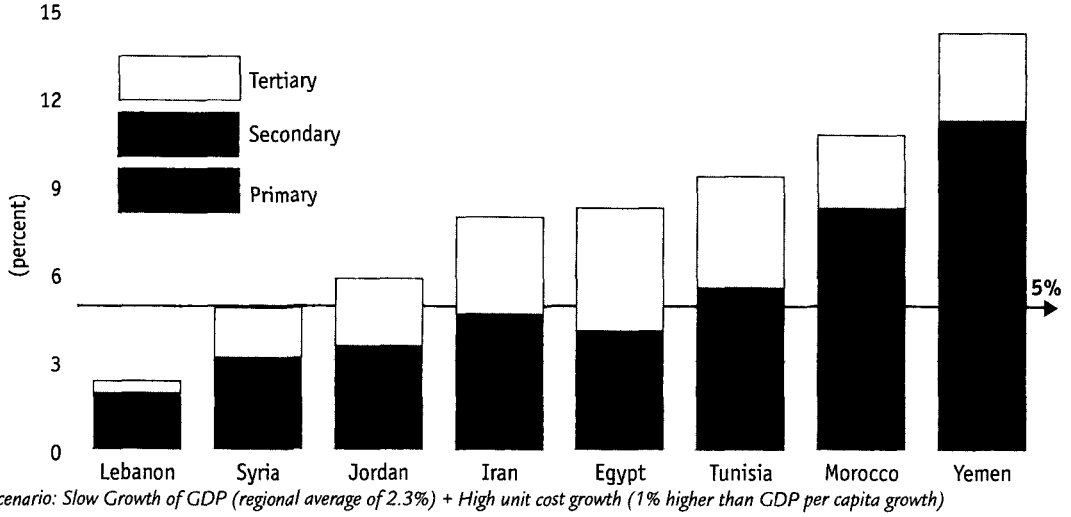
The strategies identified below will be useful to countries in pursuing the objectives discussed above. Both organizational changes and changing institutional norms can be effective in improving the system performance. Using comprehensive policy frameworks to plan and guide development, improving system performance at all levels, facilitating private finance and provision in post-compulsory stages, improving internal efficiency, and

Box 3

STRONG WILLINGNESS TO PAY FOR EDUCATION THROUGHOUT THE REGION

As is the case the world over, the citizens of many MENA countries are willing to pay considerable fees for educational services. In Egypt for instance, private spending on tutoring in the pre-university stages alone is estimated to be about EGP 7 billion annually. Tutoring is common not only among the children of wealthier families: sixty-three percent of students in upper basic education surveyed by the MOE in the mid 1990s stated that they use private lessons to supplement classroom teaching. At six percent of average household expenditure, the tutoring costs incurred per child illustrate that families place a significant value on basic education and are willing to use private funds to enhance that value. Tertiary education also attracts private money. In Jordan over 35,000 students, representing about one third of tertiary enrollments, are in private universities and community colleges. In Lebanon, where private sector delivery (subsidized and unsubsidized) dominates in both the pre-university and tertiary sectors, private spending on education is close to six percent of GDP, about one and a half times public education expenditures.

Figure 18 Public Education Spending as Share of GDP: Slow GDP Growth and High Unit Cost Scenario, 2010



Scenario: Slow Growth of GDP (regional average of 2.3%) + High unit cost growth (1% higher than GDP per capita growth)

strengthening knowledge generation and dissemination will be crucial in reaching educational goals in the next century.

Establish Comprehensive Policy Frameworks for Long Term Programs of Development and Reform

Several MENA countries have begun to establish national policies on education: mid- to long-term, non-partisan plans for achieving education goals. Where these policy frameworks are not in place, priorities change without reflecting a change in national goals. Yet the demand for education and the capacity to deliver it are relatively predictable; comprehensive policy frameworks can help insulate the education system against major policy shifts caused by minor changes in government.

These frameworks normally include an analysis of the current situation, a statement of education goals, and a discussion of strategies for attaining these goals. To be concrete, goals need to be expressed in quantitative terms and measures of performance indicated. To create ownership of the education goals in other core ministries — finance and planning, for example — an analysis of the costs associated with reaching the goals needs to be linked with other ongoing planning exercises and macroeconomic policies. To be useful frameworks need to be realistic and objective-driven and fully owned by the country. In the past, some countries have articulated policies and objectives which were, as a practical matter, impossible to achieve in the time frame envisioned.

Focus on Results: Improve Performance at All Levels

Changing a system's approach from providing and arranging inputs to increasing output and achievement is essential for raising education's quality and relevance at all levels. Measures of success will include increasing completion levels, declining gender and geographic gaps, and rising learning achievement. A results focus implies a new basis for developing policies and programs and allocating resources. Accountability systems and performance standards based on student achievement goals, not input moving protocols, will need to form the basic paradigm of results based management in the sector.

MENA countries have explored a variety of strategies for improving the quality of their education systems, and several are taking the first steps in measuring learning outcomes. Many strategies are

Box 4

STRATEGIC FRAMEWORK FOR LONG TERM SECTOR PLANNING IN EGYPT

To pursue the Government's goals for compulsory education, Egypt developed a long-term Strategic Framework defining 13 objectives and the interventions needed to achieve these goals. While affording the flexibility needed to respond to evolving requirements of educational change at the central and local levels, the Framework will guide planning and activities over the 15 to 20 year life of Egypt's multi-phase Education Enhancement Program (EEP). Activities are included in an annual work plan (AWP) designed each year through an iterative process involving the central Ministry, local Governorate bodies, international donors, and a Planning, Programming and Monitoring Unit established for the EEP. Each year's work plan incorporates priority activities needed to implement interventions identified in the Strategic Framework. To ensure that interventions are consistent with local needs, Governorate-level units and the MOE discuss proposals in planning each AWP. Annual indicators measure outputs, and show progress toward annual and long-term objectives.

The benefits of this system have been considerable. Previously weak efforts in distance education, school management, and Education Management Information Systems (EMIS) improvement have been rejuvenated. Distance education and EMIS activities had been focused simply on hardware requirements; by being incorporated in an overall Framework, the use to which hardware is put has become the prime concern. As a result, distance education materials are now directly linked to improving classroom learning, and EMIS activities are increasingly oriented towards the use of information rather than simply its production. In addition, by providing a long term and coherent Framework for activity planning, Egypt makes better use of donor inputs, and donors achieve more impact for the assistance they provide.

available to pursue these goals; four areas are particularly important.

First, *simplifying system management.* Most MENA education systems are managed by at least three ministries, and often others also have some peripheral involvement. This creates competition for resources and limits consensus on system-wide approaches for improving performance. Consolidating ministries and focusing their attention on standards and results rather than delivery process is the administrative analog to a pedagogic focus on learning rather than input delivery.

Second, *decentralization, in part through increasing school autonomy* over teaching methods, language of instruction,[37] allocation of resources within the school and school schedules can increase efficiency and the effectiveness of classroom processes. Increasing school autonomy can be accompanied by heightened community participation, as in Yemen where involving Fathers' Councils in school management is effective in mobilizing community support for education.

Third, *aligning curriculum (including textbooks and instructional materials), teacher training, instruction and assessment.* When these four key educational elements are not aligned within levels, they cannot work together to create a well performing system. Curriculum and learning skills acquisition also need to be coherently sequenced between levels — from basic and secondary, including VTE, through tertiary — to ensure that the system functions as a whole rather than as a series of unrelated stages. Alignment is particularly important for basic and secondary level education. In addition, teachers need to learn strategies that accommodate differing learning styles among students.

Fourth, *professionalizing the teaching cadre at all levels,* especially basic and secondary. Improving the quality and performance of the education system will inevitably require improving the quality

37. In many cases, language of instruction is a political rather than pedagogical issue; when this is the case, schools may not be authorized to choose the language of instruction.

of the teaching cadre. This can be accomplished in part through focusing preservice and inservice training on what teachers need to know and do, rather than on credentials. Improving the incentive structures for teachers, recruiting into the teaching cadre students from more selective streams of education and training, and increasing the share of secondary and university teaching staff with teaching degrees are all important steps as well.

