A Systematic Review of the Impact of Internationalization on Higher Educational Quality in Middle East and North African (MENA) Countries:
A Focus on Algeria and Iraq
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Introduction

This systematic review aims to provide valuable insights for policymakers, educators, and researchers working in the region. It emphasizes the importance of considering regional contexts and local factors when planning and implementing internationalization strategies in higher education while acknowledging the potential limitations in data availability and generalizability of findings to other MENA countries.

Internationalization of Education

"The process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education".
(Knight, 2004, p. 11)

"Second World War & end of the Cold War" (De Wit 2001, p.xi)

Internationalization is as a transformation from a national to an international institution (Luis et al., 2023)

Research Questions

Question 1

What are the positive and negative outcomes of internationalization on the quality of education in MENA countries?

Question 2

What are the key trends and patterns in the internationalization of education in MENA countries?

Question 3

How have these trends and patterns evolved over time?

MENA Region

Middle East and North Africa

The Middle East and North Africa (MENA) region includes approximately 21 countries, according to the World Bank (2020).

UNICEF groups 20 countries as MENA: includes 20 countries/territories: Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen.
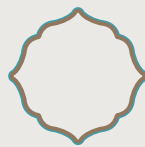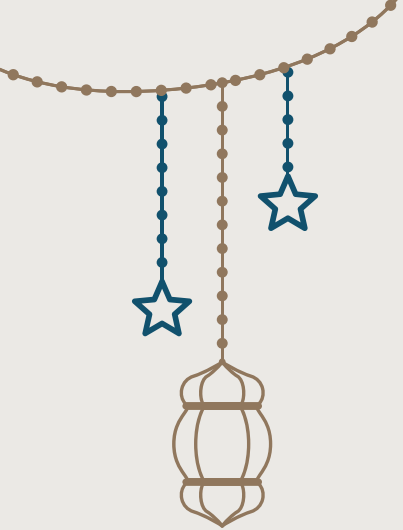
Algeria is located in North Africa with historical ties to France, while Iraq is in Western Asia with historical influences from the Ottoman Empire and the West.

These countries have received less individual attention within the MENA context regarding internationalization.
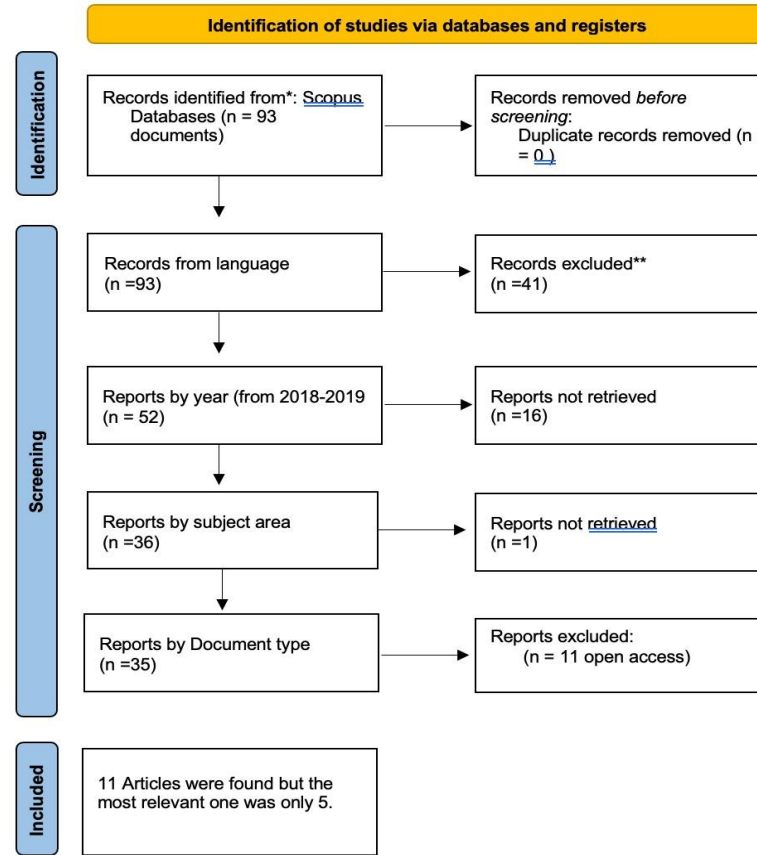
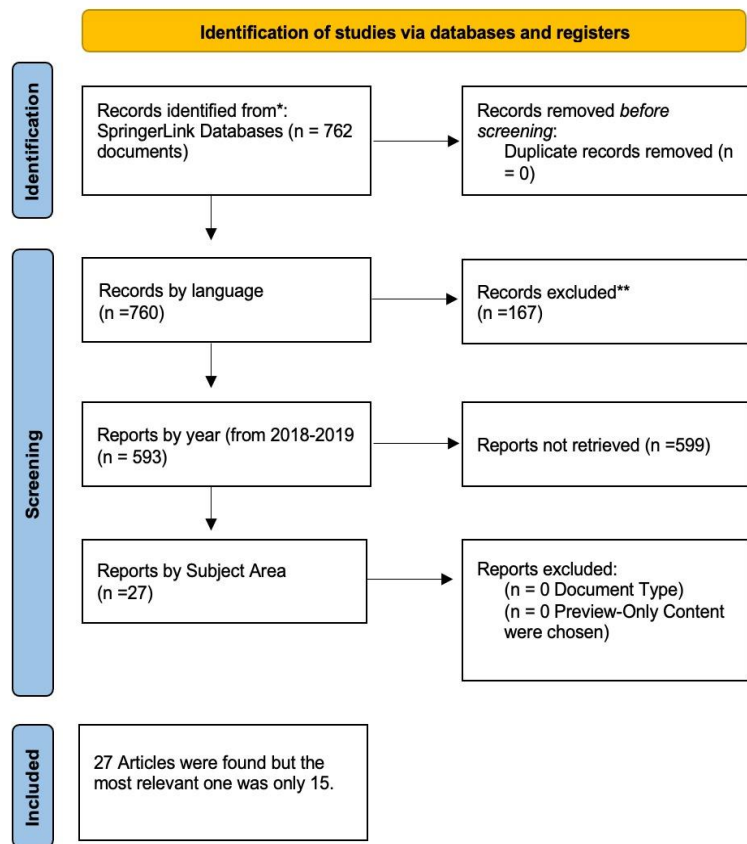## Why Algeria and Iraq?

