International Research in Social Sciences; Vol. 3, No. 2; 2025
ISSN 2810-9961
Published by July Press

Education and Social Transformation in the Middle East: Mapping the Social Impact of Schooling in a Region in Transition

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Received: August 20, 2025 Accepted: October 1, 2025 Online Published: December 27, 2025

Abstract

This article examines the social impact of education in the Middle East and North Africa (MENA), where one of the fastest educational expansions of the past half-century has coincided with persistent youth unemployment, the world's lowest female labour-force participation, protracted conflict and an acute learning crisis. Drawing on a multi-level framework that links inputs, processes and outputs to five domains of social impact, the article synthesises recent quantitative indicators, large-scale survey evidence and peer-reviewed studies published between 2023 and 2026. Three findings stand out. First, expansion has outrun quality: roughly seventy per cent of ten-year-olds in the region cannot read and understand a simple text, so schooling reproduces rather than redistributes advantage. Second, the 'MENA paradox' - women now dominate tertiary enrolment yet remain marginal to paid work - shows that the social returns to female education are mediated by norms, legal frameworks and labour demand rather than by schooling alone. Third, conflict, displacement and declining humanitarian finance have converted education into a frontline of protection for more than thirty million out-of-school children. The article concludes that the social impact of education in the region depends less on further expansion than on foundational learning, equitable financing, refugee inclusion and the governance of digital and artificial-intelligence technologies.

Keywords: social impact of education, Middle East and North Africa (MENA), educational inequality, learning poverty, gender parity, youth unemployment, refugee education, social cohesion, human capital

1. Introduction

Few regions have expanded schooling as rapidly as the Middle East. Within two generations, societies that entered the 1970s with majority illiterate populations achieved near-universal youth literacy, and tertiary enrolment ratios that were marginal in 1980 now exceed fifty per cent in several countries. The demographic weight behind this expansion is exceptional: the region still holds one of the largest youth cohorts in the world, and United Nations estimates show that one in three young people aged 15 to 24 in Western Asia and Northern Africa were not in employment, education or training in 2024 (United Nations, 2025). The question this article addresses is therefore not whether education has grown, but what that growth has done to the societies it was meant to transform.

The social impact of education is understood here as the full range of effects that schooling produces beyond the classroom: on individual capabilities and wellbeing, on household welfare and intergenerational mobility, on labour-market inclusion, on gender relations, on civic and political life, and on aggregate institutional legitimacy. This definition deliberately reaches past the narrower language of 'returns to education' that dominates human-capital economics (Schultz, 1961; Becker, 1964). Capabilities theory reminds us that schooling matters for what people can be and do, not only for what they earn (Sen, 1999; Nussbaum, 2011), while the sociology of reproduction cautions that education can just as easily certify and perpetuate existing hierarchies as dissolve them (Bourdieu, 1973; Bourdieu & Passeron, 1977). In the Middle East, where education has historically been the state's principal instrument of nation-building and of managing citizen expectations, both faces of schooling are unusually visible (Sharabi, 1988; Herrera & Bayat, 2010).

The article makes three contributions. First, it consolidates the fast-moving evidence base of 2023-2026, a period marked by the devastating war in Gaza, historic cuts to humanitarian financing, post-pandemic learning recovery and the rapid arrival of artificial intelligence (AI) in classrooms and campuses. Second, it organises that evidence within an explicit multi-level framework that connects educational inputs and processes to five distinguishable domains of social impact, summarised in Figure 1. Third, it translates the synthesis into a policy agenda that

treats the social impact of education as a measurable object of reform rather than an assumed by-product of enrolment growth.

The remainder of the article proceeds as follows. Section 2 develops the conceptual framework. Section 3 describes scope, data and method. Sections 4 to 10 examine, in turn, expansion and stratification, gender and the 'MENA paradox', skills and youth labour markets, conflict and displacement, higher education and the Gulf model, digitalisation and AI, and social cohesion. Section 11 draws out policy implications and Section 12 concludes.

2. Conceptualising the Social Impact of Education

Three theoretical traditions structure the analysis. Human-capital theory treats schooling as an investment whose returns flow to individuals, households and economies (Schultz, 1961; Becker, 1964). The capabilities approach widens the evaluative lens: education expands the substantive freedoms people have reason to value, including health, voice and bodily integrity (Sen, 1999; Nussbaum, 2011). Reproduction theory, finally, insists that educational systems are also machines of social classification that convert inherited cultural capital into certified credentials and legitimate inequality (Bourdieu, 1973; Bourdieu & Passeron, 1977; Bowles & Gintis, 1976). These traditions are often posed against one another, but in the Middle East they operate simultaneously: the same system that lifted a generation into literacy also rationed prestigious degrees, channelled graduates into saturated public sectors and left the value of a diploma dependent on family connections.

Table 1 summarises the six domains of social impact that organise the empirical review, together with the principal mechanisms through which education acts and the indicators used to observe it. Figure 1 arranges these domains within a single causal architecture. Educational inputs - access, financing and household demand - pass through teaching quality, curriculum relevance and the equity of provision, and produce outputs in the form of foundational learning, credentials and civic dispositions. Only at the fourth level do social impacts materialise, and the five impact domains are shaped jointly by outputs and by a band of moderators that are largely external to schools: conflict and displacement, gender norms and legal frameworks, the political economy of reform, digitalisation and AI, and climate stress (World Bank, 2025). The framework's central claim is that the social impact of education cannot be read off enrolment statistics; it depends on how outputs are produced and on how moderators distribute them.