A fifth strategy may be appropriate for some countries: *"leapfrogging" through the use of technology*. Evidence that technology can improve the quality of teaching and learning is growing, at least for OECD countries.[38] Research has demonstrated that students using traditional computer-based systems outperformed those taught without the use of such systems, and there is beginning evidence that computers can be effective in developing the active learning strategies considered crucial for innovation. However, caution is warranted; one 1993 estimate placed the annual cost per student for an optimal package of hardware, software and maintenance at US$556 plus personnel costs (estimated at US$1,375 in the U.S. but undoubtedly less in the MENA region).[39]

Increase Private Sector Participation in Education Through Legal, Regulatory and Accreditation Frameworks

Most private sector participation in education provision and finance in the Middle East and North Africa involves private for-profit enterprises. Not-for-profit education institutions are constrained by the lack of facilitating legal, regulatory and accreditation frameworks, particularly for post-compulsory education. While the State has, in most cases, the responsibility to guarantee access to high quality basic education for all and standards in post basic levels, public finance and provision at all levels is not affordable without a serious deterioration of quality. Private financing is thus a priority area for development, through both cost recovery in public institutions and expansion of private (for-profit or not-for-profit) delivery systems.

Regulatory frameworks that create demand and supply incentives and provide sufficient autonomy to operate independent institutions will be needed. To enable the market to move past provision of the low quality training which meets simple credentialling demand, the financial ability to establish expensive facilities and the opportunity to borrow for tuition against future earnings are needed.

Limited public subsidies can be used to enable not-for-profit institutions to compete on quality or create incentives for profit making institutions to do so. In Hungary, incentives are created by provisions for support based on efficiency and performance standards. Providing limited, targeted support to spur development of both types of private institutions may be a more cost effective means of meeting social demand for higher education than direct public financing and provision. Development of Iran's private Islamic Azad University was encouraged in this way, through subsidization of the initial capital investment costs.

Governments will need to choose the point along a spectrum of control ranging from full institutional independence to full State authority over provision. Regulation which tightly controls many aspects of provision eliminates sufficient autonomy to make private operations feasible and impedes private provision. On the other end of the spectrum, significant absence of public control over crucial aspects of provision would lead to substandard quality in some instances. The most important areas for regulatory attention are teachers, curriculum and facilities. In Jordan, the growing for-profit schools sector is subject to regulations mandating use of national textbooks, exams and teacher qualification standards. These

38. President's Committee of Advisors on Science and Technology 1997.
39. Becker 1993.

requirements are not felt to be overly onerous by school proprietors.

Issues relevant to *regulation of teachers* in for-profit and not-for profit educational institutions include the terms of employment, including salary, tenure and termination rights, certification, and mandatory teacher qualifications. While discretion may remain with school management over individual hiring and firing decisions, rules delineating the extent of that discretion are needed to ensure some uniformity of quality throughout the system and to give administrators, teachers and parents a reliable baseline of expectations on which they can depend.

All private educational institutions will likewise need a clearly defined sphere of authority over curriculum and materials choice. Regulation which so closely controls *curricular choice* as to mandate subjects, sequencing and hours by subject would eliminate a significant potential for the differentiation which can drive demand for and growth of non-public provision. In Morocco, when private schools using the French curriculum became obliged to teach the national curriculum, they chose instead to use both curricula to maintain the differentiation which supports the demand for their services. At the same time, the absence of quality ensuring regulation can create a bifurcated market in which well-to-do students enjoy very high quality and everybody else suffers from a "race to the bottom" among providers.

Ownership of, and liability for, *facilities* needs to be placed on the spectrum between private and public responsibility. Governments may choose to assume start-up costs but then transfer ownership to private actors (the inverse of a Build-Transfer-Operate infrastructure contract) who would incur expansion and maintenance obligations in return for the initial subsidy. Both profit making and not-for-profit private institutions benefiting from this type of start-up subsidy could be required to accept a set percentage of tuition free students.

Governments may wish to establish *independent accreditation boards* with authority over the aspects of quality control discussed above to develop and monitor standards in private education. Independent accreditation boards can contain a mix of public and private representatives and should have a clearly defined scope of authority. From a systemic perspective, they constitute a mechanism for coordinating private with public provision. They thus need to be integrated in long term sector planning exercises. Accreditation boards independent of university control are planned by Jordan as a way to equalize the regulatory environment in public and private higher education.

Improve Internal Efficiency

Most MENA countries devote a large share of their national budgets to education. But both investment and recurrent resources are often not used efficiently. There is enough money in most cases for basic education, but it is often used to pay the salaries of more teachers than those who actually teach, to finance construction of schools located without regard to student habitations and, ultimately, to produce students who do not learn math and science at international standards, and who possibly do not learn how to learn. High repetition levels add to the resource burden. The problems multiply with streaming and tracking systems in secondary that limit flexibility and with excessive numbers of tertiary institutions and programs.

Most countries in the region, having achieved high basic education participation, now need to respond to increasing demand for secondary and higher education. Weak sectoral management often leads to inefficient use of existing resources. Cost data on categories of expenditure and actual disbursements sufficient to monitor internal efficiency is frequently absent. Civil service lines of authority and regulations impede education managers ability to set policies and procedures regarding employment, hiring, promotion, remuneration and termination standards,

severely limiting the system's prospects for efficient operation, as 90 percent of recurrent funds are normally spent on staff.

Creation of independent teaching corps not governed by civil service regulations would foster greater accountability, flexibility and effectiveness. Developing *professional associations of educators* would be an important step in this direction. These associations could set professional standards, enforce codes of conduct, work to improve the condition of educators and advancement of the profession, and introduce a licensing regime using teaching permits, periodic renewal requirements and retraining.

Controlling and managing unit costs will also be critical. Because 90 percent of unit costs consist of salaries, which will typically rise as GDP rises, unit costs will also increase as output and income increase. With such a high proportion of unit costs sensitive to GDP growth, the budgetary advantages created by GDP growth would disappear if the total salary bill grows faster than does GDP. In such a scenario, no funds would remain for expanding access or ensuring internationally competitive learning standards.

Although differences among countries are large, the region is characterized by high levels of non-teaching to teaching staff, declining student-to-teacher ratios, and high repetition rates. This suggests that there is room for more internal efficiency and more budgetary savings. However, the trade-off is sharp: declining student-to-teacher ratios in MENA are often due to the opening of schools in remote villages where the number of students is low (e.g., in Jordan, Egypt and Morocco) in order to increase access. Similarly, high repetition rates are at times linked to a

Box 5

PUBLIC-PRIVATE PARTNERSHIPS TO IMPROVE TECHNICAL TRAINING

In Tunisia, the Government is redefining how technical training programs are designed and delivered, moving the focus from public training centers to enterprises in need of skilled workers. In the past, pre-service industrial training was designed and delivered entirely by public institutions. Now, with support from a Fund set up under the Bank supported *Second Training and Employment Project,* a dual system providing training in enterprises and centers has been established. Financing criteria ensure that training responds to enterprise needs. Centers submit feasibility studies demonstrating a clear economic justification for the training to be delivered: evidence that rates of return are positive and that labor market demand for workers with the skills in question is strong. Centers also obtain commitments — signed contracts — with enterprises, arranging for training delivery in the enterprise. This is the key to ensuring the dual nature of the system. Crucial inputs to ensure successful operation of the dual system are also supported by the project. Traditional curricula are adapted to specific enterprise needs, and selected enterprise workers are given teaching methods instruction so they can effectively deliver training in-house.

For in-service training in small and medium sized enterprises (SMEs — businesses with fewer than 100 employees), Tunisia has also moved the design and initiative for training closer to employers and employees. Using a survey of registered SMEs to identify skill needs in the sector, the Government contracts with training centers to provide short courses (about a week or less) addressing the needs of these businesses. Training centers advertise in the local media, and any employee of a registered SME is eligible to take the course free of charge. Costs are recovered with funds raised through the Vocational Training Tax paid by registered firms. By defining courses according to enterprise identified skill needs and depending on employee initiative to pursue training, the program structure ensures greater relevance and efficiency than traditionally prevails in public sector, institution-focused training schemes.

deliberate pursuit of quality and budgetary savings (e.g., in Tunisia).

