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Statistical Bulletin No.7

# Digital Education in the Arab Countries



A special bulletin issued on the occasion of ALECSO's participation in the  
“United Nations Transforming Education Summit 2022”

September 2022



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### Introduction

Goal 4 of the 2030 Agenda for Sustainable Development Goals seeks to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”. Target 4.2. aims to ensure that “all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education by 2030.”

Are Arab States adequately moving forward toward achieving SDG4, especially Target 4.a which seeks to “build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all” ?

To monitor progress in this regard, focus has been laid on the following indicators :

Percentage of schools with access to :

- a) Electricity;
- b) Internet for pedagogical purposes;
- c) Computers for pedagogical purposes;
- d) Adapted infrastructure and materials for students with disabilities;
- e) Basic drinking water;
- f) Basic sanitation facilities separated for males and females;
- g) Basic hand-washing facilities.

The available indicators reveal that Target 4.a has not been achieved in several countries around the world, and seems difficult to attain. It is in this context that the United Nations is holding the “Transforming Education Summit 2022”, in response to the global crisis in education, a crisis of equality, inclusion, quality, and appropriateness. Often slow and invisible, this crisis might have a negative impact on the future of children and youth all over the world.

In anticipation of this important global event, the ALECSO Observatory has prepared a special bulletin themed on “Digital Education in the Arab Countries”. The bulletin provides analysis based on relevant indicators, including :

- Individuals using the Internet (subscriptions to fixed-line broadband services);
- Percentage of schools, by level of education, with access to electricity;
- Percentage of schools, by level of education, equipped with computers for pedagogical purposes;
- Percentage of schools, by level of education, with access to the Internet for pedagogical purposes.

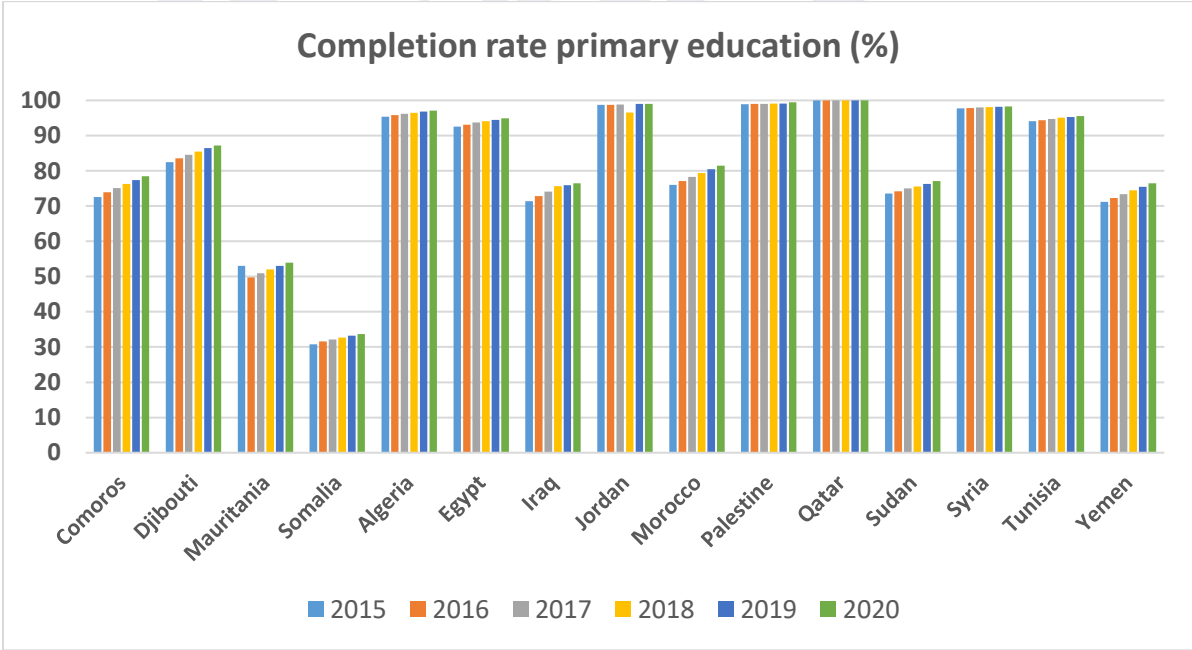
Other relevant indicators are also used to measure progress in the implementation of SDG4 during the period 2015-2020.

The “Transforming Education Summit” seeks to address current problems related to education, based on available indicators, mobilize action, ambition, solidarity, and solutions to recover the learning losses caused by COVID-19, and lay the ground for transforming education and bringing it in tune with global technological developments.

# 1 – Monitoring progress in achieving SDG4 in the Arab countries: General indicators:

- During the period 2015-2020, the completion rate of primary education for both sexes remarkably increased in all Arab countries (Figure 1). However, the rate remains below expectations in some Arab countries, such as Somalia, Yemen, Iraq, Comoros, Djibouti, Mauritania and Morocco, where more action is needed to tackle the school dropout problem.

Figure 1



Source : UIS

- In 2020, there were 16 million children and youth in the Arab countries out of primary, lower secondary and secondary schools, of whom 7.4 million were males and 8.6 million were females.
- In 2020, the number of illiterates in the Arab countries belonging to the “15 and above” age group reached 70.1 million, including 9.6 million young people aged 15-24 years.
- The Arab net enrollment ratio in primary education increased from 88.1% in 2015 to 90.1% in 2020, while the global average reached 91.2% in 2020.

## 2 – Percentage of individuals using the Internet:

During the period 2015-2020, the Arab countries<sup>1</sup> witnessed a remarkable increase in the percentage of individuals using the Internet, up from 38.2% in 2015 to about 60% at the end of 2020. This means that about 174.4 million people are still without Internet access.