Methodology

02

Methodology

"Systematic literature review is a type of review that collects multiple research studies and summarizes them to answer a research question using rigorous methods" (Gough, Oliver, and Thomas, 2017: 5).

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement, commonly referred to as PRISMA 2009, was introduced in 2009 to enhance the transparency and quality of systematic reviews and meta-analyses (Panić et al., 2013).

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers only

Identification of studies via databases and registers

Identification

Records identified from*: Scopus Databases (n = 93 documents)

Records removed *before screening*: Duplicate records removed (n = 0)

Screening

Records from language (n =93)

Records excluded** (n =41)

Reports by year (from 2018-2019 (n = 52)

Reports not retrieved (n =16)

Reports by subject area (n =36)

Reports not retrieved (n =1)

Reports by Document type (n =35)

Reports excluded: (n = 11 open access)

Included

11 Articles were found but the most relevant one was only 5.

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71 For more information, visit: http://www.prisma-statement.org/

SCOPUS DATABASE RESULTS

	Authors	Title	Year	Source title	Cited by	Publisher	Document Type
1	Mameche Y.; Omri M.A.; Hassine N.	Compliance of accounting education programs with international accounting education standards: The case of ies 3 in Tunisia	2020	Eurasian Journal of Educational Research	9	Ani Publishing	Article
2	Golding D.; Kopsick K.	The colonial legacy in Cambridge Assessment literature syllabi	2019	Curriculum Perspectives	6	Springer International Publishing	Article
3	Fakoussa R.; O'Leary S.; Salem S.	An exploratory study on social entrepreneurship in Egypt	2020	Journal of Islamic Accounting and Business Research	6	Emerald Group Holdings Ltd.	Article
4	Hamid, S., Alzouebi, K., Akinci, F., Zengul, F.	Examining the association between educational attainment and life expectancy in MENA region: A panel data analysis	2018	Health Planning & Management	4	Wiley	Article
5	Farid S.; Baines D.	Pharmacoeconomics Education in the Middle East and North Africa Region: A Web-Based Research	2021	Value in Health Regional Issues	3	Elsevier Inc.	Article
6	Pacheco E.-M.	International Student Well-Being and the Influence of Politics	2020	Rethinking Education Across Borders: Emerging Issues and Critical Insights on Globally Mobile Students	2	Springer Singapore	Book chapter
7	Arar K.; Zohri A.-A.; Alhouti I.; Chaaban Y.; Sawalhi R.; Salha S.	A critical analysis of education policy in turbulent times: A comparative study	2023	Power and Education	1	SAGE Publications Ltd	Article
8	Belarbi A.K.; El Refae G.A.; Aissani R.A.	Internationalization of Education and the Brain Drain Paradox: Case of the Mena Region	2023	Journal of Higher Education Theory and Practice	0	North American Business Press	Article
9	Aravena F.R.	The difficult task of peace: crisis, fragility and conflict in an uncertain world	2019	The Difficult Task of Peace: Crisis, Fragility and Conflict in an Uncertain World	0	Springer International Publishing	Book
10	Khine M.S.	Handbook of Research on Teacher Education: Pedagogical Innovations and Practices in the Middle East	2022	Handbook of Research on Teacher Education: Pedagogical Innovations and Practices in the Middle East	0	Springer Nature	Book
11	Farhat H.; Alinier G.; Helou M.; Galatas I.; Josse D.; Campbell C.; Olim N.; Handan Dökmeci A.; Heriza M.; Chebbi H.; El-Aifa K.; Jaafar A.; Souissi S.; Amor A.B.; Castle N.; Al-Shaikh L.; Abougalala W.; Dhiab M.B.; Laughton J.	Exploring attitudes towards health preparedness in the Middle East and North Africa against chemical, biological, radiological, and nuclear threats: A qualitative study	2024	Journal of Contingencies and Crisis Management	0	John Wiley and Sons Inc	Article