Table 1. Six domains of the social impact of education in the Middle East

Domain	Principal mechanisms	Illustrative indicators	Representative evidence
Individual capabilities and wellbeing	Literacy and numeracy; health literacy; delayed marriage; agency	Learning-adjusted years of schooling; age at first marriage	Sen (1999); Nussbaum (2011); World Bank (2025)
Household welfare and intergenerational transmission	Parental schooling shaping child schooling, aspirations and fertility behaviour	Intergenerational education elasticity; household spending	Alkasasbeh (2025); Al Khalili (2025)
Labour-market inclusion	Skills, credentials and networks; public-sector absorption; informality and migration	Youth unemployment; NEET rates; returns by field of study	Assaad et al. (2018); ILO (2025); Campante & Chor (2012)
Gender relations	Female education delaying marriage and fertility; shifting norms and legal claims	Tertiary gender parity; female labour-force participation	EUISS (2025); Arab Barometer (2025a); Moghadam (2013)
Civic and political life	Citizenship formation; political interest; trust; tolerance	Support for democratic governance; political engagement	Arab Barometer (2025b, 2025c); Akar (2024)
Societal and macro-level outcomes	Aggregate human capital; growth; inequality; institutional legitimacy	Human Capital Index; learning poverty; inequality measures	World Bank (2025); Sobhy (2024); Pritchett (2001)

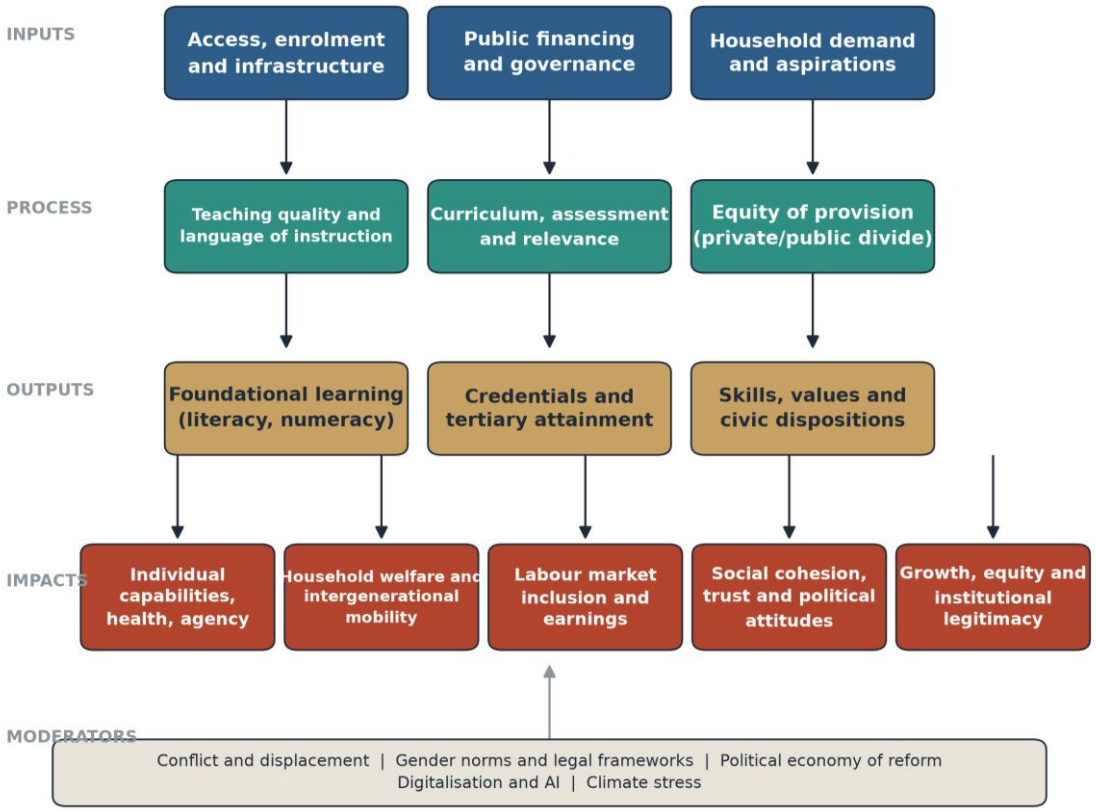


Figure 1. A multi-level framework for analysing the social impact of education in the Middle East

3. Scope, Data and Method

The analysis covers fourteen economies that span the four sub-regions of the Middle East: the Gulf Cooperation Council states (Saudi Arabia, the United Arab Emirates, Qatar, Kuwait, Bahrain and Oman), the Mashreq (Egypt, Jordan, Lebanon, Iraq, Palestine and Yemen), the Maghreb (Morocco and Tunisia), and Iran. This is a deliberately heterogeneous set: it contains some of the world's richest and some of its most conflict-affected education systems, which is precisely why regional averages must be read with care.

The article is a narrative synthesis rather than a meta-analysis. It triangulates three bodies of evidence: (i) recent quantitative indicators from UNESCO Institute for Statistics, World Bank and International Labour Organization modelled estimates; (ii) large-scale survey programmes, above all the eighth and ninth waves of Arab Barometer fielded in 2023-2025; and (iii) peer-reviewed studies and major institutional reports published between 2023 and 2026. Where country data differ in reference year, the most recent available value is used and figures are rounded; readers should therefore treat the country comparisons in Table 2 as indicative magnitudes rather than precise point estimates.

Table 2. Selected education and social indicators in Middle East economies (latest available year, 2019-2024)

Country	Youth literacy, 15-24 (%)	Learning poverty (%)	Youth unemployment (%)	Female LFP rate (%)
Egypt	96	56	20	18
Iraq	92	58	35	13
Jordan	99	50	40	15
Lebanon	99	60	35	26
Morocco	91	65	33	22
Tunisia	98	55	40	26
Yemen	82	80	35	6
Palestine	99	45	40	19
Iran	99	45	23	16
Saudi Arabia	99.9	40	17	36
United Arab Emirates	99	35	12	55

Note: learning poverty is the share of ten-year-olds unable to read and understand a simple text. Figures are rounded and compiled by the author from UNESCO Institute for Statistics data, World Bank and International Labour Organization modelled estimates and World Bank (2025). Reference years vary by country and indicator.

4. Access Expanded, Divisions Deepened: Education and Social Stratification

Measured by access, the region's expansion has been remarkable. Youth literacy now stands at or near universal levels in most of the fourteen economies, and in Saudi Arabia reaches 99.9 per cent (UNESCO Institute for Statistics data reported in United Nations, 2025). Secondary completion has risen steadily, and gross tertiary enrolment in several Gulf and middle-income systems now exceeds the global average for countries at comparable income levels. Regional adult literacy, however, still trails comparable regions: at 83.7 per cent for Northern Africa and Western Asia in 2024, it remains far below Europe and Northern America (98.8 per cent), reflecting the large cohorts educated before the expansion (United Nations, 2025).