Considering *alternative forms of education delivery,* particularly at the secondary and tertiary level, deserves attention. Two important possibilities are increasing linkages with the private sector and distance education (e.g., Arab Open University). Public-private partnerships can be very important for increasing efficiency, for instance through contracting out to the private sector for provision of essential goods and services such as textbooks and building maintenance, or through establishing pairing relationships between enterprises and higher vocational and technical education to ensure that training resources and student time are well targeted.

With completion rates in the primary and lower secondary stages nearing universal levels, demand for places in higher secondary and tertiary education will grow beyond the capacity of available public funds. Because students at these levels have the ability to learn independently, *distance education* delivery methods can provide access to upper levels at much lower per student costs while maintaining high quality standards. If a televised lecture reaches 10,000 students, it could be affordably delivered by a Nobel Laureate. There is not much experience with these methods in the region, but some examples illustrate that the prospects of success with distance education are high; costs depend largely on the number of students enrolled and the modality of instruction. Two distance education institutions are presently operating in the region, and a third — the Arab Open University — is planned.

Al-Quds Open University (AOU) is a national institution for higher education operated by the Palestinian Authority. The mode of instruction is print-based, and therefore low cost. It operates nine study centers in the major cities in West Bank–Gaza, as well as two study centers in the United Arab Emirates, and enrolled 10,500 students in 1998. It has a presence on the World Wide Web at http://www.palestine-net.com/education/qou. AOU accepts students holding a general secondary school certificate or its equivalent and offers programs of study in education, management and entrepreneurship, technology and applied sciences, social and family development and continuing education. Fees are lower than those of conventional universities in West Bank–Gaza, amounting to about US$16 per credit hour.

The University of Tourism and Culture for Peace is a not-for-profit institution based in Marseilles, France, that offers, in cooperation with the University of Rabat, University of Bethlehem and University of Ben Gourion, a program of study on tourism management sponsored in part by Club Med. The mode of instruction is two-way teleconferencing, and therefore high cost. Students enroll in courses at their own universities and are taught by a team of professors from the participating universities. Courses are taught in French and English, with translation into Arabic as needed. Approximately 80 students at four universities were enrolled in 1998. Unit costs are high due to the high cost of satellite time (US$40/hour), capital costs for the specially equipped classrooms (US$300,000 per site for classrooms, engineering and antennas) and operating costs (US$400,000 per year).

Distance education is also being used to help a significant portion of the Yemeni teaching cadre to upgrade their skills. Since late 1993 over 10 percent of Yemen's basic education teachers have taken part in a World Bank supported program which uses field libraries and televised lectures. Training is delivered to grade 1–4 teachers who are just two years removed from secondary school graduation. It allows teachers to continue working in schools while improving their subject matter knowledge and teaching skills.

Build a Community of Learners

Designing and implementing results based strategies requires a community of learners willing to

continuously review best experiences, methodologies and technologies, and analyze educational problems in the context in which they arise so they can apply the results to new challenges. In virtually all regions education policy-makers, researchers and practitioners participate in learning networks focusing on improving education. In MENA, such a network needs to be built up, beginning perhaps within countries and then spreading across the regions.

There is little tradition in MENA for encouraging public access to information on education. Moreover, basic education statistics are often unreliable. Information is lacking on key areas such as expenditures, learning and labor market outcomes. This needs to change. Universities, consulting firms, private businesses, political leaders as well as families and communities all need open access to information regarding the education system and how well it is doing.[40]

Such communities of learners are being developed. In MENA, the Economic Research Forum based in Cairo acts as a community of learners on economic issues. A similar network could be established for education researchers in partnership with such groups as ALECSO (the Arab League Education, Culture and Science Organization), ISESCO (the Islamic Education, Science and Culture Organization), UNESCO and ESCWA. There are also international communities made up of learners from many regions. Participation in one of the international or regional assessments of learning achievement is one way to join in this network. Some MENA countries have already participated in these studies and others intend to participate in future assessments.

Inform Everybody

Disseminating information about education is critical for building consensus around education reform and for continued support of national comprehensive policy frameworks. People need to know what is being planned, and what it means for them and their children. They also need to know about costs and results: what are the real costs of education, how much students are learning in key subjects, which fields of study have higher employment opportunities. Each country will need to develop its own communication strategy, but the overall objective is to achieve greater transparency and to reduce information asymmetry. Jordan and West Bank-Gaza have both taken important steps in this regard by putting their national education data in the most public of forums — the World Wide Web. Jordan's National Center for Human Resource Development maintains a website with all of its research publications as well as national data at *http://www.nchrd.gov.jo* while the Palestinian Central Bureau of Statistics maintains a site at *http://www.pcbs.org* where the annual

Table 2 Key Objectives and Strategic Paths: How They Relate

Key Objectives	Establish policy frameworks	Focus on results	Enable private participation	Improve internal efficiency	Build a community of learners	Inform everybody
Learning to learn	X	X			X	
Building human capital and social cohesion	X	X		X	X	X
Universal completion of basic education	X	X		X		
Increase education information	X				X	X
Maintain sustainable financing	X		X	X		

40. Heyneman 1997.

statistical yearbooks for education in Palestine can be accessed.

Countries in the Middle East and North Africa can use the strategic paths discussed above to pursue the key education development objectives identified in Section II of this paper. Each of the paths leads to some of the objectives but not to others, and there is no one-to-one correlation of means and ends. Used in concert however, these strategies can help countries to move forward on all fronts.

IV. HOW THE WORLD BANK GROUP CAN ASSIST ITS CLIENTS IN MENA IN THE FUTURE

In 1963, Tunisia became the first country to implement an education project with World Bank support. Since then, the Bank has supported education in 11 regional countries, lending over US$2.65 billion through 75 projects. World Bank education lending increased by 80 percent between the mid 1980s and the mid 1990s, from 5 to 8 percent of total lending. In MENA, education's share of lending remained relatively stable over this time period, at about 9 percent. About two new projects enter the portfolio annually. Disbursements have risen since FY95 and about four new operations per year are planned for FY99 through FY2000. Tunisia and Morocco are the largest borrowers, and only Yemen qualified for IDA lending in FY98.

All education subsectors are represented in the portfolio. The share of support to basic education is approximately equal to the Bank-wide average, while for secondary, vocational and tertiary education the shares are slightly higher, as would be expected from the general level of development in the region.

The World Bank can help its clients to pursue and achieve their education goals by providing assistance designed to reinforce the strategic underpinnings of education development and to design and implement specific program actions. At the same time, the Bank's activities must be targeted so that its resources are used consistently with its comparative advantage. The World Bank can help its clients by:

Helping to develop comprehensive policy frameworks for long-term program support. Egypt developed such a framework for basic education in 1997 with World Bank assistance and is basing its investment and programmatic activities on it. Linking the education policy framework to the economic environment and strategy is a crucial