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers only

Identification of studies via databases and registers

Identification

Records identified from*:
SpringerLink Databases (n = 762 documents) → Records removed *before screening*:
Duplicate records removed (n = 0)

Screening

Records by language (n =760) → Records excluded** (n =167)

Reports by year (from 2018-2019) (n = 593) → Reports not retrieved (n =599)

Reports by Subject Area (n =27) → Reports excluded:
(n = 0 Document Type)
(n = 0 Preview-Only Content were chosen)

Included

27 Articles were found but the most relevant one was only 15.

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71 For more information, visit: http://www.prisma-statement.org/

Methodology

Analysis

Comparison

Scopus: 05 used

SpringerLink: 15 used

	Authors	Item Title	Publication Year	Content Type
		SpringerLink Database Results		
	Authors	**Item Title**	**Publication Year**	**Content Type**
1	Hassan Abouabdelkader, Barry Tomalin	Diversity Education in the MENA Region	2023	Book
2	Prof. Adnan Badran, Prof. Elias Baydoun, Dr. John R. Hillman	Higher Education in the Arab World: Research and Development	2022	Book
3	Adnan Badran, Elias Baydoun, John R. Hillman	Major Challenges Facing Higher Education in the Arab World: Quality Assurance and Relevance	2019	Book
4	Teresa Brawner Bevis	A World History of Higher Education Exchange	2019	Book
5	Adnan Badran, Elias Baydoun, Joelle Mesmar	Higher Education in the Arab World	2022	Book
6	Adnan Badran, Elias Baydoun, Sandra Hillman, Joelle Mesmar	Higher Education in the Arab World	2023	Book
7	Pedro Nuno Teixeira, Jung Cheol Shin	The International Encyclopedia of Higher Education Systems and Institutions	2020	ReferenceWork
8	Mar√≠a Sagrario Salaberri-Ramiro, Abderrazak Zaafour	Sustainable Policies and Strategies in the MENA Region for Teaching English as a Foreign Language	2023	Chapter
9	Sarah Elaine Eaton	Second Handbook of Academic Integrity	2024	ReferenceWork
10	John Waterbury	Reform of Higher Education in the Arab World	2019	Chapter
11	Mohamed Chtatou	Understanding and Maximizing Diversity Education in the MENA Region	2023	Chapter
12	Joseph Zajda	Third International Handbook of Globalisation, Education and Policy Research	2021	Book
13	Nadia Badrawi, Maha Rashwan	Networking and Initiatives on Quality Standards and Integrity in Higher Education in the Middle East	2023	ReferenceWorkEntry
14	Teresa Brawner Bevis	US-Middle East Exchange in the Early Twenty-First Century	2019	Chapter
15	Nadia Badrawi, Maha Rashwan	Networking and Initiatives on Quality Standards and Integrity in Higher Education in the Middle East	2024	ReferenceWorkEntry
16	Teresa Brawner Bevis	The Rise and Fall of International Education Exchange	2024	Book
17	Abdeljalil Akkari	Higher Education in the Arab Region: Globalization, Privatization and Prospects	2021	Chapter
18	Mansoor Alaali	COVID-19 Challenges to University Information Technology Governance	2022	Book
19	Teresa Brawner Bevis	The Late Twentieth Century (1979ñ1999)	2019	Chapter
20	Adrian CurajJamil Salmi, Cezar Mihai H,j	Higher Education in Romania: Overcoming Challenges and Embracing Opportunities	2022	Book
21	Rasha Sharaf, Hany Helal	The Relationships Between Universities and Governments in the Arab World	2020	Chapter
22	Joelle Mesmar, Adnan Badran	The Post-COVID Classroom: Lessons from a Pandemic	2022	Chapter
23	Teresa Brawner Bevis	Camelot: 1960ñ2000	2024	Chapter
24	Teresa Brawner Bevis	Approaching Midcentury	2019	Chapter
25	Fernando M. Reimers	Education and Climate Change	2021	Book
26	Mohammed A. Khasawneh, Nael H. Thaher, Rida A. Shibli, Wejdan S. Abu Elhaija, Ahed M. Alwahadni	Bolstering Economic Growth in the Arab Region Through Commercialization of Research Outcomes	2022	Chapter
27	Teresa Brawner Bevis	A Beckoning: 1945ñ1960	2024	Chapter

03

Findings

Based on found literature
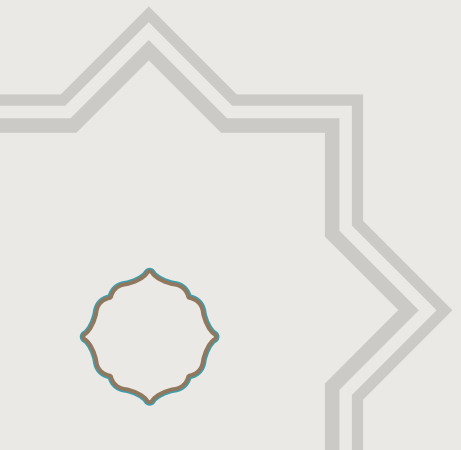
Results

Key trends and patterns in the internationalization of education in MENA countries:

❖ **Establishment of Quality Assurance Mechanisms:** Significant trend towards establishing QAAs in MENA countries since early 2000s.