Measured by learning, the picture darkens sharply. The World Bank estimates that as many as seventy per cent of ten-year-olds in MENA have not mastered basic literacy or numeracy, and the region's average Human Capital Index score of 0.49 falls below that of peers at similar income levels (World Bank, 2025). In Egypt, fifty-six per cent of children face learning poverty, slightly worse than the regional average (World Bank & UNESCO, 2024). International assessments tell the same story: PISA 2022 results show participating Arab systems clustered in the lower third of the distribution (OECD, 2023), and TIMSS 2023 confirms wide gaps in mathematics and science relative to international medians (IEA, 2024). Figure 2 plots the inverse relationship between human-capital indices and learning poverty across ten economies; Yemen, Iraq and Morocco anchor the worst corner of the distribution.

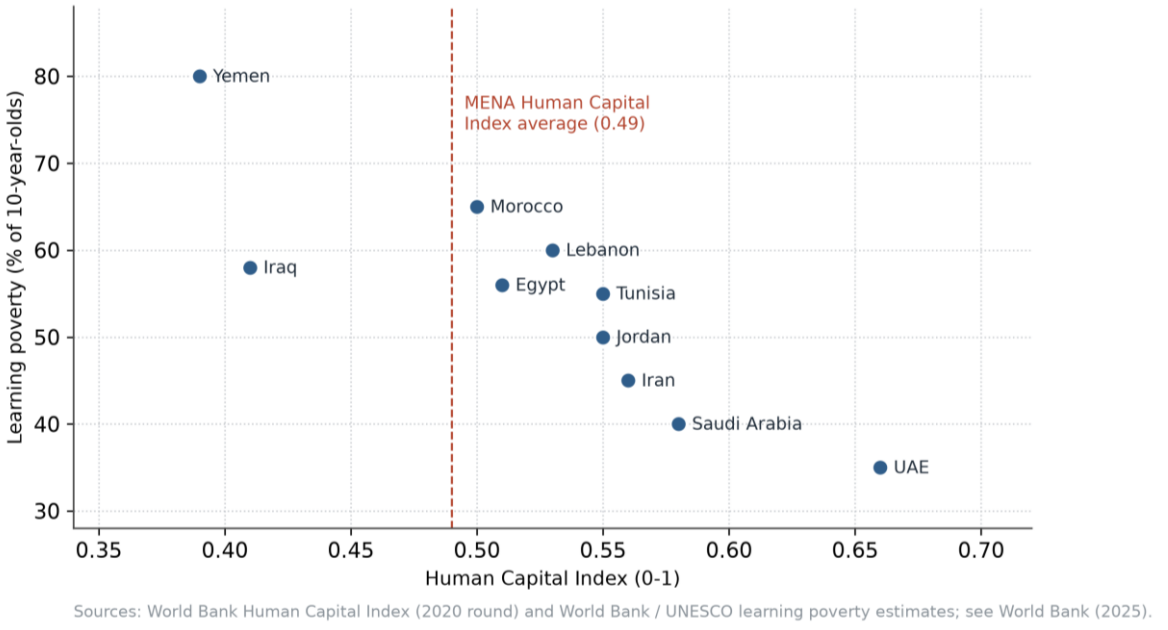


Figure 2. Human capital and learning poverty selected Middle East economies

These shortfalls carry direct social consequences. A growing literature on the 'global learning crisis' argues that schooling without learning silently converts public spending into private certification, strengthening rather than weakening the dependence of life chances on family background (Pritchett, 2001; Sobhy, 2024). The region provides vivid illustrations. In Lebanon, qualitative evidence from the multidimensional crisis shows parents migrating between private and public schools according to a child's perceived ability, with lower-achieving children and children with disabilities pushed towards degraded public provision (Al Khalili, 2025). In Egypt, three decades of privatisation, debt-conditioned austerity and uneven commitment to equity have produced a tiered system in which outcomes track household wealth more than state policy (Sobhy, 2024). In Jordan, inequality of higher-education opportunity is moderate by international standards, but is driven chiefly by parental education and father's occupation - the signature of intergenerational transmission (Alkasasbeh, 2025).

The scale of exclusion remains the starkest stratifying fact. UNICEF estimates that at least thirty million children are out of school across the MENA region, roughly one in three children in the twelve most affected countries, most of them fragile or conflict-affected (UNICEF, 2026). Between 2023 and 2026, projected aid cuts of about 769 million United States dollars - a twenty-six per cent decline in education financing - put a further 1.4 million children at risk of dropping out (UNICEF, 2026). Where states cannot guarantee a basic, predictable school place, education ceases to be a ladder and becomes a lottery whose odds are set by geography, income and war.

Demography compounds these pressures in two opposite directions. In the Mashreq and parts of the Maghreb, large youth cohorts keep pressure on school places high even as public budgets contract: several middle-income systems, including Egypt, Jordan and Tunisia, have experienced real-term declines in per-capita education spending because population growth and inflation have outrun nominal budget increases (World Bank, 2025). In the Gulf and Iran, by contrast, fertility decline is producing one of the world's fastest demographic transitions, and the ratio of people aged sixty-five and over to the working-age population is projected to increase two and a half times over the next three decades (World Bank, 2025). The social contract that schooling supports is therefore being renegotiated at both ends: expanding systems must find resources while maturing systems must reorient towards lifelong learning, reskilling and longer working lives.

Early childhood is the weakest link in the chain. Coverage of early childhood development programmes for children aged zero to five remains very low across the region, and the World Bank identifies this deficit - together with primary health coverage below seventy per cent - as a principal reason why later investments in schooling under-deliver (World Bank, 2025). The social consequence is cumulative rather than episodic: children who arrive at school without adequate nutrition, stimulation and pre-literacy exposure absorb fewer returns from each subsequent year of schooling, and the disadvantage compounds across households and generations.