Figure 19 MENA Education Lending, FY87–00

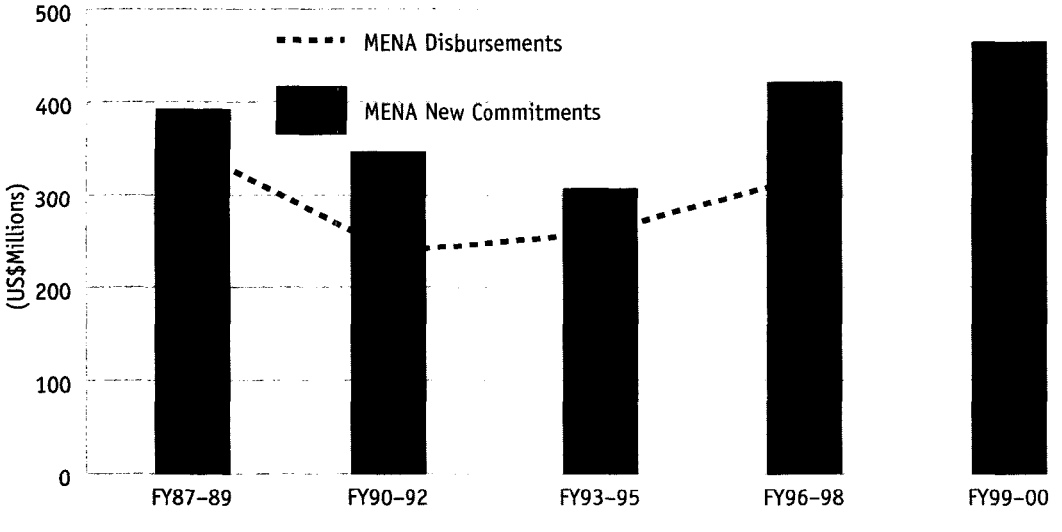
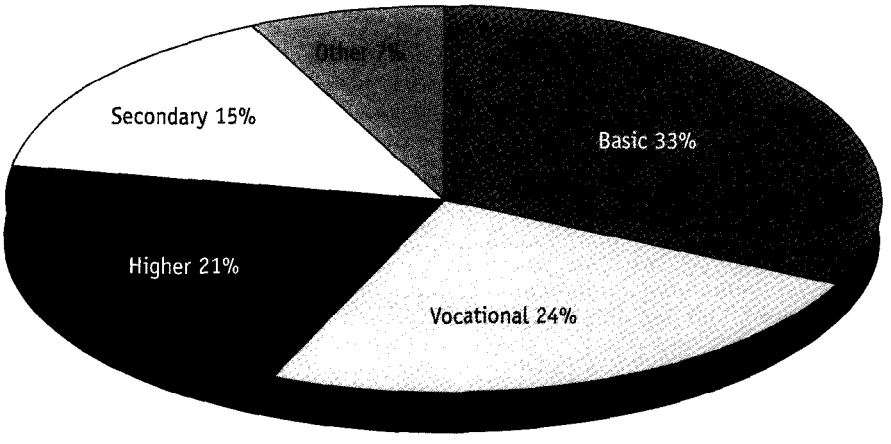


Figure 20 MENA Education Lending by Subsector (US$), FY90–98



part of the exercise, so that development plans form a coherent whole and not just a fragmented collection of sector specific visions. In countries where stable sectoral priorities are few, identification of priorities which national authorities can commit to is a first step in this process. Where limited capacity for strategic policy development exists, intensive work to train counterparts in the processes and objectives of such an exercise will be needed to begin the process. While the World Bank can assist with these steps, multisectoral work involving economic management will be needed to initiate reforms, such as teacher compensation, requiring broader prerequisite actions such as civil service reform. Consensus among the domestic educational community and strong Government commitment to reforms in some countries facilitate the Bank's ability to assist in identifying, preparing and implementing operations.

Providing supportive advice and high quality non-lending services, such as comprehensive economic and sector work, referral services to technical assistance, social assessment support, and access to global knowledge about education. The Bank's unique advantage in learning from the collective experience of its clients regarding effective education strategies and practices is particularly valuable for countries in the MENA region, which are often cut off from the international community for reasons of language (relatively little education research is published in Arabic) and technology (telephone to population ratios are low, limiting access to the internet). Comprehensive economic and sector work, based in part on global knowledge, can be the first step in designing effective program lending, or of developing legal frameworks to increase private financing and provision activities. These activities can be used to build the consensus needed for policy frameworks. Such support was useful in assisting Tunisia, Egypt and Jordan to generate consensus and commitment to reform through years-long processes of consultation and discussion at all levels — from teachers and school administrators to regional educational authorities and national educational research and development institutions. In Tunisia, intensive nationwide consultation and collaboration with teachers and school officials helped to ensure firm system-wide support for a reform which aims at improving educational quality and heightening a sense of nationhood.

Using more flexible lending instruments for program support and selecting instruments suited to specific policy, institution building and investment objectives identified by the client so

that lending is demand driven. Program lending increases the opportunities for partnership with other donors and thus the World Bank's leverage in policy discussions (such as in the design of the Egypt strategic framework) where adherence to Bank supported policy reform is the key to substantial concessionary co-financing. New loan types (the Learning and Innovation Loan) can also be used where experimentation is needed to determine the best long term course of action, or to assess national implementation capacity. These have not yet been used in education in MENA, but may become applicable with clients who resume cooperation with the Bank after long periods. To the extent however that new lending instruments call for short, fast, highly focused sector work, their utility in program lending will be constrained by the need for sector work conducted in full partnership with the client to ensure ownership. Tradeoffs between these goals — speed, client participation and comprehensiveness of sector work — will be necessary where early stage program lending requires substantial up front investment costs.

Facilitating greater public-private partnerships and non-public participation in financing and providing education. Part of the challenge will involve creating demand among clients for private sector institutional development lending. Jordan's experience with engaging enterprises in vocational training can be used to demonstrate the beneficial effects of these activities. Caution will be needed where legal frameworks are absent in the non-profit sector, as this can impede non-profit operation as effectively as a hostile regulatory environment.

Serving as a catalyst of dialogue between Ministries and a coordinator of donor efforts. This increases the Government's incentive to involve the Bank in its development activities in a number of ways. First, by integrating all relevant Ministries in planning exercises, the Bank can help its clients ensure that development planning is coherent and coordinated from a national perspective, not just within the education sector. For instance, the Bank routinely helps to ensure that the long term recurrent costs generated by capital investment are taken into account as part of the decision to invest. Second, the Bank serves to coordinate and rationalize donor efforts within an overall framework. By ensuring that the multitude of direct assistance sources are planned so as to complement one another, the effectiveness of this assistance is increased, as in Jordan, West Bank-Gaza, Yemen and Egypt. There is also great potential for cooperation with Arab donors, such as the Arab Fund for Social and Economic Development. Third, in a few cases the World Bank's "Stamp of Approval" is required by the European Union to continue discussion with Governments on inclusion in the Mediterranean Initiative on trade, and in return for the EU's substantial funding of technical assistance for human resource development.

Using evaluation research programs to learn from experience in partnership with clients. These programs should monitor and measure the development impact of World Bank lending and ESW activities, as Bank operations in Jordan have done. These activities can also be used to provide more support for participation in international assessments and development of internationally comparable statistics. Jordan's experience in establishing an institution to perform high quality research and analysis on the sector is instructive. With strong support from the highest levels of national authority, the National Center for Human Resource Development (NCHRD) has played a catalytic role in improving the quality of education delivered in Jordan and now provides analytic services to other regional countries. Such high level technical expertise also contributes to good implementation capacity.

The World Bank can best help its clients by emphasizing **selectivity in making choices,** so that both governments and the Bank invest credibility and resources in only those undertakings that can make a significant development impact. Where broad issues not susceptible to intervention through the education sector alone

(e.g., civil service reform) would constrain the effectiveness of World Bank activities in education, substantial caution in committing resources is warranted. Where constraints to effectiveness such as the lack of commitment to reforms, severely limited implementation capacity or non-additionality of funds due to national budgeting procedures are present (i.e., where there is no incremental effect of lending), the Bank should look closely to see that development resources are not squandered.

Focusing on capacity building for planning, analysis and management during project implementation through allocating more Bank resources to impact and progress monitoring. Continuing to place social sector experts in resident missions to increase the substance of the Bank's partnership with its clients — as it is doing in Egypt, Yemen and Morocco — can be an important positive step in this regard. In addition, Bank site visits and missions to Mashreq countries should include Arabic speakers.

LIST OF ANNEX TABLES

ANNEX A: EDUCATION SYSTEM AND STRUCTURE

Table A1 Compulsory Education and Number of Years in Each Level of Education

			Secondary				
Country	Compulsory		1st Cycle		2nd Cycle		Tertiary
Algeria	Compulsory	6	Compulsory	3	Free	3	Free
Egypt	Compulsory	5	Compulsory	3	Free	3 (5)	Free
Iran	Compulsory	5	Compulsory	3	Compulsory	4	Free
Jordan	Compulsory	10	N/A		Free	2	Not free
Lebanon	Compulsory	6	Not compulsory	3	Not compulsory	3 (4)	Not free
Morocco	Compulsory	6	Free	3	Free	3	Free
Syria	Compulsory	6	Free	3	Free	3	Free
Tunisia	Free	6	Free	3	Free	4	Small fee
WBG	Compulsory	6	Compulsory	3 or 4	Partly free*	3 or 2	No public
Yemen	Compulsory	9	N/A		Small fee	3 (4)	Not free

Sources: Constitutions of the Countries of the World (various years), International Encyclopedia of Education (1994).
Notes: In Free stages tuition is not charged but attendance is not compulsory.
Years in parentheses are for some types of secondary vocational/technical schools.
* Poor families are not required to pay.