❖ **Regional Collaboration and Networking:** Increased engagement in regional collaboration and networking efforts to enhance education quality.

❖ **Enrollment Numbers and International Student Mobility:** Egypt and Nigeria have the largest higher education systems in Africa, with millions of students enrolled. The MENA region is witnessing high outbound international student mobility.
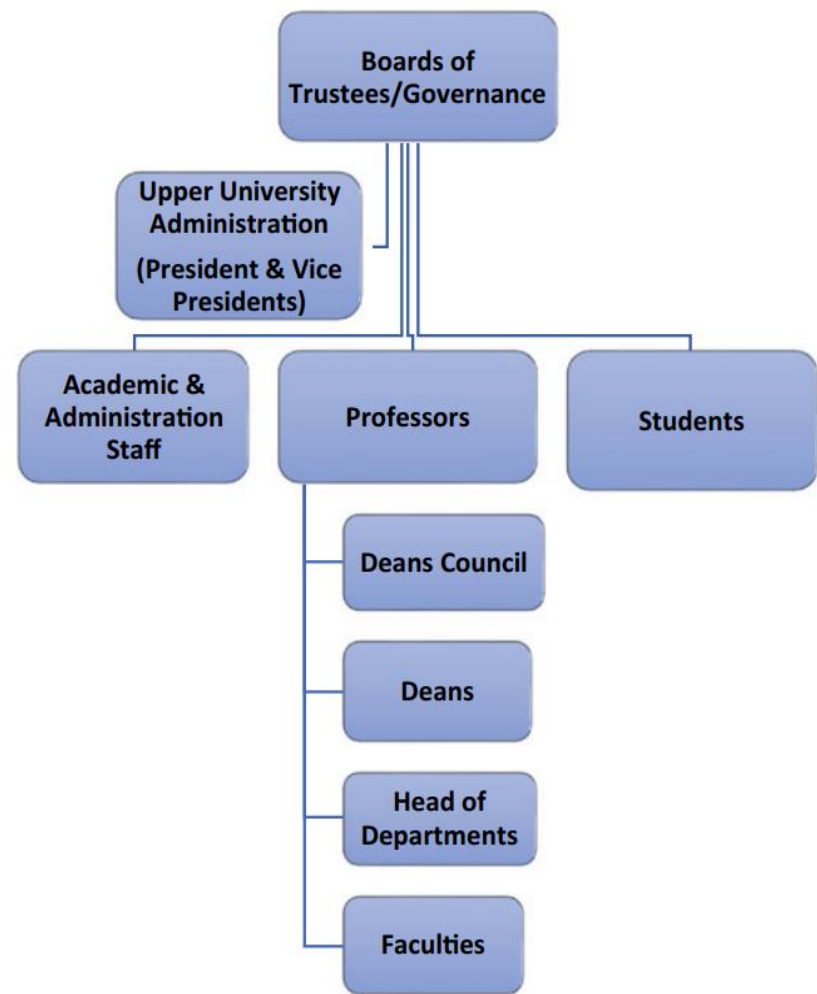
Fig. 5.2 The structure of governance of higher education systems in the Arab world

Key trends and patterns in the internationalization of education in MENA countries

❖ UAE hosts over 40 international branch campuses, which represents almost one-quarter of all international branch campuses worldwide (Becker, 2015). The University of Wollongong (Australia) was the first foreign university to be accredited by the UAE Ministry of Higher Education and has operated in Dubai since 1993. It offers undergraduate as well as graduate programs (MBA and PhD).

❖ Population Characteristics: The MENA region comprises 54 African countries and 14 Middle Eastern countries with a combined population of 1.4 billion.

Table 4.1 Arab universities and institutes of higher education

Country	Government universities	Private universities	Colleges and institutes	Total
Algeria	50	0	56	106
Bahrain	3	9	4	16
Egypt	25	26	158	209
Iraq	35	12	59	106
Jordan	10	19	7	36
Kuwait	2	4	9	15
Lebanon	1	36	12	49
Libya	14	6	78	98
Mauritania	1	7	0	8
Morocco	14	5	31	50
Oman	1	7	22	30
Palestine	9	12	10	31
Qatar	2	8	6	16
Saudi Arabia	27	12	21	60
Somalia	1	17	0	18
Sudan	35	19	53	107
Syria	8	22	4	34
Tunisia	13	15	27	55
United Arab Emirates	3	30	41	74
Yemen	10	20	18	48
Total	264	286	616	1166

Key trends and patterns in the internationalization of education in MENA countries

❖ **Global Competitiveness Index**: The text highlights the natural ranking of global competitiveness in 2019, where the UAE emerges as the leading Arab country with an index of 75.0.