One encouraging counterexample deserves emphasis. A randomised controlled trial of the Iqraa Arabic reading-fluency programme in Ras Al Khaimah, covering eighty-three classrooms in twenty-six schools, found gains equivalent to an additional twenty-five per cent of typical annual progress in Arabic reading - achieved within the regular timetable and with only a modest number of teacher-training days (Al Qasimi Foundation & J-PAL MENA, 2025). The result matters beyond the United Arab Emirates because it locates the problem in pedagogy, particularly the diglossic gap between spoken and classical Arabic, rather than in the language itself - and shows that socially consequential improvements are achievable at modest cost.

5. Gender, Education and the "MENA Paradox"

Nowhere is the gap between educational and social outcomes clearer than in gender. Young women across the region have overtaken young men in education. The combined gross enrolment ratio for women in tertiary education consistently exceeds that of men, often by a wide margin: in Algeria, female tertiary enrolment stands at sixty-eight per cent against forty per cent for men, and women account for thirty-nine to fifty-four per cent of STEM graduates across surveyed countries (EUISS, 2025). Survey evidence confirms that attitudes have shifted as well: support for the claim that a university education matters more for males is low everywhere it is measured (EUISS, 2025). This is the reverse of the historical pattern that earlier scholarship on Arab gender regimes described (Sharabi, 1988; Moghadam, 2013).

Yet female labour-force participation remains the lowest of any world region. The gender gap between men and women reporting that they have ever held a job exceeds thirty-eight percentage points in the latest Arab Barometer wave, while every surveyed country falls below the world average ratio of female to male participation (Arab Barometer, 2025a). This juxtaposition - parity in schooling, exclusion from work - has become known as the MENA paradox. The same survey series clarifies that education is necessary but not sufficient: across all surveyed countries, women with more than secondary education are, on average, twenty-eight percentage points more likely to have ever worked than women with less education, and more educated women also express a stronger intention to return to work after interruptions (Arab Barometer, 2025a).

The mechanisms of exclusion lie largely outside the school. Evidence reviewed by the European Union Institute for Security Studies points to the interaction of restricted sectoral and working-hour rules, employer bias, the cost and availability of childcare, and continuing social stigma, with legal reform moving faster than enforcement (EUISS, 2025). A further structural constraint is asset ownership: despite nominal legal equality, women's ownership of productive assets remains extremely low, limiting collateral, credit and entrepreneurship even where start-up aspirations are among the highest in the world (ESCWA, 2024; EUISS, 2025). Cultural expectations, long theorised as neopatriarchy, continue to mediate how families weigh daughters' education against their anticipated domestic roles (Sharabi, 1988; Inglehart & Norris, 2003).

The social impact of female education is nonetheless profound and cumulative even where employment is blocked. Higher female schooling is robustly associated with later marriage, lower fertility, better child health and higher investment in the next generation - the classic capability dividends (Sen, 1999; Nussbaum, 2011). The regional evidence on entrepreneurial intention is instructive: high aspirations that cannot convert into ownership produce frustrated agency rather than transformation, which is precisely why legal reform, childcare provision and anti-discrimination enforcement now matter as much as curriculum reform (EUISS, 2025). For displaced populations the stakes are higher still: among refugees, gender parity holds at primary level but the gap widens sharply at secondary level as poverty, protection risks and early marriage push adolescent girls out of school (UNHCR, 2026). Female education in the region is thus a story of institutional success and social under-delivery at the same time.

6. Education, Skills and the Youth Labour Market

The region's demographic transition has produced the largest educated youth cohort in its history, yet the labour market has not kept pace. In 2024, one in three young people in Western Asia and Northern Africa were not in employment, education or training, against a world average of one in five; among young women in the region the NEET rate reached 41.8 per cent, the highest of any major region except Central and Southern Asia (United Nations, 2025). Figure 3 places this in comparative perspective. The asymmetry between male and female idleness in the region is the quantitative shadow of the paradox examined above.

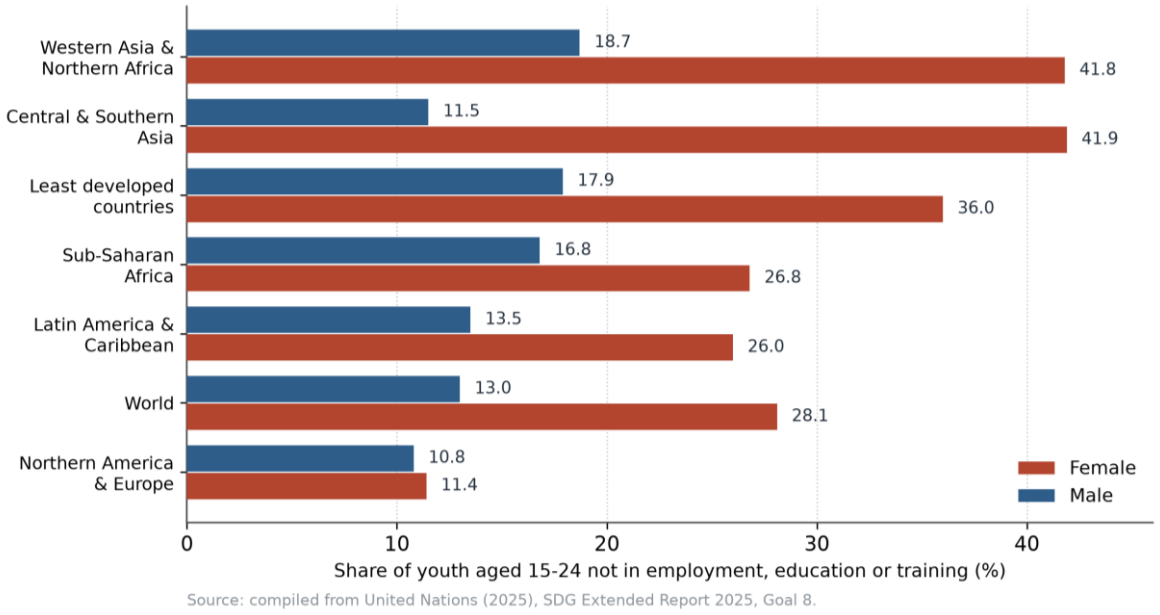


Figure 3. Youth NEET rates by SDG region and sex, 2024

Unemployment is concentrated among the educated. Youth unemployment in several middle-income economies of the region stands at thirty-five to forty per cent, and graduates experience longer queues than less-educated peers because the aspirations and status expectations that schooling creates collide with a private sector offering insecure, low-status work (Assaad et al., 2018; ILO, 2025). The composition of higher education matters: using Egyptian administrative and survey data, Assaad, Krafft and Salehi-Isfahani (2018) show that the type of institution and field of study - not merely attainment - drives employment and earnings outcomes, with general academic tracks consistently underperforming selective and technical pathways. Campante and Chor (2012) had earlier demonstrated how the combination of rising education and stagnant opportunity generated precisely the status inconsistency that fed the 2011 uprisings.