Table 1

### Percentage of individuals using the Internet in arab countries – 2015 - 2020

country/year	2015	2016	2017	2018	2019	2020
Algeria	38,2	42,9	47,7	49	57,9	62,9
Bahrain	93,5	98	95,9	98,6	99,7	99,7
Comoros	7,5	7,9	8,5	9	9,5	10
Djibouti	22,9	30,8	55,7	58	59	59
Egypt	37,8	41,2	45	46,9	57,3	71,9
Iraq	16,8	37,7	49,4	43,3	44,3	,,,,
Jordan	54,2	56,2	64,5	65,2	,,,,	,,,,
Kuwait	82	85,6	98	99,6	99,5	99,1
Lebanon	74	76,1	78,2	80,9	80,9	84,1
Libya	19	20,3	21,8	23	24,2	25
Mauritania	17,6	24,1	24,2	35,1	36,7	40,8
Morocco	57,1	58,3	61,8	64,8	84,1	84,1
Oman	73,5	76,8	80,2	85,5	90,3	95,2
Palestine	56,7	59,9	63,3	64,4	70,6	74,6
Qatar	92,9	95,1	97,4	99,7	99,7	99,7
Saudi Arabia	69,6	74,9	94,2	93,3	95,7	97,9
Somalia	1,8	1,9	2	2,2	2,3	2,6
Sudan	...	14,1	18,6	24,6	25,9	28,4
Syria	30	31,9	32,7	33,8	34,7	35,8
Tunisia	46,5	49,6	55,5	64,2	66,7	71,9
UAE	90,5	90,6	94,8	98,5	99,1	100
Yemen	24,1	24,6	26,7	27,8	29,1	30
Arab States	41,9	43,4	48,4	54,5	61,4	68,9
Word	40,5	43,3	45,8	49,4	54	60

Source : International Telecommunications Union

(-) Estimates by ALECSO Observatory

<sup>1</sup> 22 Member States of the League of Arab States, with a population of 436 million in 2020.

This situation should not, however, overshadow the efforts invested in recent years by Arab countries to develop infrastructure, which enabled a significant rise in the percentage of individuals using the Internet (Table 1). At the end of 2020, the percentage reached 95 to 100% in the Gulf countries, 80% in Lebanon and Morocco, 71% in Tunisia, and 74.6% in Palestine.

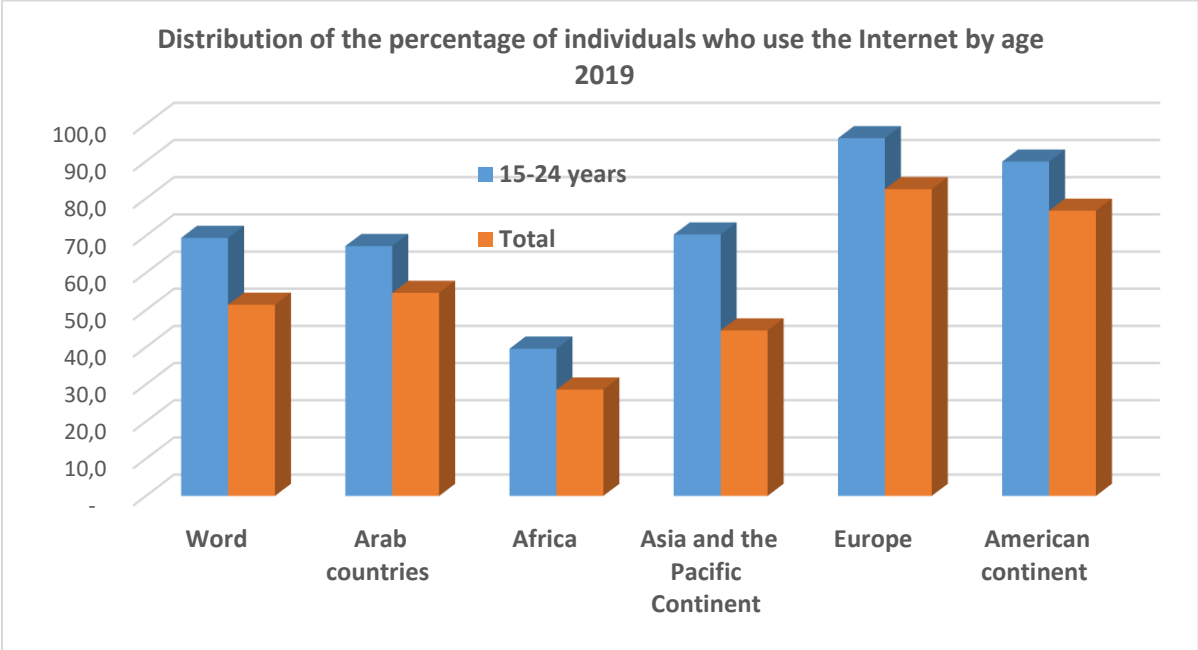
A remarkable evolution took place in Djibouti where the percentage of individuals using the Internet went up from 22.9% in 2015 to 59% in 2019 – 2020, a significant percentage compared to other countries having the same socio-economic level. Conversely, low percentages are still recorded in Somalia and the Comoros where more action is needed to improve Internet access rates.

In terms of age, the available data on young people aged 15-24 years show that the spread of digital technologies has provided unprecedented opportunities for children and youth to connect, communicate, share, learn, access information, and express their views on everything that affects their lives and their communities.

Indicators also reveal that young people in this age group use modern means of communication more than other groups of the population, and are therefore more ready for digital learning.

It is worth noting, in this regard, that the Arab and global percentages of young people using the Internet are broadly comparable, though the European and American continents have higher percentages than other regions of the world. At the same time, significant progress is being made in the Arab countries, which should be best leveraged to enhance digital learning in the years to come.