Table A2 Constitutional and Legal Provisions for Education (most recent available data)

Country	Constitution	Law/Act
Algeria	*November 28, 1996* • Education is a Right • Basic education is compulsory • State provided free instruction at all levels	*1976 Laws on educational reform* • 9 years of basic education is compulsory and free
Egypt	*May 22, 1980* • Education is a Right • Primary education is compulsory • State provided free instruction at all levels	*Law No 233/1988* • 8 years of basic education is compulsory
Iran	*October 24, 1979 amended July 28, 1989* • Obliges the government to pursue free primary and secondary education for all, and to facilitate and expand higher education	
Jordan	*As amended through January 8, 1984* • Elementary education is compulsory and free in governemnt schools	*1994 Law of Education and Instruction* • 10 years of education is compulsory and free
Lebanon	No statement in the 1926 Constitution, as amended in 1990	*1998 law* • Elementary education is compulsory
Morocco	*Revised 1996* • Education is a right	• 6 years of basic education is compulsory • Public education is free at all levels
Syria	*March 13, 1973* • Education is a Right • 6 years of primary education is compulsory • Public education is free at all levels	
Tunisia	No statement in Constitution as amended in 1998	*Education Reform Law in 1991* • Basic education defined as 9 years
Yemen	*November 1994* • Education is a Right • Primary education is compulsory	*1992 Education Law* • Defines compulsory education as 9 years; However, due to present financial constraints only 6 years of basic education is currently compulsory.

Sources: Constitutions of the Countries of the World (various years by country); International Encyclopedia of Education (1994); Daily Star (April 1998), other various World Bank documents.

Table A3 Student Achievement, Assessment and Promotion Systems

	Algeria	Egypt	Iran	Jordan	Lebanon	Morocco	Syria	Tunisia	Yemen
First level									
Graduation criteria	No	R	R	T	T	T	T	R	T
Second level–1st stage									
Entrance criteria	No	G	G	N/A	G	G	G	G	G
Graduation criteria	R	N	R	N/A	N	R	N	N	N
Second level–2nd stage									
General or All									
Entrance criteria	G	G	G	G	G	G	G	G	G
Graduation criteria	N*	N	N	N**	N*	N*	N*	N*	N
Third level									
Entrance criteria	G	G	E	G	G	G	G	G	G

Key: T–Teachers' assessment; R–Standardized test at the regional/provincial level; N–National standard exam; E–Unclear which entity provides exam; G–Performance assessment at graduation from previous level of school.

** Baccalaureate; ** GSSCE*

ANNEX B: ECONOMIC AND SOCIAL STATISTICS

Table B1 Income and Social Indicators, 1970 and circa 1996

	GNP per Capita			Mortality Rate, Infant		Life Expectancy		Fertility Rate, Total		Literacy Rate, Adult	
	(US$)		PPP($)	(per 1,000 live births)		at Birth (years)		(births per woman)		(% of people 15+)	
	1970	1996	1996	1970	1996	1970	1996	1970	1996	1970	1995
Algeria	360	1,520	4,620	139	31.7	53.3	70.0	7.4	3.4	37	62
Egypt	230	1,080	2,860	158	53.1	51.1	65.5	5.9	3.3		51
Iran	—	1,739	5,360	131	35.6	54.8	69.8	6.7	3.8	—	72
Iraq	—	—	—	102	101.4	55.4	61.6	7.1	5.3		58
Jordan	—	1,650	3,570	—	29.8	—	70.6	—	4.4	70	87
Lebanon	—	2,970	6,060	50	30.7	64.2	69.6	5.4	2.7	—	92
Morocco	260	1,290	3,320	128	52.8	51.9	66.2	7.0	3.3	28	44
Syria	360	1,160	3,020	96	31.2	55.8	68.6	7.7	4.0	53	71
Tunisia	280	1,930	4,550	121	30.3	54.2	69.7	6.4	2.8	55	67
WBG	—	—	—	—	—	—	68.3	—	6.4	—	84
Yemen **	—	380	790	186	97.8	41.6	54.0	7.7	7.2	—	44
Income groups											
LI		430			69		63		3.2		66
LI (*)		290			89		46		5.0		54
LMI		1,670			41		67		3.0		79

Source: WDI 1997 and 1998, Education Development Center 1997, World Bank estimates for GNP per capita in Iran.

Notes: — not available. Averages for income groups are for 1995. (*) excluding China and India. (**) Yemen literacy rate in 1995 are for 1994.

Table B2 Population and Labor Force Indicators, various years

	Population									Labor Force			
	Total (millions)			Aged 0-14, % of Total			Avg. Annual Growth Rate (%)			Avg. Annual Growth Rate (%)		Female % of Total	
	1970	1990	1996	1970	1990	1996	1970-80	1980-90	1990-95	1980-90	1990-95	1980	1995
Algeria	14	25	29	48.4	41.7	37.5	3.1	3.7	2.3	4.9	5.3	15	21
Egypt	33	52	59	41.4	39.3	37.2	2.1	2.5	2.0	2.5	2.7	26	29
Iran	28	56	63	45.8	45.9	40.3	3.3	3.6	2.8	3.3	3.5	21	25
Iraq	9	18	21	46.6	46.5	42.5	3.4	3.3	2.1	2.7	3.1	17	18
Jordan	2	3	4	45.8	52.8	41.5	3.8	3.7	5.7	4.9	5.3	15	21
Lebanon	2	4	4	43.9	34.9	33.7	1.4	2.5	1.9	3.5	2.9	23	28
Morocco	15	24	27	47.6	38.9	35.7	2.4	2.2	2.0	2.6	2.6	34	35
Syria	6	12	15	48.9	48.2	43.8	3.4	3.3	3.0	2.6	2.6	34	35
Tunisia	5	8	9	46.2	37.6	34.4	2.2	2.5	1.9	2.7	3.0	29	30
WBG	1	2	2	—	—	44.7	—	—	—	—	—	—	—
Yemen	6	12	16	43.6	48.7	47.7	3.0	3.3	5.0	3.7	4.9	33	29
LI countries	—	n/a	n/a	—	—	—	2.6	2.0	1.7	2.2	1.7	40	41
LI countries (*)	—	n/a	n/a	—	—	—	2.0	2.7	2.4	2.6	2.5	40	41
LMI countries	—	n/a	n/a	—	—	—	2.2	1.7	1.4	1.8	1.7	38	40

Source: WDI 1997 and 1998, World Development Report (WDR) 1992, World Bank staff calculation based on data from WDI.
Notes: — not available. (*) excluding China and India.

Table B3. Average Annual Population Growth, Low and Middle Income Countries (%)

	1965-73	1973-80	1980-90	1990-96
ECA	n/a	n/a	n/a	0.3
EAP	2.6	1.7	1.6	1.3
LAC	2.6	2.4	2.0	1.7
SAS	2.4	2.4	2.2	1.9
MENA	2.8	3.0	3.2	2.6
SSA	2.7	2.9	3.1	2.7

Source: WDR 1993, World Bank estimates, September 1997.
Note: ECA: Europe & Central Asia, EAP: East Asia & Pacific, LAC: Latin America & the Caribbean SSA: South Asia, SSA: Sub-Sahara Africa.