Blocked opportunity is also pushing people out of the region. In Jordan, forty-four per cent of citizens say they would like to emigrate, with economic reasons dominating the stated motives; in Egypt, the share who have considered emigrating rose from thirteen per cent in 2022 to twenty-two per cent in 2025, with interest highest among youth, students and the highly educated (Arab Barometer, 2025c, 2026). The social impact of education therefore includes a migration externality: public investment in skills subsidises Gulf labour markets and OECD destination economies while the sending societies absorb the fiscal cost (ILO, 2025).

Reform responses increasingly recognise that the binding constraint is matching rather than quantity. Recent assessments of Gulf and wider MENA higher education document chronic under-qualification and over-qualification among graduates, outdated labour-market data, weak employer engagement and curricula that lag emerging sectors such as renewable energy, tourism and digital services (Awashreh, 2025). Corrective agendas - work-integrated learning, industry partnerships, embedded career services, entrepreneurship education and soft-skill development - are spreading across the Gulf states, and youth unemployment above thirty per cent in parts of Saudi Arabia has made human-capability development a centrepiece of Vision 2030 (Awashreh, 2025; World Bank, 2025). The ILO's latest assessment nonetheless warns that without demand-side job creation, training reform alone will reproduce the same queue with better-documented graduates (ILO, 2025).

7. Education under Conflict and Displacement

The Middle East hosts some of the world's largest and most protracted refugee and displacement crises, and education is where those crises are most visible. Globally, an estimated 5.8 million school-aged refugee children - forty-four per cent of the 13.1 million total - were out of school in 2025 (UNHCR, 2026). The transition from primary to secondary schooling is the decisive breakpoint: while sixty-five per cent of refugee children of primary age were enrolled, only thirty-two per cent reached secondary school (UNHCR, 2026). Refugee tertiary enrolment, by contrast, reached a record eleven per cent in 2025, with more than 450,000 refugees in higher

education, keeping the '15by30' target of fifteen per cent by 2030 within reach (UNHCR, 2025, 2026). Figure 4 and Table 3 summarise the position.

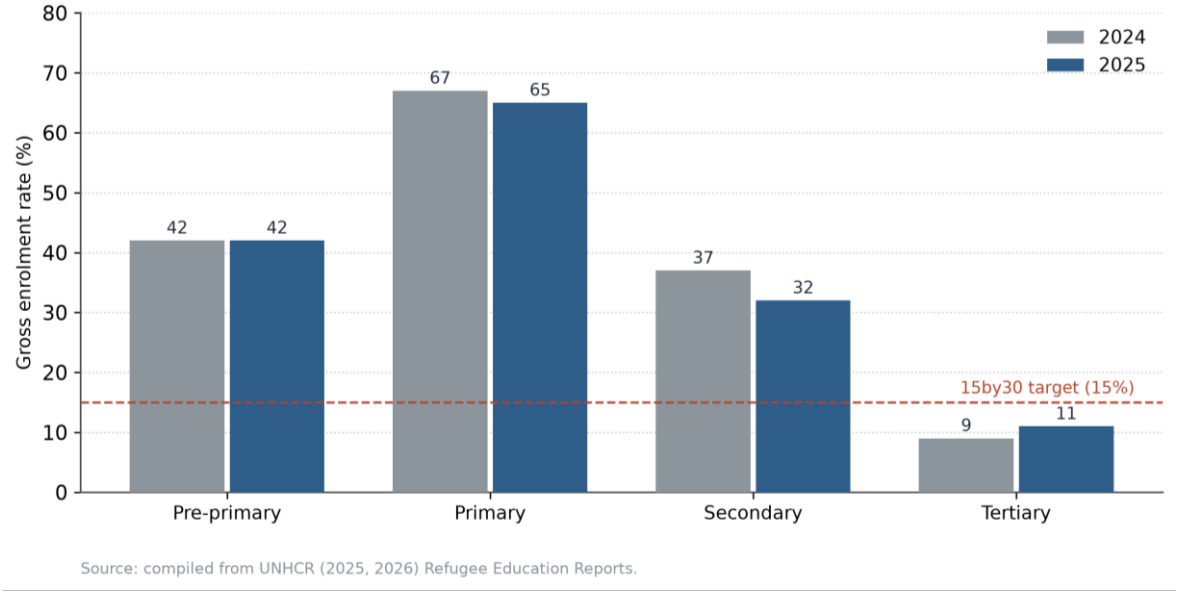


Figure 4. Refugee gross enrolment rates by education level, 2024 and 2025

Table 3. Gross enrolment rates of refugees compared with host-population benchmarks, 2025 (%)

Education level	Refugees	Low-income countries	Fragile or conflict-affected settings
Pre-primary	42	-	-
Primary	65	102	94
Secondary	32	40	44
Tertiary	11	8	10

Note: compiled from UNHCR (2025, 2026). Gross enrolment rates above 100 per cent reflect over-age enrolment common in low-income systems. Pre-primary benchmarks for the two comparison groups are not reported.

The comparative data reveal a sobering hierarchy of exclusion: refugee children face greater barriers than even the average child in low-income or fragile settings, reflecting legal status limitations, unfamiliar curricula, language barriers, non-recognition of prior learning and household poverty (UNHCR, 2025). Because most of the world's refugees live in the Middle East and its immediate periphery, these global figures are largely a regional story. Inclusion in national systems, the preferred policy since 2019, is threatened by the same financing shock that is hollowing out host-country education: UNICEF projects that aid cuts between 2023 and 2026 will reduce MENA education funding by about twenty-six per cent, weakening systems on which 32 million children depend (UNICEF, 2026; Education Cannot Wait, 2025).