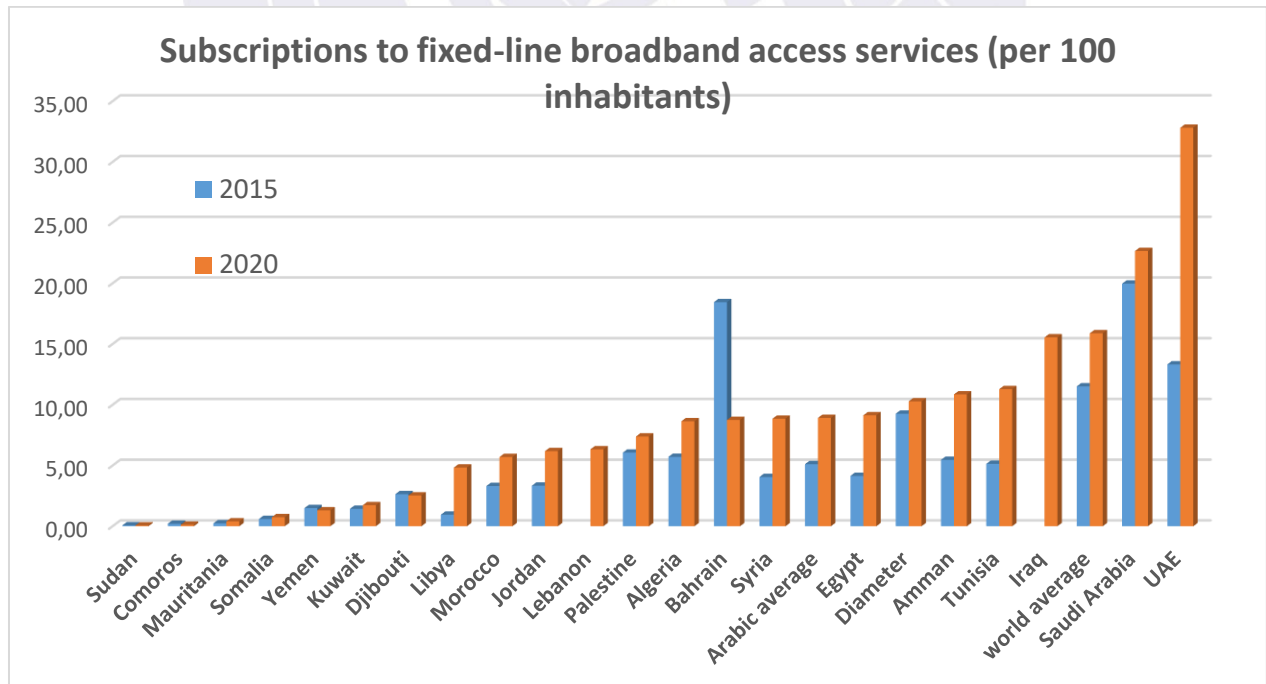
Figure 2



Source : International Telecommunications Union

Another important indicator relates to subscriptions to fixed-line broadband services (Figure 3). In fact, high-speed Internet connection enables better digital learning in schools and colleges. The Internet access rate, as an initial quantitative indicator, does not provide an accurate idea about the quality of Internet access in educational institutions. Low-speed Internet hinders digital learning, data-sharing, and delivery of remote lessons.

Figure 3



Source : world bank

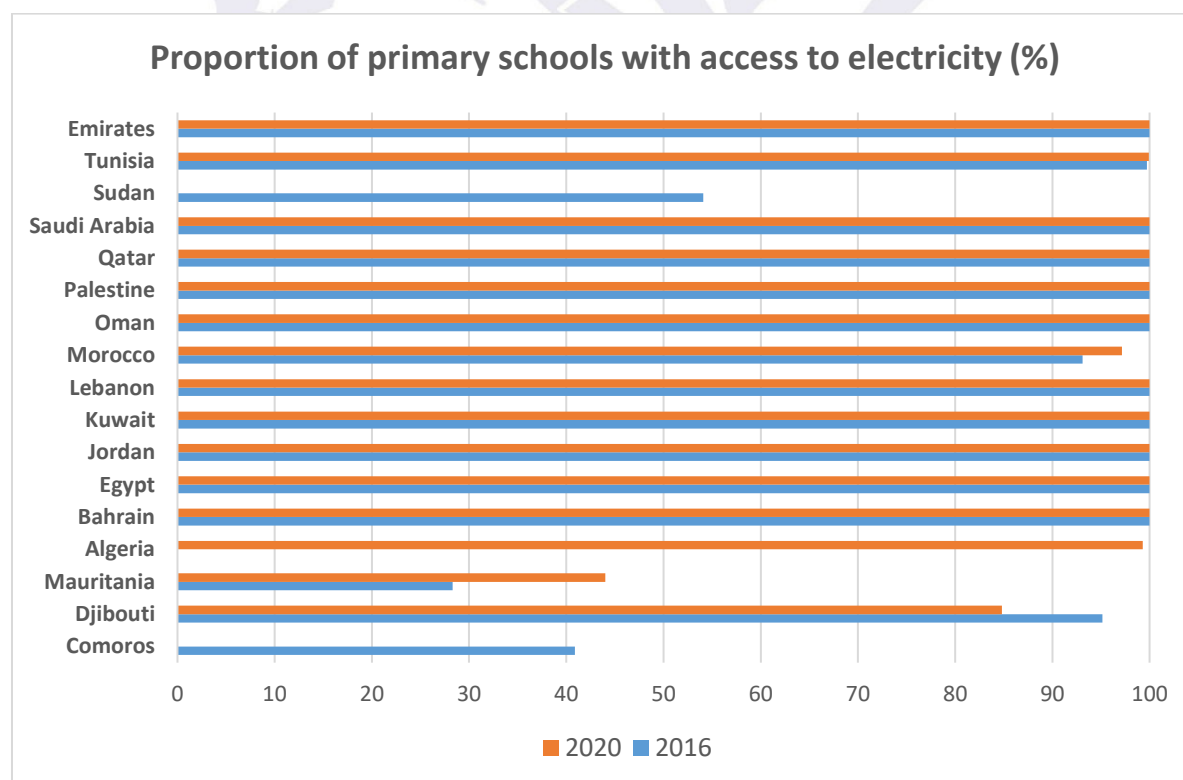
### 3 – Infrastructure in primary, lower secondary and secondary schools:

#### 3.1 Electricity

##### 3.1.1 Primary schools :

According to available data (Figure 4), the electricity coverage rate in primary schools is equal or close to 100% in most Arab countries, with the exception of Sudan, Mauritania, the Comoros, and - to a lesser extent - Djibouti and Morocco. The absence of electricity is a key factor impeding the adoption of digital learning in all primary schools in these countries.

Figure 4



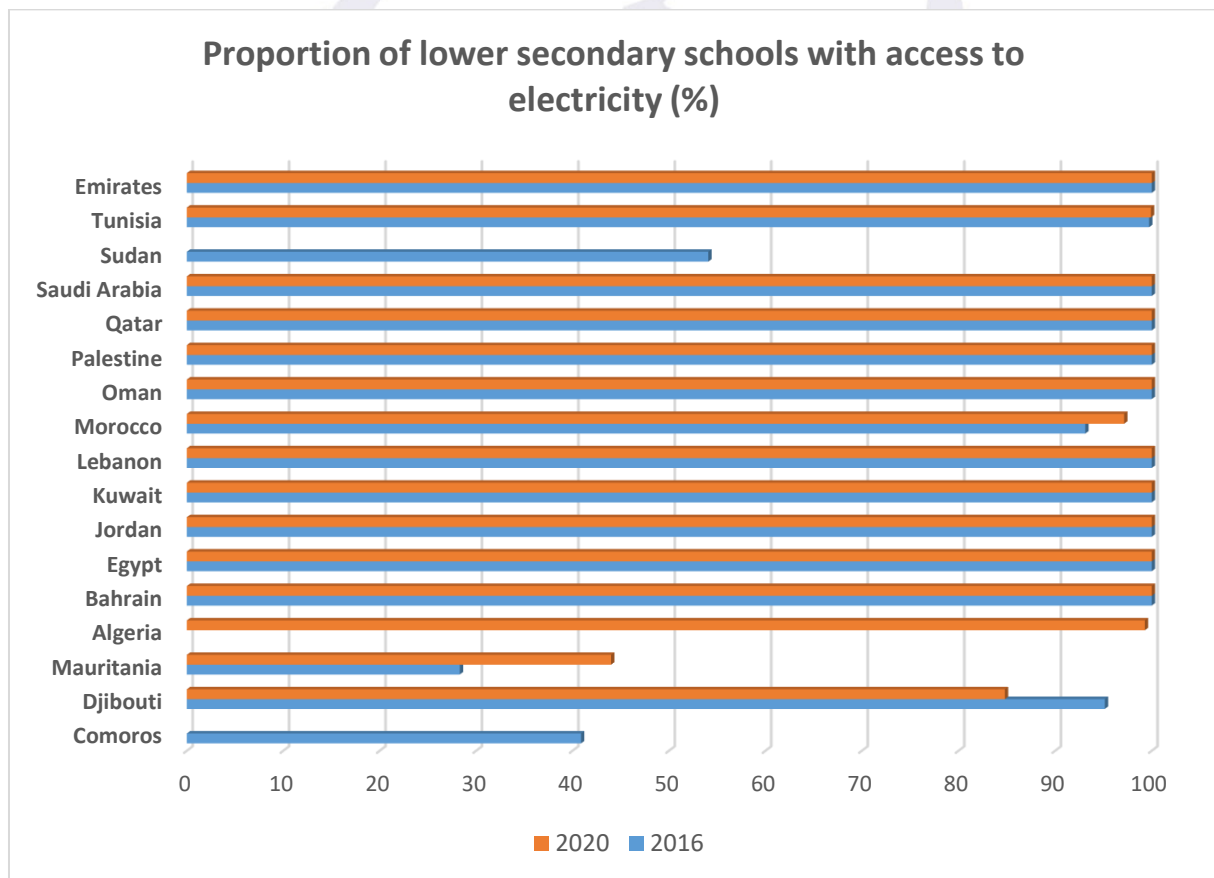
Source : UIS

##### 3.1.2 Lower secondary Schools:

According to available data (Figure 5), the electricity coverage rate in lower secondary schools is equal or close to 100% in most Arab countries. Some countries, however, such as Mauritania, Sudan and the Comoros, still have low coverage rates, which might hinder the implementation of ALECSO's initiative to provide computers to Arab countries with limited resources in order to promote digital learning at all educational levels.