Table B4. Estimates and Projections of School-Age Cohorts (thousands), 1995–2040

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040
Ages 5–9										
Algeria	3,596	3,563	3,572	3,740	3,888	3,631	3,551	3,616	3,685	3,720
Egypt	7,665	7,231	6,955	7,173	7,321	7,151	7,100	7,167	7,187	7,197
Iran	9,210	7,434	7,657	8,400	8,472	7,879	7,589	7,745	7,960	8,082
Iraq	3,076	3,115	3,550	4,151	4,432	4,507	4,523	4,522	4,466	4,311
Jordan	558	619	668	785	766	706	644	654	704	726
Lebanon	457	491	464	424	417	437	454	456	446	437
Morocco	3,198	3,317	3,188	3,351	3,098	3,080	3,176	3,227	3,231	3,195
Syria	2,260	2,082	2,126	2,320	2,451	2,393	2,207	2,171	2,254	2,322
Tunisia	1,064	1,041	984	928	968	1,009	1,020	1,002	982	978
WBG	304	411	505	545	571	604	629	641	623	583
Yemen	2,887	2,415	2,787	3,164	3,470	3,606	3,568	3,513	3,437	3,332
Ages 10–14										
Algeria	3,596	3,586	3,555	3,565	3,733	3,883	3,626	3,546	3,612	3,682
Egypt	7,099	7,623	7,200	6,933	7,155	7,306	7,136	7,089	7,156	7,177
Iran	8,749	9,183	7,417	7,642	8,386	8,458	7,868	7,579	7,736	7,953
Iraq	2,605	3,055	3,100	3,536	4,138	4,419	4,496	4,513	4,513	4,459
Jordan	597	557	619	667	785	765	705	643	654	703
Lebanon	416	456	490	463	424	416	437	453	455	445
Morocco	3,065	3,176	3,301	3,176	3,342	3,090	3,073	3,170	3,221	3,227
Syria	1,975	2,253	2,077	2,122	2,315	2,447	2,390	2,204	2,168	2,253
Tunisia	1,040	1,061	1,038	982	926	967	1,008	1,019	1,001	981
WBG	259	306	412	505	544	571	602	628	641	623
Yemen	2,318	2,845	2,385	2,759	3,137	3,444	3,581	3,545	3,493	3,419
Ages 15–19										
Algeria	3,233	3,583	3,575	3,547	3,557	3,726	3,876	3,620	3,540	3,607
Egypt	5,918	7,055	7,584	7,172	6,912	7,135	7,287	7,120	7,073	7,143
Iran	6,776	8,719	9,156	7,398	7,625	8,369	8,443	7,854	7,568	7,725
Iraq	2,217	2,590	3,042	3,089	3,526	4,126	4,408	4,484	4,502	4,503
Jordan	512	595	556	617	666	782	763	704	641	653
Lebanon	389	414	455	489	462	423	416	436	453	454
Morocco	3,019	3,042	3,158	3,287	3,166	3,331	3,082	3,065	3,162	3,215
Syria	1,610	1,966	2,245	2,071	2,117	2,311	2,442	2,384	2,201	2,165
Tunisia	951	1,037	1,058	1,035	980	923	964	1,006	1,017	1,000
WBG	221	262	308	412	504	543	570	601	626	639
Yemen	1,632	2,277	2,802	2,355	2,727	3,105	3,412	3,550	3,518	3,468
Ages 20–24										
Algeria	2,756	3,217	3,568	3,562	3,535	3,546	3,714	3,864	3,610	3,532
Egypt	4,929	5,864	7,003	7,542	7,139	6,882	7,107	7,260	7,095	7,050
Iran	5,619	6,743	8,680	9,120	7,372	7,600	8,343	8,417	7,832	7,547
Iraq	1,991	2,203	2,577	3,028	3,077	3,512	4,111	4,392	4,469	4,487
Jordan	476	513	595	555	616	663	780	761	702	640
Lebanon	412	387	412	452	486	460	421	414	434	451
Morocco	2,646	2,985	3,017	3,138	3,270	3,151	3,318	3,070	3,054	3,152
Syria	1,313	1,597	1,956	2,235	2,064	2,109	2,302	2,434	2,377	2,194
Tunisia	859	946	1,032	1,054	1,032	976	920	961	1,003	1,014
WBG	208	226	264	307	411	502	541	568	599	624
Yemen	1,058	1,578	2,222	2,746	2,310	2,682	3,058	3,365	3,506	3,480

Source: World Bank staff estimation

Table B5. Average Annual Growth in GDP and Real Per Capita GDP (%)

Country	GDP		Real Per Capita GDP			
	1974–85	1986–95	1974–80	1981–90	1991–95	Forecast 1996–2002
Algeria	5.8	0.3	1.0	-0.8	-2.4	2.9
Egypt	9.0	2.2	4.8	3.6	-0.7	3.7
Iran	1.1	2.1	-5.8	-0.1	-0.5	3.8
Jordan	3.4	1.7	9.7	-2.6	1.9	2.9
Lebanon	—	—	-2.6	-1.5	9.3	5.4
Morocco	4.9	2.8	1.8	1.5	-0.9	2.4
Syria	4.8	4.5	5.4	-0.9	3.6	0.7
Tunisia	5.3	3.4	4.1	1.0	2.5	4.6
WBG	—	—	—	—	—	—
Yemen (*)	—	3.9	3.1	2.8	-1.8	1.2

Source: Staff calculation using data from WDI 1997 and World Economic Outlook (WEO) 1997.
Note: (*) For Yemen, GDP growth rates are for 1993–1995.

Table B6. Culture and Communication, 1995

Country	Daily Newspapers (copies per 1,000 inhabitants)	Radio Receivers	Television Receivers	Main Telephone Lines	Cellular Subscribers*
	per 1,000 inhabitants				
Algeria	51	238	89	42	0.3
Egypt	43	312	110	46	0.1
Iran	17	228	63	76	-
Iraq	26	224	80	33	-
Jordan	47	251	80	73	3.5
Lebanon	110	891	366	82	39.2
Morocco	15	226	94	43	1.4
Syria	19	264	67	63	0.0
Tunisia	45	200	89	58	0.5
WBG	-	-	-	-	0.0
Yemen	15	43	28	12	0.5

Sources: UNESCO 1996, Arab States Telecommunications Indicators; ITU, Nov. 1996.
Notes: -: not available. (*) Data on cellular subscribers are for 1996.

Table B7. Adult Literacy Rates, 1960–1995 and Average Years of Schooling Among Adults 15 Years and Older

Country	Adult Literacy Rates (%)								Average Years of Schooling		
	Total				Total	Female	Male	Gender Gap			
	1960	1975	1985	1990	1995				1980	1985	1990
Algeria	10	37	49	57	62	49	74	25	2.5	3.2	4.0
Egypt	26		45	48	51	39	64	25	2.3	3.6	4.3
Iran	—	—	48	54	72	66	78	13	2.8	3.3	3.9
Iraq	18		52	60	58	45	71	26	2.7	3.5	4.0
Jordan	32	70	74	80	87	79	93	14	4.3	5.2	6.0
Lebanon	—	—	77	80	92	90	95	4	—	—	—
Morocco	14	28	42	49	44	31	57	26	—	—	2.5
Syria	30	53	59	64	71	56	86	30	2.9	3.3	3.9
Tunisia	16	55	58	68	67	55	79	24	3.7	4.4	5.1
WBG	—	—	—	—	84	77	92	15	—	—	8.0
Yemen	—	—	32	38	44	24	63	39	0.3	0.8	1.5

Percentage of citizens 15 years or older

Sources: Palestinian Central Bureau of Statistics 1996; Republic of Yemen 1996; WDI 1997 for 1990 and 1995; WDR 1980 for 1960 and 1975. Barro and Lee 1996; World Bank database.

Note: For Yemen, data are 1994 instead of 1995.

ANNEX C: EDUCATION STATISTICS

Table C1. Gross Enrollment Rates, 1995 (%)

Country	Primary		Secondary				Tertiary	
			Lower & Upper		Lower	Vocational/technical Enrollment as Share of Total Secondary		
	Female	Male	Female	Male	Total		Female	Male
Algeria	100	112	59	66	75	6	9	13
Egypt *	93	107	68	80	90	31	14	22
Iran *	96	103	62	76	93	5	11	19
Iraq **	83	97	34	53	—	—	—	—
Jordan	94	93	67	63	73	19	13	22
Lebanon ***	108	111	78	73	—	14	—	—
Morocco	71	94	33	44	45	7	9	13
Syria	95	106	40	47	80	10	—	—
Tunisia	112	119	59	63	52	6	12	14
WBG	91	92	—	—	n/a	3	—	—
Yemen	36	82	11	41	n/a	1	3	17

Sources: UNESCO 1997, Global Education Database (GED) 1995, Hashemite Kingdom of Jordan 1996; Palestinian Authority 1996, National Center for Human Resources Development (www.nchrd.gov.jo), Yemen Education census 1997/98 World Bank 1996 and 1997.
Notes: (*) Egypt tertiary GERs and Iran GERs are 1994 data; (**) Iraq GERs are 1992 data; (***) Lebanon Secondary GER are 1993 data. —: not available. GERs in lower secondary are most recent available data in the 1990s. For Jordan, Grades 7–10 GER is used for lower secondary. For WBG, primary education covers 10 years in this table.