Regional displacement patterns give these numbers concrete social geography. Jordan and Lebanon have absorbed Syrian refugees for over a decade and now co-host growing numbers of Sudanese arrivals; Egypt hosts Sudanese refugees whose children, like the nineteen-year-old student profiled in UNHCR's 2026 report, continue secondary schooling only through agency-supported pathways while aspiring to technology degrees (UNHCR, 2026). Chad, Yemen, Iraq and Turkey host further populations whose schooling depends on the interaction of national admission policies, curricular recognition and humanitarian finance. Because displacement in the region is protracted rather than temporary, the question is no longer how to educate refugees through an emergency but how a generation educated in exile will be incorporated into - or excluded from - the societies that hosted them.

Emerging research complicates the simple narrative of state failure. Comparative ethnographic work in Egypt and Lebanon shows that faith-based, tuition-free private schools can provide caring, well-governed environments that national systems fail to offer refugee children - an informal but socially significant safety net (Bonet & Chatila, 2025). At the same time, Akar (2024) demonstrates how political gridlock and donor-led governance in Morocco, Iraqi Kurdistan and, above all, Lebanon have repeatedly blocked reforms intended to make education a vehicle for citizenship and equity. Parental strategy studies reinforce the point: when families lose trust in public schooling during crisis, their coping behaviour deepens the very stratification the system was meant to overcome (Al Khalili, 2025).

Finally, the war in Gaza has reconfigured education's social meaning in real time. Two years into the conflict, education has overtaken the economy as the most frequently cited priority among West Bank respondents, rising from twenty-five to thirty per cent, even as satisfaction with education-system performance collapsed from forty-four to twenty-one per cent (Arab Barometer, 2026). The demand for schooling survives the destruction of schools; what has eroded is confidence in institutions to deliver it. In this sense education now functions, as UNHCR (2026) puts it, as protection first and opportunity second.

8. Higher Education, Knowledge Economies and the Gulf Model

Higher education is the region's most ambitious bet on education as an engine of social transformation. The Gulf states have invested heavily in research universities, international branch campuses and knowledge-economy strategies: Qatar's Education City, the United Arab Emirates' position as a hub for international education, and Saudi Arabia's Vision 2030, which places universities and research at the centre of economic diversification (Awashreh, 2025; World Bank, 2025). These are deliberate attempts to import academic capacity rather than wait for it to develop organically, and they have created genuine research concentrations in fields from quantum computing to water technology.

The social yield of this strategy is more contested than its architectural ambition. Branch-campus models raise an unresolved question of whether they cultivate durable local academic culture or primarily serve credential and prestige goals (Awashreh, 2025). Faculty recruitment depends heavily on international scientists whose career incentives, contract security and research support remain weaker than in mature systems, and domestic capacity-building has struggled to keep pace with expansion (Awashreh, 2025). Meanwhile the distributional question is sharpened by intra-regional divergence: gross tertiary enrolment reaches about seventy-four per cent in Qatar against roughly ten per cent in Yemen, a gap that AI-enabled delivery cannot close where digital exclusion runs at forty-three per cent (Eljai et al., 2025).

For social mobility, the evidence suggests higher education still matters, but selectively. Jordanian evidence shows that inequality of opportunity in higher education is moderate, and that family background operates through parental education and father's occupation rather than through gender or region of birth (Alkasasbeh, 2025). Egyptian evidence shows returns varying sharply by institution type and field, rewarding selective pathways and penalising the mass general-academic track that absorbs most students (Assaad et al., 2018). Higher education therefore functions as a sorting machine whose output is more unequal than its input - a finding that reproduction theory would predict and that human-capital accounts of expanding access tend to overlook.

9. Digitalisation, Artificial Intelligence and the New Equity Frontier

Digital technology entered the region's classrooms at scale during the pandemic and has not left. The 2023 Global Education Monitoring Report warned, however, that technology tends to amplify whatever inequities surround it: where connectivity, devices and teacher capacity are unevenly distributed, digitalisation widens learning gaps rather than closing them (UNESCO, 2023). The regional evidence bears this out. A recent analysis of AI in higher education across Qatar, Morocco, Yemen and Jordan finds that AI boosts enrolment and access where infrastructure exists, but falters against forty-three per cent digital exclusion and embedded algorithmic bias - concluding that AI's equity potential hinges on policy rather than technology (Eljai et al., 2025).

The stakes are rising because AI is simultaneously a labour-market shock. The World Bank's regional human-development assessment identifies demographic ageing, climate stress and technological transformation as the three megatrends that will strain education systems over the coming decades, and argues that digital skills, quality low-cost internet and appropriate regulation of platform work are the region's main levers for converting that threat into opportunity (World Bank, 2025). Country strategies are following: Egypt's second national AI strategy and the Gulf's rapid adoption of AI-based adaptive learning in thousands of schools illustrate how quickly governments are moving (Awashreh, 2025).

Two cautions follow for social impact. First, the most persuasive learning evidence currently available from the

region is resolutely low-tech: a structured, phonics-based Arabic reading programme delivered in ordinary classrooms outperformed the standard curriculum in a rigorous trial (Al Qasimi Foundation & J-PAL MENA, 2025). Second, leadership and governance - not devices - remain the strongest school-level predictor of learning, a conclusion the 2024/5 Global Education Monitoring Report places at the centre of its argument (UNESCO, 2024). Technology policy that crowds out investment in teachers, school leaders and foundational pedagogy would repeat at higher cost the error of the expansion era: buying the appearance of modernity while leaving learning behind.

10. Education, Social Cohesion and Political Attitudes

Education's political impact in the Middle East has long been a subject of debate. Campante and Chor (2012) showed that the educated youth cohorts of the early 2010s were precisely the groups whose status aspirations the region's political economies could not satisfy, supplying the educated but excluded protagonists of the uprisings. Anthropological and sociological work on Muslim youth likewise emphasises that schooling shapes political imagination as much as employability (Herrera & Bayat, 2010). A decade later, the survey record suggests a more ambivalent picture.