❖ **Contribution of Universities to Research**: Universities play a significant role in research and development globally.

❖ **Distribution of Research Funding**: In the Arab region, research is predominantly funded by the government sector (70%).

❖ **Expenditure on R&D**: The Arab world has generally failed to allocate 1% of their GDP spending to R&D, as recommended by the United Nations Conference in 1979.

❖ **h-index**: Tunisia ranks first among Arab countries in the h-index.

Table 1 Ranking of Arab countries according to the Research, Development and Innovation Index 2016

Arab Countries	Ranking according to the Research and Innovation Composite Index	Ranking according to research and development	Ranking according to innovation	Ranking according to enabling environment and infrastructure
UAE	1	1	1	2
Qatar	2	2	6	1
Saudi Arabia	3	3	2	3
Tunisia	4	6	5	6
Kuwait	5	7	11	4
Lebanon	6	5	3	11
Bahrain	7	15	4	5
Jordan	8	10	7	9
Oman	9	8	13	8
Morocco	10	16	9	7
Egypt	11	4	14	13
Djibouti	12	14	8	15
Palestine	13	11	12	17
Syria	**14**	**13**	**15**	**16**
Algiers	15	17	16	12
Mauritania	16	18	10	18
Yemen	17	9	17	20
Sudan	18	12	18	19
Libya	19	19	19	10
Iraq	20	20	20	14

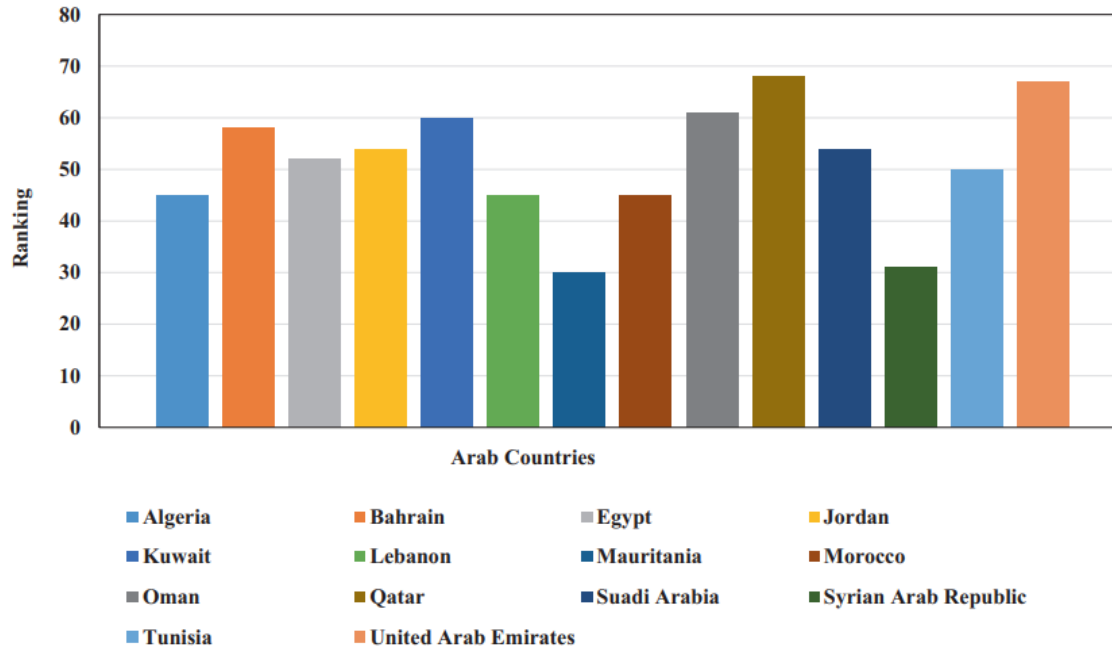# Key trends and patterns in the internationalization of education in MENA countries

Fig. 2 General enabling environment of the Arab world in the Global Knowledge Index 2019. Data visualized from Knowledge 4All.org (All values are normalized to a scale from 0 (worst) to 100 (best))

Shift towards STEM subjects (science, technology, engineering, and mathematics)

Promotion of interactive approaches and innovation

Increasing collaboration between academia and business

Massification

Negative outcomes of internationalization on the quality of education in MENA countries:

Levels	
Government	✓
Institutional	✓
Classroom	✓

Fig. 4.1 Some of the challenges facing the Arab higher education

(1) Governance

(2) Quality Assurance

(3) Finance

(4) Scientific Research

(5) Educational outcomes and development

(6) Globalization

(7) Educational outcomes and development

(8) Brain Drain

Negative outcomes of internationalization on the quality of education in MENA countries:

Equity of student Access to online education from home

Egypt 10% | Algeria 15% | Iraq 18% | Jordan 43% | Libya 45% | Morocco 50% | Tunisia 52% | Oman 92% | Saudi Arabia 94%

Fig. 7 Equity of student access to online education from home in the Arab World
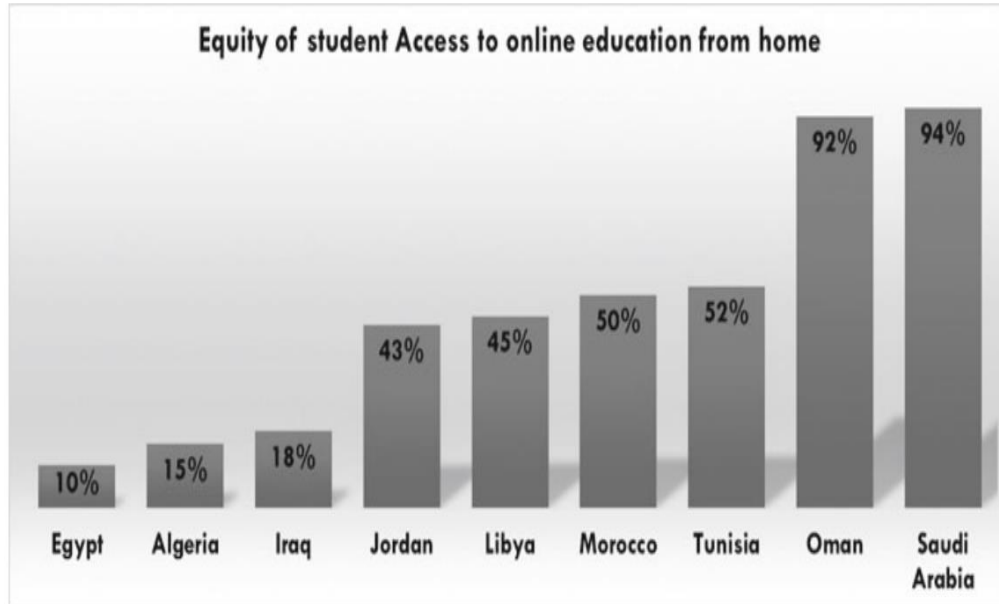
❖ The Arab Gulf countries "have been the largest recipients of transnational higher education globally, whilst Australia, the UK, and USA have been the largest providers" (Wilkins, 2011, p. 73) Transnational education is transferred through three different forms: distance education, branch campus, and partner-supported delivery in joint venture.

❖ According to Wilkins (Wilkins, 2011), the Arab Gulf countries "have been the largest recipients of transnational higher education globally, whilst Australia, the UK, and USA have been the largest providers" (Wilkins, 2011, p. 73)

Negative outcomes of internationalization on the quality of education in MENA countries:

- ❖ Addressing skills gap in higher education: Despite progress in promoting innovation and entrepreneurship, there remains a significant skills gap facing NA universities.
- ❖ Challenges in accreditation and recognition: The excerpt highlights the challenges facing Arab countries regarding the accreditation and recognition of e-learning credentials and certificates.
- ❖ Integration of student perspectives: The excerpt also highlights the importance of integrating student perspectives in assessing e-learning quality.
- ❖ Focus on Information Technology: Information technology plays a crucial role in reshaping education in the MENA region.
- ❖ Government Investment in Research and Development: Political upheavals in 2011 spurred increased R&D funding in countries like Algeria, Jordan, Morocco, Tunisia, and Egypt.
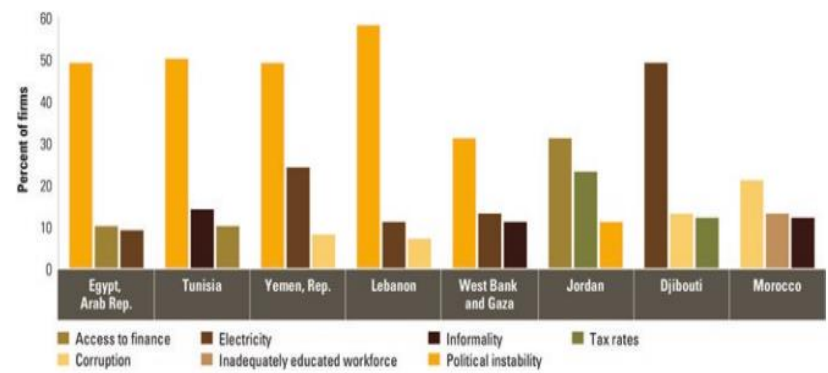