Figure 5



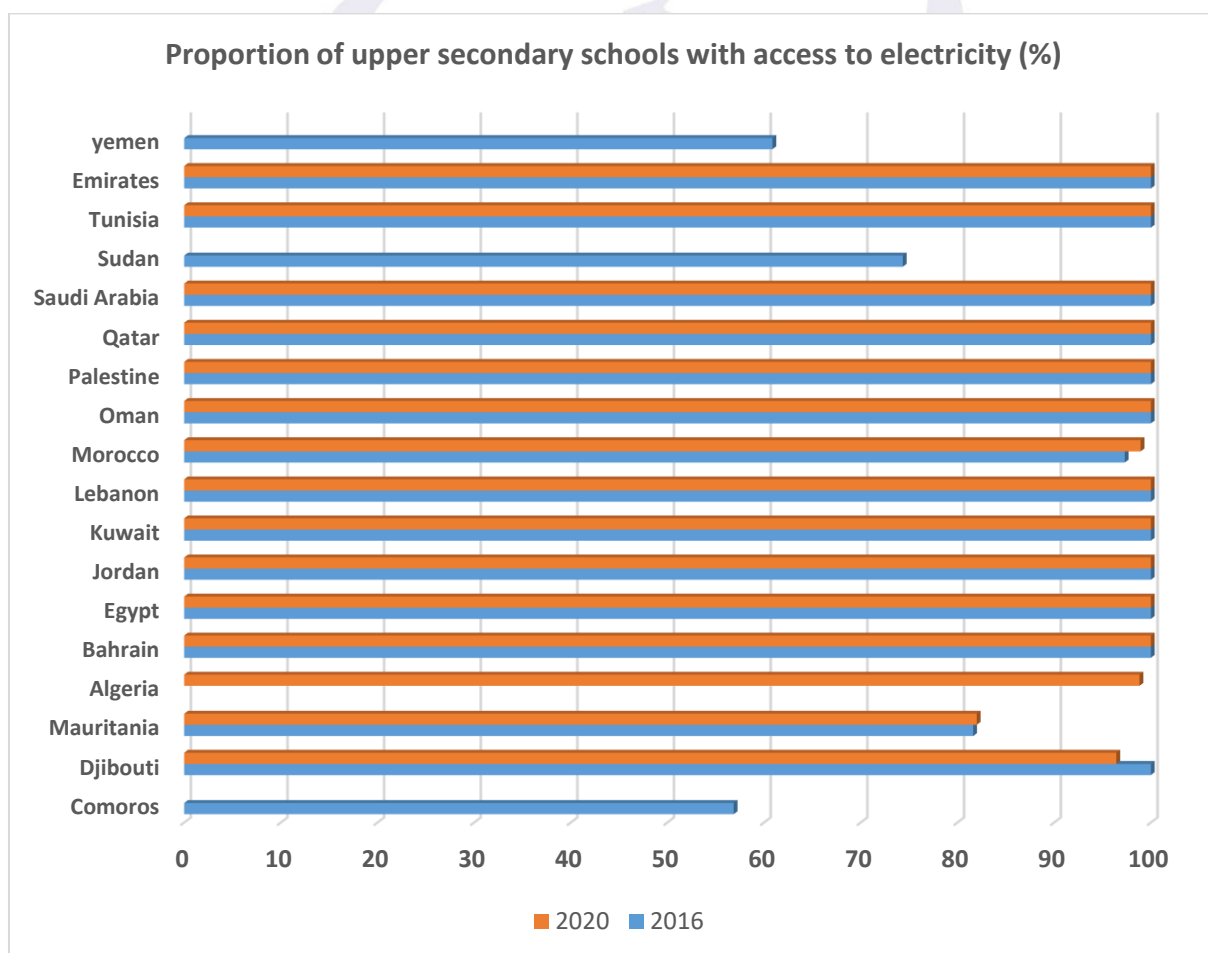
Source : UIS

### 3.1.3. Secondary schools:

The available data (Figure 6) show that the electricity coverage rate in secondary schools is equal or close to 100% in most Arab countries. Some countries, however, such as Yemen, Sudan, the Comoros, and to a lesser extent Mauritania, have somewhat low coverage rates, which might impede digital learning in these countries.

In Djibouti, the coverage rate in secondary schools slightly decreased from 100% in 2016 and to about 96% in 2020. This may be due to the fact that the new secondary schools built during this period to meet the growing number of students have not been connected to the electricity network yet.