The eighth and ninth waves of Arab Barometer document a region in which support for liberal democracy remains the most favoured model but is modest and declining, with rising openness to strongman rule and other alternatives, especially where institutions are seen as ineffective (Arab Barometer, 2025b). Citizens increasingly define democracy performance-wise - by dignity, safety and the guarantee of basic needs - rather than by electoral procedure (Arab Barometer, 2025b, 2026). Education retains a clear association with civic engagement: in Jordan, the college-educated are eight percentage points more likely than those with at most secondary education to express interest in politics (Arab Barometer, 2025c). Whether that engagement converts into democratic commitment or into politically alienated emigration depends on institutional performance, not on curriculum content alone.

This is why the governance of education matters for cohesion. The 2024/5 Global Education Monitoring Report argues that school leadership is the second most important school-level factor explaining learning outcomes and calls for leaders to be trusted, fairly selected and supported to build collaborative cultures (UNESCO, 2024). Citizenship-education reform, by contrast, has repeatedly stalled where political gridlock prevents consensus on what the nation's children should learn (Akar, 2024). UNESCO's framing of education as a global common good, and the Fortaleza Declaration's emphasis on education's transformative power for peace and equity, rest on exactly this institutional condition (UNESCO, 2015). Where systems are broken by war or austerity, the cohesion dividend of education is deferred - and a generation that finds neither work nor voice through schooling may instead invest its aspirations in exit (Arab Barometer, 2025c, 2026; UNHCR, 2026).

Youth themselves are redefining what educational agency looks like. The 2026 Global Education Monitoring youth report argues that young people should be treated as co-leaders of education policy rather than as its beneficiaries, and documents youth-led initiatives across the Global South in which students organise tutoring, mental-health support and climate-education campaigns inside and outside formal systems (UNESCO, 2026). In the Middle East, where the median age of the population remains far below that of Europe, this reframing has direct social implications: a region that educates but does not consult its youth converts its principal asset into a standing critique of its institutions (Herrera & Bayat, 2010; Arab Barometer, 2025b).

11. Policy Implications and a Research Agenda

The evidence assembled above supports six priorities for policy and a corresponding research agenda. They are stated here as directives to governments and their partners, with the caveat that fiscal and political capacity varies enormously across the region.

- Prioritise foundational learning over further expansion. With up to seventy per cent of ten-year-olds not mastering basic literacy, structured early-grade reading and numeracy programmes - of which the Iqraa trial provides a tested regional model - offer the highest social return per dollar (World Bank, 2025; Al Qasimi Foundation & J-PAL MENA, 2025).
- Treat the gender gap as a labour-market and legal problem, not an education problem. Parity in schooling is achieved; converting it into participation requires childcare, anti-discrimination enforcement, transport and asset rights (EUISS, 2025; ESCWA, 2024).
- Protect education financing against shock. Projected aid cuts of twenty-six per cent threaten the schooling of 32 million children and 1.4 million drop-outs; domestic financing reforms and predictable

multi-year humanitarian education funds are prerequisites (UNICEF, 2026; Education Cannot Wait, 2025).

- Include refugees in national systems and finance them for it. The 15by30 trajectory shows that sustained investment works, but host systems need teachers, classrooms and recognition of prior learning (UNHCR, 2025, 2026; Bonet & Chatila, 2025).
- Align higher education with labour demand and equity simultaneously: work-integrated learning, better labour-market data and field-of-study reform matter more than gross enrolment targets (Awashreh, 2025; Assaad et al., 2018; Alkasasbeh, 2025).
- Govern the digital transition deliberately. AI in education will mitigate disparities only where access, bias auditing and teacher capability are addressed in policy; otherwise it will mask them (Eljai et al., 2025; UNESCO, 2023, 2024).

On the research agenda, four gaps are conspicuous. Learning outcomes of forcibly displaced children remain almost entirely unmeasured (UNHCR, 2025). The social returns to specific pedagogical interventions in Arabic-medium classrooms are documented in only a handful of trials. The distributional consequences of AI adoption in the region's unequal systems are, so far, almost entirely theoretical (Eljai et al., 2025). And the long-run social effects of the Gulf's imported higher-education model - on local research culture, on social mobility and on state-society relations - await systematic evaluation.

12. Conclusion

The Middle East demonstrates that educational expansion is a necessary but radically insufficient condition for social transformation. Over two generations the region universalised youth literacy, educated its daughters to a degree unprecedented in its history and built some of the developing world's most ambitious universities. Yet the same systems now certify one of the world's worst learning crises, watch the most educated female generation in regional history remain outside the labour force, and see thirty million children excluded altogether as conflict and austerity close classrooms (World Bank, 2025; EUISS, 2025; UNICEF, 2026).

The multi-level framework developed here explains why. Education's social impact is produced at the level of process and moderated by forces - gender norms, conflict, political economy and technology - that schools alone cannot control. Policy that treats enrolment as the outcome will keep mistaking inputs for impact. The agenda that follows from the evidence is harder but clearer: guarantee foundational learning, remove the barriers that block educated women's agency, finance education as protection for the displaced, and govern the digital transition before it deepens the divides it promises to close. Education in the Middle East has already changed who the region's people are; the unfinished task is to change what their societies let them become.

References

Akar, B. (2024). Disrupted institutional pathways for educational equity in conflict-affected nations. *Daedalus, 153*(4), 286-301. https://doi.org/10.1162/daed_a_02116

Al Khalili, T. (2025). Parental strategies and educational inequalities during severe economic, political and refugee crises in conflict-affected Lebanon. *Asia Pacific Education Review, 26*, 553-566. https://doi.org/10.1007/s12564-025-10040-7

Al Qasimi Foundation & J-PAL MENA. (2025). *Iqraa: Evidence from a randomized evaluation of an Arabic reading fluency programme in Ras Al Khaimah*. Ras Al Khaimah: Sheikh Saud bin Saqr Al Qasimi Foundation for Public Policy Research.

Alkasasbeh, Y. (2025). Inequality of higher educational opportunity - the role of circumstances among the Jordanian people. *Applied Economics, 57*(56), 9445-9461. https://doi.org/10.1080/00036846.2024.2418436

Arab Barometer. (2025a). *Education and working women in MENA*. Princeton, NJ: Arab Barometer.