Fig. 2 Political instability is most commonly chosen as top obstacle by MENA surveyed firms (2013/14). (Source EBRD [33], Fig. 2.5)
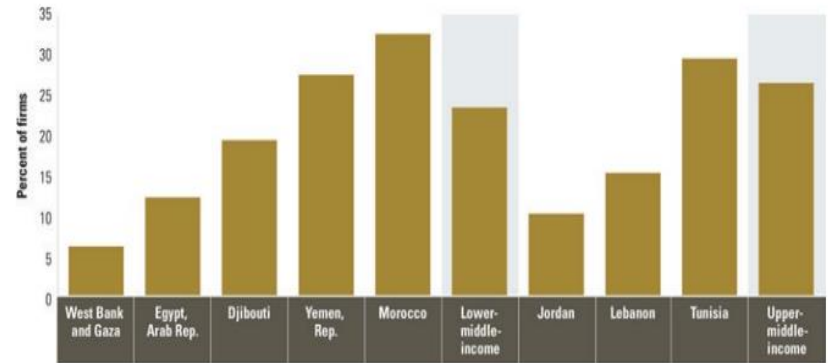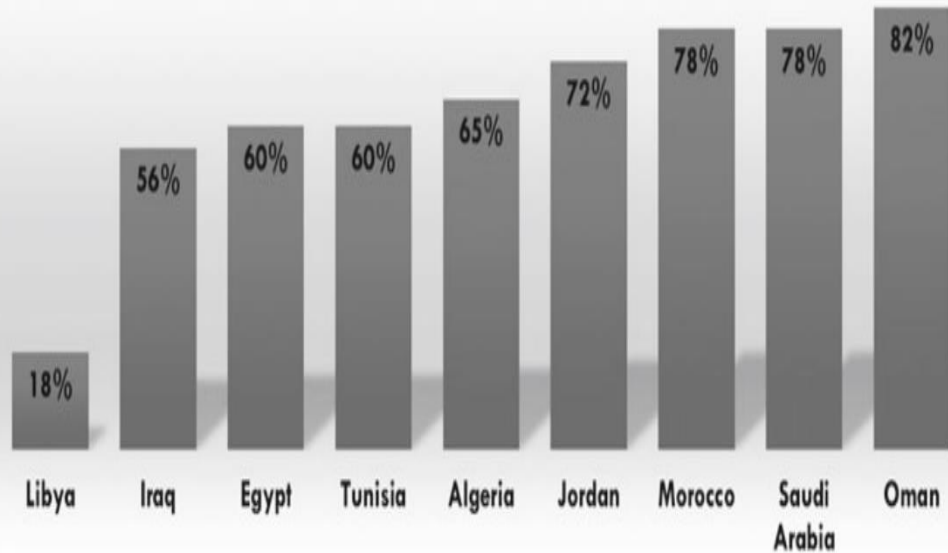

Fig. 3 The proportion of firms reporting and inadequately educated workforce as a severe constraint. (Source: EBRD [33], Fig. 4.11)

Fig. 8 Provision of sufficient training and capacity building at higher education institutions in the Arab World

Positive outcomes of internationalization on the quality of education in MENA countries

❖ The 1998 UNESCO strategy of internationalization of education, which is viewed as the only pathway to enhance education, scientific research, and innovation, seeks to adopt international standards in all related education academic activities such as teaching, improving academic program curricula, student and faculty exchange, polarization of field experts, acquiring soft communication skills, and seeking international cooperation and partnership in research, education, and training

Table 01: Arab region countries with quality assurance agencies

No.	Country	Has Quality Assurance Agency	Agency Name
1	Kingdom of Bahrain	✓	Education and Training Quality Authority
2	Kingdom of Saudi Arabia	✓	National Commission for Academic Assessment and Accreditation
3	Qatar	✓	Council for Higher Education
4	Sultanate of Oman	✓	Oman Academic Accreditation Authority
5	Kuwait	✓	National Bureau for Academic Accreditation and Education Quality Assurance
6	United Arab of Emirates	✓	The Commission for Academic Accreditation
7	Yemen	✓	Yemeni Council for Accreditation and Quality Assurance
8	Libya	✓	Center for Quality Assurance and Accreditation of Higher Education Institutions
9	Lebanon	✓	Center of Quality Assurance
10	Sudan	✓	Evaluation and Accreditation Commission (EVAC)
11	Egypt	✓	National Authority for Quality Assurance and Accreditation of Education
12	Tunisia	✓	Tunisian Agency for Evaluation and Accreditation in Higher Education and Scientific Research
13	Syria	✓	National Commission for Quality and Accreditation in Higher Education
14	Jordan	✓	Accreditation Authority for Jordanian Higher Education organizations
15	Palestine	✓	Accreditation and quality assurance commission
16	Iraq	✓	The Iraqi Association for Accreditation and Development of Educational Programs
17	People's Democratic Republic of Algeria	✓	Quality Assurance Commission for Higher Education (CIAQES)
18	Republic of Djibouti	x	-
19	Union of the Comoros	x	-
20	Kingdom of Morocco	✓	National Agency for Evaluation and Quality AssuranceHigher Education and Scientific Research
21	Islamic Republic of Mauritania	✓	The Mauritanian authority for Quality Assurance in Higher Education (AMAQ-ES)
22	Republic of Somalia	x	-

Positive outcomes of internationalization on the quality of education in MENA countries:

Table 1 International applications by Arab countries in the last 5 years for patents via the World Intellectual Property Organization.