Table C2. Net Enrollment Rates in Primary and Secondary Education, circa 1995 (%)

	Primary				Secondary			
Country	Year	Female	Male	Total	Year	Female	Male	Total
Algeria	1995	91	99	95	1995	53	59	56
Egypt	1995	87	97	92	1995	66	70	68
Iran	1992	93	100	97	—	—	—	—
Iraq	1992	74	83	79	1992	30	44	37
Jordan	1996	97	96	96	1996	55	49	52
Lebanon	1996	96	96	96	—	—	—	—
Morocco	1995	62	81	72	1994	—	—	30
Syria	1995	87	95	91	1995	37	41	39
Tunisia	1995	95	98	97	1991	39	46	43
Yemen	1998	38	71	55	1998	10	23	17

Sources: UNESCO 1996, 1997; World Bank staff estimates using data from Egypt MOE, Lebanon Household Survey 1996, FAFO Survey of Living Conditions in Jordan 1996, Yemen Education Census 1997/98.

Notes: — Not available. Jordan primary education includes 10 years of basic education and 2 years of secondary. Data for Lebanon are school participation rates for children aged 6–11. Egypt preparatory education data (grades 6–8, ages 11–13) is listed for secondary.

Table C3. Percentage of Children Enrolled in School in 1990s and Estimated Number of Children out of School, 1995

		Share of Children in School, Age 6–10			Children out of School	Share of children in School, Age 11–15			Children out of School
Country	Year	Female	Male	Total	(000s)	Female	Male	Total	(000s)
Algeria	1995	91.0	99.0	95.0	180	—	—	—	—
Egypt	1995	79.0	89.1	84.2	1,193	60.0	79.3	74.2	1,771
Iran	1992	93.0	100.0	97.0	274	—	—	—	—
Iraq	1992	74.0	83.0	79.0	626	—	—	—	—
Jordan	1996	99.5	99.8	99.7	2	94.3	94.7	94.6	32
Lebanon	1996	96.1	96.1	96.1	18	90.4	88.5	89.4	43
Morocco	1994	46.5	61.2	54.0	1,459	43.6	64.7	54.2	1,399
Syria	1995	87.0	95.0	91.0	198	—	—	—	—
Tunisia	1995	95.0	98.0	97.0	32	—	—	—	—
Yemen	1994	36.7	61.3	49.4	1,403	38.3	82.3	62.0	829
Total					**5,384**				**4,074**

Sources: UNESCO 1996 and 1997; Household Survey 1996 for Lebanon; Egypt 1996; FAFO Survey of Living Conditions in Jordan 1996. Staff estimation using data from Kingdom of Morocco 1996 and Republic of Yemen 1996.

Table C4. Student Flow Indicators, Most Recent Years, mid 1990s (%)

Country	Progression Within Primary		Transition to Secondary
	Grade 4 Enrollment as Percent of Entering Cohort (*)	Final Grade Enrollment as Percent of Entering Cohort	Initial Year of Secondary Enrollment as Percent of Final Primary Grade Enrollment
Algeria	96	90	82
Egypt	—	98	83
Iran	93	90	94
Iraq	—	—	—
Jordan	99	80	—
Lebanon	—	—	—
Morocco	85	72	81
Syria	94	85	66
Tunisia	95	87	62
WBG	—	—	—
Yemen	88	—	—

Sources: UNDP 1997; GED 1998; World Bank 1998.
* Arithmetic averages for females and males. Primary stage includes 5 years in Egypt and Iran; 9 years in Yemen; 10 years in Jordan; All other countries have 6 years of primary education.

Table C5. Primary Repeaters Share in Total Enrollments, 1990–1995 (%)

Country	1990	1991	1992	1993	1994	1995
Algeria	9.2	8.8	9.1	9.1	8.9	8.7
Egypt (*)	7.9	7.9	7.4	5.1	6.8	6.0
Iran	9.4	9.6	7.2	7.2	7.2	—
Iraq	—	—	16.5	—	—	—
Jordan	5.4	5.7	4.4	1.6	—	1.3
Lebanon	—	—	—	—	—	—
Morocco	11.1	12.3	12.4	—	11.7	12.0
Syria	7.0	6.8	7.2	7.0	7.6	7.2
Tunisia	19.8	20.5	18.5	17.8	16.3	17.3
WBG	—	—	—	—	—	—
Yemen	—	—	—	—	—	7.0
LMI average					6.6	

Sources: EdStats 1998; GED 1998; World Bank 1996 and 1998.
Notes: — Not available. (*) Data for Egypt do not include students in Al-Azhar schools.

Table C6. Compulsory Education and Child Labor

Country	Ages for Compulsory Education	Minimum Working Age	Labor Force, Children 10–14 (% of age group)			
			1970	1980	1990	1995
Algeria	6 to 15	16	7	7	3	2
Egypt	6 to 13	12	15	18	13	11
Iran	6 to 17	15	17	14	7	5
Iraq	6 to 12	15	13	11	4	3
Jordan	6 to 15	13	6	4	1	1
Lebanon	6 to 11	14	6	5	0	0
Morocco	7 to 12	12	13	21	11	6
Syria	6 to 11	12 to 13	12	14	9	6
Tunisia	—	13 to 15	12	6	0	0
Yemen	6 to 15	15	17	26	22	20

Sources: ILO 1998, UNESCO 1997, WDI 1997, Constitution of the Countries of the World.

Table C7. Public Expenditure on Education, Mid 1990s

	Public Education Expenditure as a % of... (1994)			Current Expenditure per Student *, mid-1990s							Allocation of current Expenditure by Level, Early 1990s		
				% of per capita GNP		US$ Exchange Rate		US$ PPP					
Country	GNP	GDP	Total Spending	Primary	Secondary	Primary	Secondary	Primary	Secondary	Tertiary**	Primary	Secondary	Tertiary
Algeria ***	7.3	7.0	20.7	13.8	30.4	221.5	487.0	621.5	1366.6	8281.0	60.9	18.1	16.1
Egypt	6.6	6.5	16.7	12.3	19.3	88.8	138.6	338.0	527.6	2801.1	31.3	40.8	27.9
Iran	4.7	4.5	18.1	7.2	10.7	158.0	235.2	380.2	566.0	—	29.0	33.9	22.9
Iraq	—	—	—	—	—	—	—	—	—	—	—	—	—
Jordan	6.3	6.0	16.6	15.1	15.4	227.8	231.8	517.4	526.5	6063.3	57.5	n/a	34.0
Lebanon	2.0	2.1	5.9	19.4	16.2	416.7	348.3	1122.1	938.0	5448.9	38.6	37.4	16.1
Morocco	5.6	5.4	22.6	13.3	44.3	147.3	491.8	395.4	1320.4	3885.6	33.0	50.7	16.3
Syria ****	3.8	3.6	13.6	8.8	17.8	99.1	199.0	262.7	527.6	3336.7	46.4	27.7	23.4
Tunisia	6.6	6.2	16.4	15.6	25.9	283.1	470.5	703.1	1168.6	5036.4	42.6	36.8	18.8
WBG	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	—	n/a	n/a	n/a
Yemen	7.5	6.1	20.8	27.3	48.3	71.0	125.5	210.4	371.6	1433.3	76.4	13.5	8.6

Sources: UNESCO 1997, World Bank 1996-1998, WDI 1998, Qasem 1998, World Bank staff calculation.