Arab Barometer. (2025b). *Liberal democracy still favored in MENA, but publics increasingly open to alternatives (Wave VIII, 2023-2024)*. Princeton, NJ: Arab Barometer.

Arab Barometer. (2025c). *Public opinion in Jordan: Wave IX country report.* Princeton, NJ: Arab Barometer.

Arab Barometer. (2026). *Egyptian public opinion, 2025: Wave IX factsheet.* Princeton, NJ: Arab Barometer.

Assaad, R., Krafft, C., & Salehi-Isfahani, D. (2018). Does the type of higher education affect labor market outcomes? Evidence from administrative and survey data. *Economics of Education Review, 62,* 59-79.

Awashreh, R. A. (2025). Leadership-driven innovation in GCC and MENA higher education: Integrating AI, entrepreneurship, and sustainability to bridge the skills-market divide. *Journal of Business and Management Studies, 2*(7), 61-70.

Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education.* New York: Columbia University Press.

Bonet, S. W., & Chatila, S. N. (2025). "They are our children": An examination of faith-based, tuition-free, private schools as potential sites of educational opportunity for refugee children in Egypt and Lebanon. *Social Sciences, 14*(1), 54. https://doi.org/10.3390/socsci14010054

Bourdieu, P. (1973). Cultural reproduction and social reproduction. In J. Karabel & A. H. Halsey (Eds.), *Power and ideology in education* (pp. 487-511). New York: Oxford University Press.

Bourdieu, P., & Passeron, J.-C. (1977). *Reproduction in education, society and culture*. London: Sage.

Bowles, S., & Gintis, H. (1976). *Schooling in capitalist America: Educational reform and the contradictions of economic life*. New York: Basic Books.

Campante, F. R., & Chor, D. (2012). Why was the Arab world poised for revolution? Schooling, economic opportunities, and the Arab Spring. *Journal of Economic Perspectives, 26*(2), 167-188.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94,* S95-S120.

Education Cannot Wait. (2025). *Annual results report 2024: Learning in crisis*. New York: Education Cannot Wait.

Eljai, M., Eljai, Y., Asmar, K., & Dehbi, F. E. (2025). The role of AI in higher education: Mitigating or masking socio-educational disparities in the MENA region? In *2025 International Conference on Circuit, Systems and Communication (ICCSC)* (pp. 1-4). IEEE. https://doi.org/10.1109/ICCSC66714.2025.11135115

ESCWA. (2024). *Social policy and the rights of women in the Arab region: A review of asset ownership and legal reforms*. Beirut: United Nations Economic and Social Commission for Western Asia.

European Union Institute for Security Studies. (2025). *Women as agents of change in the MENA region? (Ageing Europe brief).* Paris: EUISS.

Herrera, L., & Bayat, A. (Eds.). (2010). *Being young and Muslim: New cultural politics in the global south and north*. New York: Oxford University Press.

IEA. (2024). *TIMSS 2023 international results in mathematics and science.* Chestnut Hill, MA: International Association for the Evaluation of Educational Achievement.

ILO. (2025). *World employment and social outlook: Trends 2025.* Geneva: International Labour Organization.

Inglehart, R., & Norris, P. (2003). *Rising tide: Gender equality and cultural change around the world.* Cambridge: Cambridge University Press.

Moghadam, V. M. (2013). *Modernizing women: Gender and social change in the Middle East* (3rd ed.). Boulder, CO: Lynne Rienner.

Nussbaum, M. C. (2011). *Creating capabilities: The human development approach*. Cambridge, MA: Harvard University Press.

OECD. (2023). *PISA 2022 results (Volume I): The state of learning and equity in education*. Paris: OECD Publishing. https://doi.org/10.1787/53f23881-en

Pritchett, L. (2001). Where has all the education gone?. *The World Bank Economic Review, 15*(3), 367-391.

Ridge, N. (2014). *Education and the reverse gender divide in the Gulf states: Embracing a global perspective.* New York: Teachers College Press.

Schultz, T. W. (1961). Investment in human capital. *The American Economic Review, 51*(1), 1-17.

Sen, A. (1999). *Development as freedom.* Oxford: Oxford University Press.

Sharabi, H. (1988). *Neopatriarchy: A theory of distorted change in Arab society.* New York: Oxford University Press.

Sobhy, H. (2024). Equity, the transnational and the global learning crisis. *Cogent Social Sciences, 10*(1), 2359268. https://doi.org/10.1080/23311886.2024.2359268

UNESCO. (2015). *Rethinking education: Towards a global common good?*. Paris: UNESCO.

UNESCO. (2023). *Global education monitoring report 2023: Technology in education - A tool on whose terms?*. Paris: UNESCO.

UNESCO. (2024). *Global education monitoring report 2024/5: Leadership in education - Lead for learning*. Paris: UNESCO.

UNESCO. (2026). *2026 youth report: Lead with youth (Global Education Monitoring Report)*. Paris: UNESCO.

UNHCR. (2019). *Stepping up: Refugee education in crisis*. Geneva: United Nations High Commissioner for Refugees.

UNHCR. (2025). *The unbreakable promise: Resilience and resolve in refugee education (2025 Refugee Education Report)*. Geneva: United Nations High Commissioner for Refugees.

UNHCR. (2026). *Pathways to the future: Education, opportunity and self-reliance (2026 Refugee Education Report)*. Geneva: United Nations High Commissioner for Refugees.

UNICEF. (2026). *Children and education in emergencies: Middle East and North Africa fact sheet.* Amman: UNICEF MENA Regional Office.

United Nations. (2025). *The sustainable development goals extended report 2025 (Goals 4 and 8)*. New York: United Nations.

World Bank & UNESCO. (2024). *Egypt, Arab Republic - Learning poverty brief 2024*. Washington, DC: World Bank.

World Bank. (2018). *World development report 2018: Learning to realize education's promise*. Washington, DC: World Bank.

World Bank. (2025). *Embracing and shaping change: Human development for a Middle East and North Africa in transition*. Washington, DC: World Bank.

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