

ج
ظ
ن
م
و

CHAPTER FIVE:

RESULTS OF THE
FIELD SURVEY:
REALITIES OF
THE ARAB YOUTH
INTEGRATION IN
THE LOCALISATION
OF KNOWLEDGE

ع
و
ي
م
و

ع
و
ي
م
و

Introduction

This chapter presents the results of studies and field surveys conducted on samples of the Arab youth in their final stages of university education in four Arab countries (UAE, Jordan, Tunisia and Morocco), in which more than 3,800 young Arabs participated. These surveys come in accordance with the field study methodology that the Arab Knowledge Report adopted for direct communication in the report issues through the exploration of opinions and statuses of the primary stakeholders, namely the youth. Using the outcomes of these field investigations, this chapter builds on the analyses presented by the previous chapters concerning the status and mechanisms of knowledge transfer and localisation and the effectiveness of the Arab youth in this process, in addition to research conducted over the surrounding enabling environments. The main goal of these tools that were used during 2013 was to directly observe the status of basic skills among the Arab youth in universities, which are required for their effective integration in the transfer and localisation of knowledge. Research tools also aimed at exploring the direct opinions of the youth regarding the most important relevant topics, including values and practices, as well as their perceptions of the surrounding enabling environment. With this goal in mind, innovative tools were designed and used for the first time in the preparation of this report. This field approach distinguishes this report and makes it more realistic when it comes to diagnosis; thus more accurate and realistic in terms of suggested recommendations and tendencies.

Methodological Clarifications

In accordance with the main focus of this report, the research aims at exploring what distinguishes university youth in terms of cognitive, value-based and practical features related to the transfer and localisation of knowledge. It also aims at exploring youth opinions, particularly in relation to the required enabling mechanisms and environments and the degree of their

availability, as well as perceptions about their role in achieving this ambition and ways to overcome obstacles.

Clarifications on the Conceptual Basis

Before going into methodological and technical details related to the process of designing research tools, it is worth recalling certain basic concepts on which the report is based, and what they entail in terms of general or specific implications:

- **Skills:** With reference to international literature and certain regional studies that addressed the skills of university students and adults in general, and in light of the knowledge society requirements, a set of agreed upon basic skills is identified, namely:
 - Skills of understanding and using at least one foreign language;
 - Technological skills represented by the purposeful and productive employment of modern technologies;
 - Communication skills represented by possessing the tools of written communication;
 - Literacy skills represented by the skills of processing information of all sorts (texts, tables, figures, and charts);
 - Problem solving skills represented in the ability to employ knowledge of all sorts in solving daily life problems.
- **Mechanisms of transfer and localisation:** Mechanism refers to the nature of assembling the parts within a machine or in something similar. In futuristic studies and action plans, this concept refers to executive methods and procedures that can contribute to achieving the objective. This report adopts the latter concept of mechanism. As such, it focuses on the set methods, means and procedures that are employed for achieving the expected objective, which is the transfer and localisation of knowledge.
- **Enabling environments:** Along with what was set in the two previous reports regarding the concept of enabling environments, this term refers to “the

In accordance with the main focus of this report, the research aims at exploring what distinguishes university youth in terms of cognitive, value-based and practical features related to the transfer and localisation of knowledge

conditions of incubation and support, with all their various structures and forms”, or in other terms, “knowledge tools, financial tools, framed legislations, supporting institutions and freedoms in their broadest sense”.¹

Clarifications on the Design of the Tools

According to the conceptual model adopted in the Arab Knowledge Report 2014, the tools required for collecting the necessary data included a skills test and a questionnaire to gather students' opinions and perceptions of knowledge transfer and localisation mechanisms and related enabling environments.

The Student Questionnaire

Based on the adopted concepts and the topics identified in relation to the transfer and localisation of knowledge, various sections of the field survey were determined. These sections are related, in particular, to the aspects that directly affect the student, from which one can conclude a series of tendencies relating to the extent of ability to integrate into the transfer and localisation of knowledge and satisfaction with what the environment in its broad sense has to offer, in terms of conditions that can help achieve this integration. In view of this, the preliminary version of the questionnaire was drafted. It included 55 questions divided into the main themes on which the conceptual model of the report is generally based, namely:

- The status of the Arab youth (human capital);
- The mechanisms of the transfer and localisation of knowledge;
- The enabling environments.

Regarding the values, the focus was particularly on the values and tendencies directly related to the topic of acquiring, transferring and localising knowledge, by calling upon the youth sample to express the extent of their acceptance or rejection of a series of positions and attitudes that hold specific values. 20 different values were targeted and represented.