Figure 6



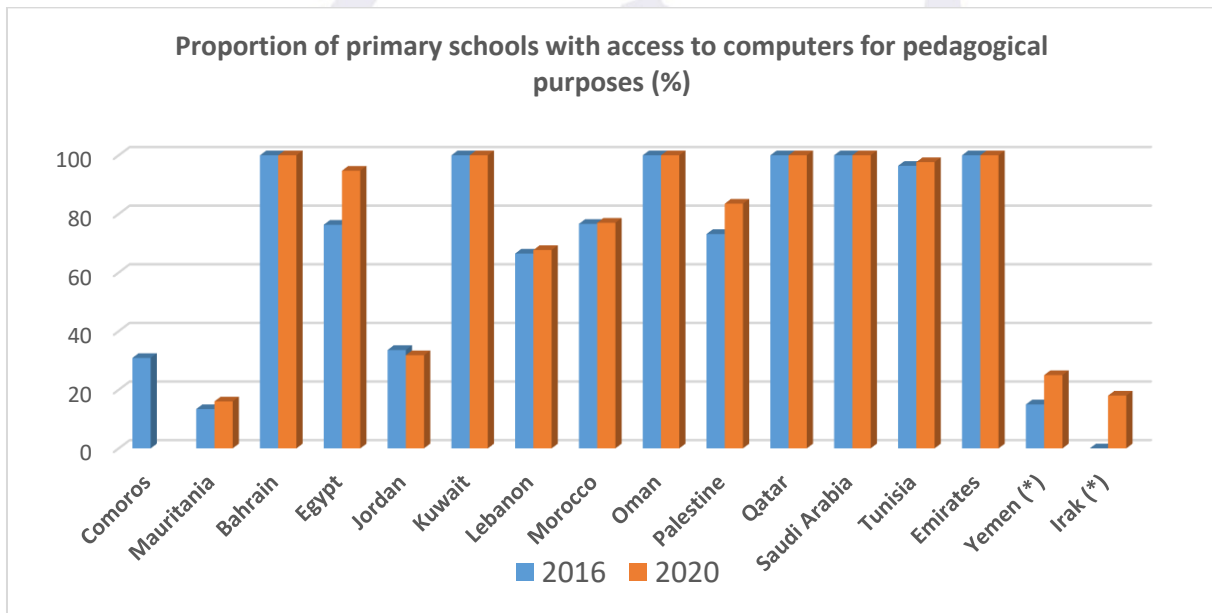
Source : UIS

### 3.2 Primary, lower secondary and secondary schools equipped with computers for pedagogical purposes:

#### 3.2.1. Primary schools:

As shown by Figure 7, most schools in Bahrain, Kuwait, Oman, Saudi Arabia, Qatar, Tunisia and UAE, are equipped with computers for pedagogical purposes. Percentages between 68% and 84% have been recorded in Lebanon, Morocco and Palestine, compared to only 30% in the Comoros, Mauritania, Yemen, and Iraq. This situation may be explained by the fact that some primary schools in these countries are still without electricity.

Figure 7

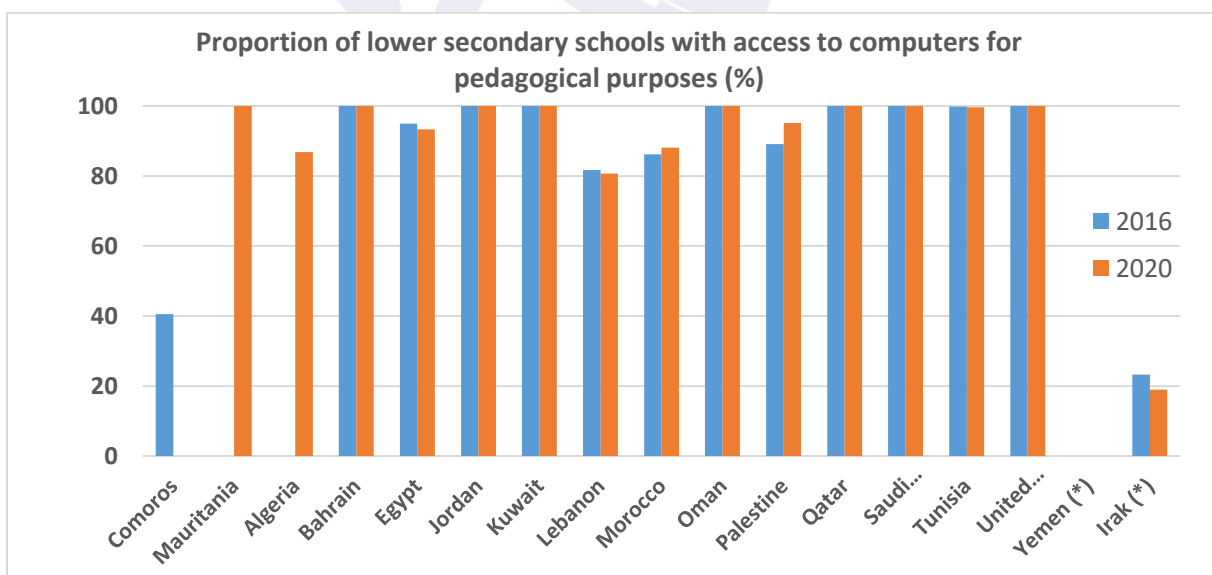


Source : UIS / (\*) Countries

### 3.2.2. Lower secondary schools:

As shown by Figure 8, most Arab countries have recorded percentages equal or close to 100% in terms of provision of lower secondary schools with computers for pedagogical purposes. In the Comoros and Iraq, percentages range between 20 and 40%, while in Yemen, no lower secondary schools are equipped with computers.