Notes: (*) The calculation of current expenditures per student in public schools is based on the assumption of no public subsidies to private schools. (**) Tertiary per student expenditure is calculated on a different basis than are primary and secondary, using data on capital and current expenditures by public and private institutions. (***) For Algeria, 9 years of basic education is used as primary education for this calculation. (****) For Syria, only Ministry of Education expenditures are accounted for in this calculation. Spending by other ministries and departments and local authorities is excluded; 1994 expenditures do not include expenditure on third level education.

Table C8. Primary and Secondary Student-to-Teacher Ratios

	1980	1985	1990	1991	1992	1993	1994	1995-98*
Primary								
Algeria	35.2	27.8	27.7	28.2	27.4	27.4	27.3	27.3
Egypt	—	31.9	24.9	24.0	23.5	26.8	26.8	24.2
Iran	—	21.9	31.4	31.3	31.9	31.7	31.9	30.3
Jordan	31.8	31.3	25.1	24.1	22.1	21.5	21.5	20.8
Lebanon	17.9	—	—	10.8		9.9	9.3	9.2
Morocco	38.2	27.8	27.1	27.1	27.6	27.6	28.3	28.2
Syria	28.1	25.9	25.1	24.7	24.2	23.7	23.4	23.5
Tunisia	38.5	31.6	27.8	26.4	26.2	26.3	25.2	24.1
WBG	—	—	—	—	—	—	—	30.9
Yemen	—	—	—	36.5	—	—	—	23.5
Secondary								
Algeria	25.0	21.9	16.8	17.0	16.7	16.6	16.7	16.9
Egypt	26.9	22.3	21.8	20.6	19.9	21.2	—	16.6
Iran	—	16.4	24.4	26.6	28.3	29.3	31.8	34.5
Jordan	21.0	17.9	15.6	21.1	—	—	—	16.1
Lebanon	11.9	—	—	—	—	—	—	—
Morocco	—	18.7	—	—	—	—	17.0	16.4
Syria	19.5	17.7	18.9	18.4	17.7	16.9	16.6	14.8
Tunisia	—	—	—	—	23.0	—	—	22.8
Yemen	—	—	—	—	—	—	—	12.6

Sources: WDI 1997, UNESCO 1997, GED 1998, National Center for Human Resources Development (www.nchrd.gov.jo), Palestinian Central Bureau of Statistics and MOE 1996, World Bank staff calculation using data from Tunisia MOE 1997/98, Egypt MOE 1997/98, Morocco Annual Statistical Book 1996, Yemen Education Census 1997/98.

Notes: (*) Egypt, Tunisia, and Yemen data are for 1998. Morocco data are for 1996. Algeria, Jordan, Syria data are for 1995. For Iran, calculation is based on data on students in 1996 and teachers in 1995. Lebanon primary education data are for primary and general secondary education in 1995. WBG data are for basic and secondary education.

Table C9. Selected Teacher Characteristics, 1990s

Country	Female Teacher's Share, mid-1990s		Primary School Teachers by Level of Diploma, 1990		
	Primary	Secondary	Secondary	Tertiary	Other
Algeria	43	44	17	83	0
Egypt	54	36	0	100	0
Iran	55	46	—	—	—
Iraq	68	42	—	—	—
Jordan	60	44	96	4	0
Lebanon	—	—	—	—	—
Morocco	38	33	—	—	—
Syria	64	45	—	91	9
Tunisia	49	44	64		36
WBG *	46	—	—	—	—
Yemen	17	16	—	—	—

Sources: WDI 1997, UNESCO 1993, Egypt MOE 1997/98, Tunisia MOE 1997/98, Palestinian Central Bureau of Statistics and Ministry of Education 1996; World Bank 1998.
Note: For WBG, data include teachers in Basic and Secondary Education.

Table C10. Number of Students and Teaching Staff, Most Recent Years, mid-1990s

Country	Students			Teaching staff		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary***
Algeria	4,617,728	2,544,864	312,400	169,010	150,397	10,405
Egypt	7,499,303	6,629,066	1,142,271	310,116	398,682	44,125
Iran	9,238,000	8,590,000	1,048,093	305,380	249,307	—
Iraq	—	—	244,400	131,271	—	9,688
Jordan	1,074,877	176,123	111,900	51,721	10,921	3,200
Lebanon*	367,862	336,970	86,900	71,688	n/a	3,096
Morocco	3,101,555	1,335,211	306,000	109,817	78,401	11,053
Syria	2,672,960	940,982	214,300	113,530	63,683	3,340
Tunisia	1,440,479	833,372	119,900	59,708	36,528	5,346
WBG*	611,857	50,770	57,500	21,461	n/a	1,172
Yemen**	2,881,181	347,749	121,600	122,660	27,683	1,348

Sources: UNESCO 1997; Qasem 1998; Egypt MOE 1997/98; Iran in Figures 1997; National Center for Human Resources Development (www.hchrd.gov.jo); Morocco Direction de la Statistique, Annuaire Statistique 1997; Republique Tunisienne 1996-97; Yemen Education Census 1997/98.
Notes: —: Not available. (*) Teaching staff in primary include teachers in general secondary. (**) Teaching staff by primary and secondary are staff estiamtes using total number of teachers in basic and secondary. (***) Staff with Master or PhD.

Table C11. Private Enrollment's Share of Total Enrollment and Regulations Affecting Private Schools, mid 1990s

Country	Share of Total Enrollment (%) General			Regulations Affecting Private Primary and Secondary Schools		
	Primary	Secondary	Tertiary	Permitted	Regulated	Subsidized
Algeria	0	0	0	No	n/a	n/a
Egypt	7	7	2	Yes	CF	Yes
Iran	1	1	40	Yes	CEF	Yes
Iraq	—	—	—	—	—	—
Jordan	24	7	20	Yes	C	No
Lebanon	68	58	54	Yes	CGR	Yes
Morocco	4	3	3	Yes	C	Yes
Syria	4	6	—	Yes	—	—
Tunisia	1	9	3	Yes	CRT	No
WBG (*)	53	10	100	Yes	—	—
Yemen	1	1	Small	Yes	No	Yes
Regional average (**)	6	5	—			
LI countries	12	36	—			
LMI countries	11	24	—			
UMI countries	9	15	—			

Sources: UNESCO 1995 & 1998; Palestinian Central Bureau of Statistics and Ministry of Education 1996; Egypt Five Year Development Plan 1997; International Encyclopedia of Education 1994; Yemen Statistical Yearbook 1997; World Bank 1994 and 1997.

Notes: n/a Not applicable, — Not available, Data for first and second levels of education are for 1992 with the exception of WBG. (*) WBG data in primary education is for basic education (grades 1–10) in 1995/96. (**) Regional and income group averages are weighted by total population.

C = Curriculum; E = Owners qualifications and/or physical status of building and grounds;
F = Fee levels; G = Graduation certification; T = Teachers' qualifications,
R = Registration of school and reporting of basic information.

ANNEX D: WORLD BANK ASSISTANCE—PAST AND FUTURE

Table D1: Non-lending Services for Education in the MENA Region*, FY97 and FY98

	Major ESW	Strategy Notes	Study Tours	Seminars
1997	4	1	1	2
1998	4	3	4	3

Note: (*) Human Development Department (MNSHD)

Table D2. Staff in the Education Group in the MENA Region*

Professional/ Technical Specialization	Number of Staff	Share of MNSHD
Education Specialists	3	9%
Education/ HR Economists	3	9%
Operations /Implementation Specialists	4	12%
HR Specialists	2	6%
Staff Assistants	4	n.a.

Note: (*) Human Development Department (MNSHD)

Table D3. World Bank Lending for education, MENA Region

	1993	1994	1995	1996	1997	1998
New projects	3	1	2	3	2	2
New projects commitment amount (US$M)	115	33	158	138	98	143
Number of new projects with cofinancing	0	1	1	0	1	0
Number of projects in portfolio	24	20	19	19	20	18
Committed amounts (US$M)	971.1	918.6	1021.8	1071.7	1744.0	1571.3
Average age of portfolio (in years, in ARPP year)	5.0	4.7	4.6	4.3	4.6	4.1

Source: World Bank database 1998.

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