Arab countries	Population (million 2018)	Gross domestic product (billion US $) 2018	2015	2016	2017	2018	2019
Algeria	42.23	586.39	8	13	12	16	9
Bahrain	1.57	65.87	5	6	1	1	2
Egypt	98.42	1084.01	58	44	36	44	44
Iraq	38.43	598.20	2	1	2	—	2
Jordan	9.96	82.73	1	1	6	12	19
Kuwait	4.14	271.06	3	3	4	6	5
Lebanon	6.85	79.50	7	6	5	6	3
UAE	9.63	641.58	77	81	98	100	108
Tunisia	11.57	128.33	8	6	9	7	11
Syria	16.91	—	1	2	1	1	3
Sudan	41.80	176.84	6	—	11	6	3
Saudi Arabia	33.70	1651.15	274	294	378	663	552
Qatar	2.78	313.03	19	14	26	15	25
Oman	4.83	177.87	3	8	3	14	10
Morocco	36.03	279.33	34	35	47	49	34

The data relating to population and GDP are from the UN Statistics Division and the World Bank. Data for PCT applications are extracted from WIPO statistics database

❖ **Promotion of innovation and entrepreneurship:** There is a growing emphasis on promoting innovation and entrepreneurship within North African (NA) countries, particularly through the support of startups in various sectors such as financial technology, artificial intelligence, and e-commerce. Governments in the region, including those of Algeria and Egypt, actively encourage the development of technological ecosystems to support innovation.

❖ **Investment in research and development:** Morocco and Egypt are highlighted as leaders in research and innovation within the MENA region, with Morocco having the highest GDP expenditure for research and innovation and Egypt ranking second in terms of the share of MENA startup launches.

Positive outcomes of internationalization on the quality of education in MENA countries

❖ **Number of Researchers**: The UAE leads in the number of researchers per million people.

❖ **Publication Output**: Egypt leads in the number of published articles in peer-reviewed journals.

❖ **Global Directory of Publishers**: Despite the presence of numerous publishing houses in Arab countries, the Global Directory of Publishers lists only a limited number.

❖ **Arcif Report 2020**: The report utilized data from 681 Arabic peer-reviewed journals.

❖ **Countries Represented**: The distribution of journals from 18 Arab countries shows Algeria having the highest number of journals.

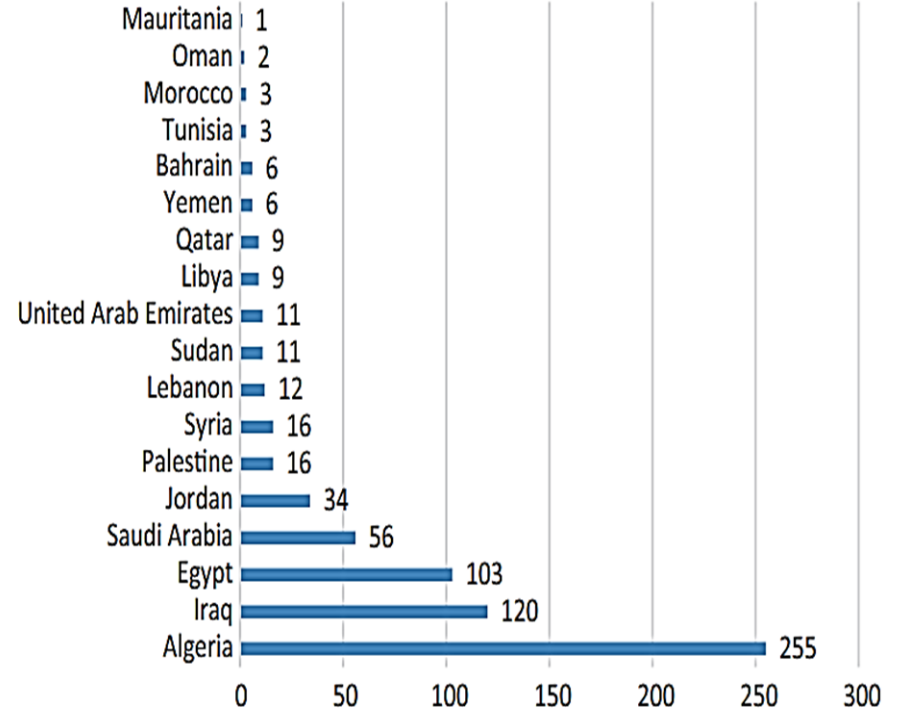❖ **Citation Ranking**: The top ten cited journals include publications from Jordan.

Fig. 13 Distribution of journals from Arab countries

Conclusion

The internationalization of education in MENA countries offers opportunities to enhance various aspects of society, from health and labor participation to cultural exchange and economic growth. Addressing challenges related to education quality, gender equality, and distance learning will be crucial in realizing the full potential of internationalizing education in the MENA region.

04

Thank You!

Do you have any questions?