Figure 8

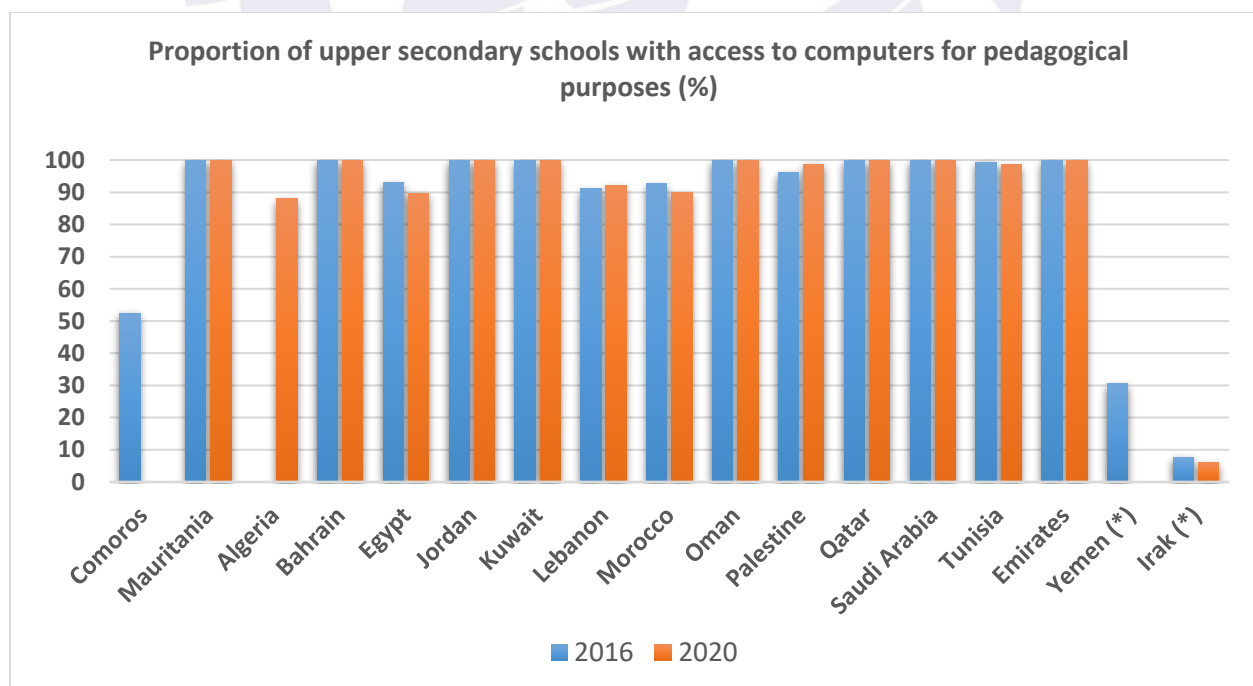


Source : UIS / (\*) Countries

### 3.2.3. Secondary schools:

As shown by Figure 9, most Arab countries have recorded percentages equal or close to 100% in terms of provision of secondary schools with computers for pedagogical purposes, a significant factor that facilitates digital education in secondary schools. The Comoros and Iraq, however, still have low percentages (5.25% and 6% respectively), while in Yemen, no secondary schools are equipped with computers.

Figure 9



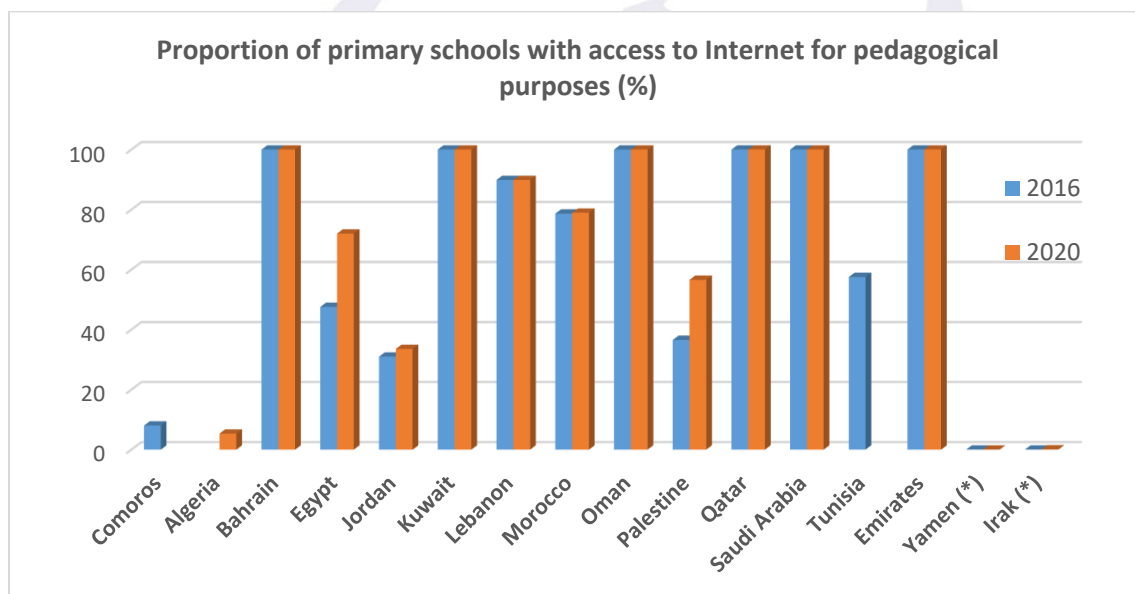
Source : UIS / (\*) Countries

### 3.3. Primary, lower secondary, and secondary schools with access to the Internet for pedagogical use

#### 3.3.1. Primary schools:

According to available data (Figure 10), all primary schools in the Gulf countries (Qatar, Saudi Arabia, Bahrain, Kuwait, UAE and Oman) are connected to the Internet. The Internet access rate ranges between 33 and 72% in Tunisia, Jordan, Morocco, Egypt and Palestine. Low rates, not exceeding 10%, are recorded in the Comoros, Algeria, Iraq and Yemen.

Figure 10

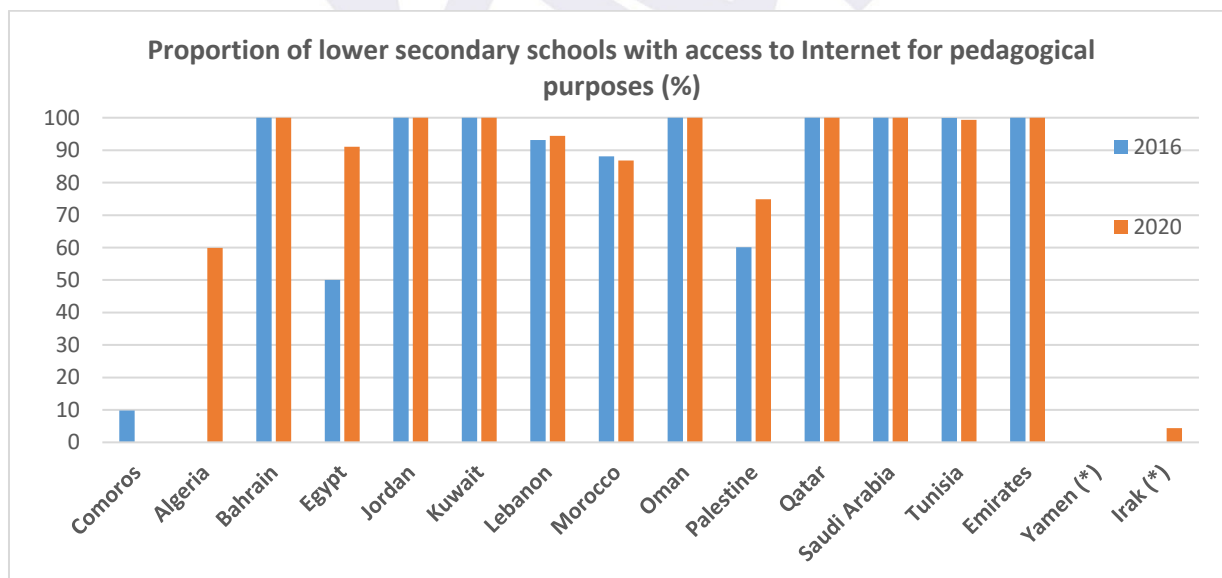


Source : UIS / (\*) Countries

### 3.3.2 Lower secondary schools:

As shown by Figure 11, the percentage of lower secondary schools with access to the Internet for pedagogical purposes is close to 100% in several Arab countries (Gulf States, Tunisia, and Lebanon), compared to 60 to 90% in Algeria, Egypt, Morocco and Palestine, and no more than 10% in Yemen, Iraq and the Comoros.

Figure 11

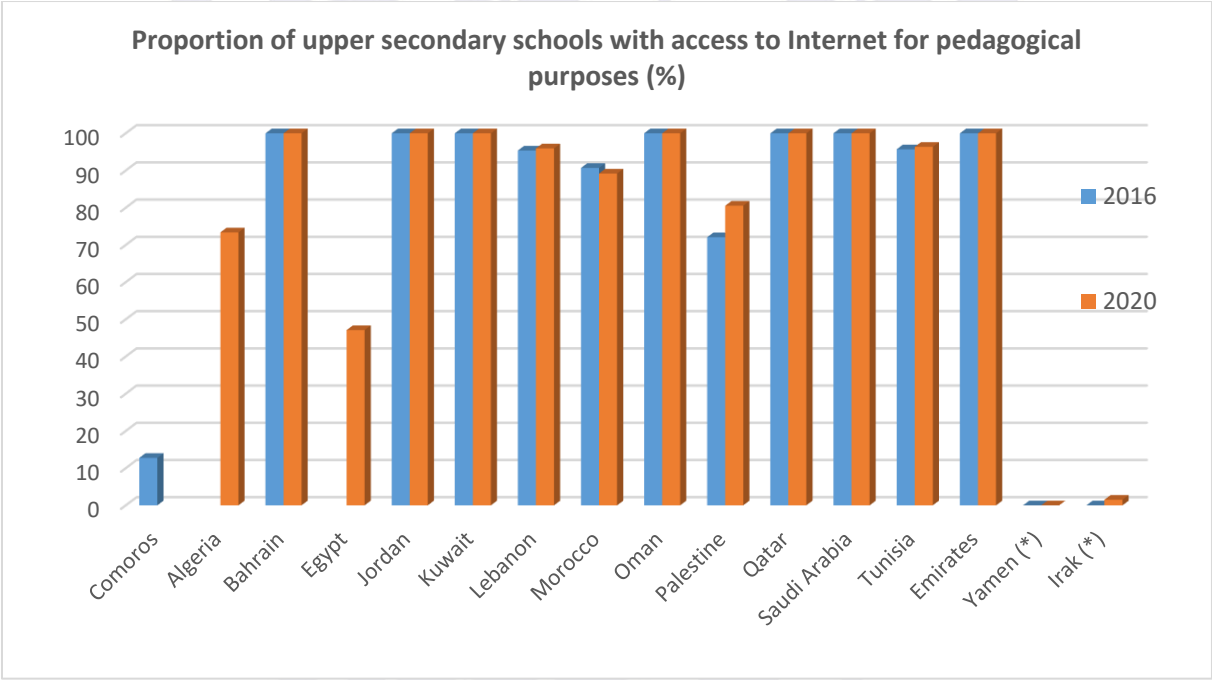


Source : UIS / (\*) Countries

### 3.3.3. Secondary schools

As shown by Figure 12, the percentage of secondary schools with access to the Internet for pedagogical purposes ranges between 90 and 100% in the Gulf countries, Morocco, Tunisia and Jordan, compared to 45 to 80% in Egypt, Algeria and Palestine. Low percentages are recorded in the Comoros (10%) and Iraq (1.5%), while in Yemen, no secondary schools have Internet access.

Figure 12



Source : UIS / (\*) Countries

## Conclusion

There is no doubt that information technology plays a strategic role in the field of education, especially in view of the significant technological progress and the infrastructure development undertaken in most Arab countries. Transition to digital education/learning should be made in line with a well-thought approach, as it requires flexibility in dealing with both learners and teachers.

More than ever, Arab countries are called on to give a significant place to digital education/learning, being an integral part of human resources training and preparation, and a key driver for sustainable development. Digital learning also helps to tackle the problem of school dropout, as it enables learners to follow courses online at any time that suits them.

This being said, it is necessary to provide the requisites for a smooth transition to digital education/learning. These include in particular :

- Specialists in the development of digital content and open learning materials, to provide teachers with all the needed techniques, tools and skills to manage the digital learning process;
- Continuous training of teachers on the use of modern technologies in education;
- An educational “emergency unit” to tackle problems in the learning process and provide quick and timely solutions;
- Continuous and realistic evaluation of the digital learning process, and visions to improve results and outcomes;
- Specialists in technical and educational training to provide teachers with the needed tools and skills to manage the digital learning process;
- Digital infrastructure available in cities and villages and accessible to all students from all social groups.

It is in this context that ALECSO is launching its initiative, on the occasion of the United Nations “Transforming Education Summit”, for the provision of “**Learning and Education Connected Computer Devices for All**”. This initiative is designed to promote digital solidarity between high-income and low-income countries, which helps to spread digital education/learning practices all over the Arab region. This important initiative might be extended to cover other regions of the world.

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