Values Targeted by the Survey

Scientific integrity	Flexibility (against fanaticism)
Freedom of thought and creativity	Cooperation and altruism (rejecting selfishness)
The love of knowledge and curiosity	Religious tolerance
Cooperation and collective work	Self esteem
Appreciation for work	Scientific ambition
Objective judgment	Respect of intellectual property
Scientific modesty	Initiative and modernisation
Seriousness and discipline	The sense of responsibility
Respect of pluralism and diversity	Loyalty to the country
Work proficiency	
Diligence and perseverance	

The Skills Test

This test aims at measuring a number of required skills, i.e those skills that university students of all specialisations are supposed to possess. These are horizontal skills that are not related to one specific specialisation, but to knowledge and cognitive skills that every adult in general and every seeker of education and knowledge in particular needs to be able to respond to the requirement of a knowledge society (in terms of the transfer, localisation, production and diffusion of knowledge). In view of this, a test composed of five different exercises targeting the aforementioned skills was prepared:

- The first exercise aimed at measuring the basic knowledge related to employing modern technologies in the process of acquiring, transferring and localising knowledge. Given the nature of the targeted audience and the intended education stage, the focus was not placed on knowledge and preliminary operations related to using computers or its programmes. We rather directed all questions towards the tools and programmes required by the processes of knowledge communication, distance education, exchange of information and virtual cooperative work.
- The second exercise aimed at measuring the skill of written communication. We suggested for this purpose a situation that was relevant to the student, consisting of

According to the conceptual model adopted in the Arab Knowledge Report 2014, the tools required for collecting the necessary data included a skills test and a questionnaire to gather students' opinions and perceptions of knowledge transfer and localisation mechanisms and related enabling environments

writing a letter to a scientifically ranked party for a knowledge-related purpose. This was regarded as one of the most important situations that students usually experienced during their university years, regardless of their specialisations. Such a situation can have a powerful effect on the chances of success in broadening their scientific horizons and integrating into professional life.

- The third exercise aimed at measuring the skill of solving daily problems. The suggested situation consisted of placing the student before a specific need and a set of surrounding stressors. He or she was expected to find the best formula to respond to the need. This required the student to analyse the situation and to study a set of possible solutions to reach the best one. Therefore, we made sure that the student explained how the solution was reached, for us to be able to discuss the strategies used. To avoid straying from the context of the university students' interests and concerns, we suggested a university life situation related to time management.
- The fourth exercise aimed at measuring the skill to search for and process information. We adopted a situation consisting of three types of texts: a free text, a chart (or figure) and a table, accompanied by a set of questions relating to extracting information distributed in the three texts, for analysis and comparison. These were also among the situations that students regularly faced during educational and research years, especially in light of the large flow of information and the plurality of its sources.
- The fifth exercise aimed at measuring foreign language skills, understanding and writing. We adopted for this purpose a short text addressing the spread of modern technologies in the world and accompanied by two questions, to examine the extent of the student's understanding of the ideas of text. We also included a question in the form of a topic on social media, in which the student was expected to give an opinion. It is to be noted that we adopted the

same texts and questions in two copies: in French for the students of Tunisia and Morocco and in English for the students of UAE and Jordan.

Testing and Adjusting the Tool

The research tool was developed in stages. At first, the topics and issues to be highlighted were identified during a specialised workshop. In light of that, the first draft was developed. The validity of its sections was checked through established scientific procedures. Then, the required amendments were performed for the final draft for testing in two copies; a copy with French translation to be used in Tunisia and Morocco, and a copy with English translation to be used in UAE and Jordan. Following this, the tools were subject to field testing in the concerned countries. The test sample included 393 male and female students from concerned majors (human sciences, engineering, management and medicine), distributed as follows:

The field testing process resulted in a series of amendments related to the form and content of the tool. Consequently, the outcome was drafting a notebook composed of two parts: the first included the skills test, while the second included the questions related to the values and students' perceptions of enabling mechanisms and environments, distributed as follows:

As for the statistical analyses that were adopted to study the various internal connections (between the sections that fall under the same category) and external connections (between the categories that constitute the tool), and to verify the uniformity and consistency of the tools' content, they were represented by the Cronbach Alpha coefficient and the correlation coefficients of Pearson or Spearman.

The various analyses have made it possible to obtain a number of indicators that confirm the existence of high degrees of consistency that are presented in the following table:

The research tool was developed in stages. At first, the topics and issues to be highlighted were identified during a specialised workshop. In light of that, the first draft was developed

The Target Group and Sample Selection

The field study targeted the university youth audience, considering them as the most important pillar of the knowledge society; the “Knowledge Human Capital”. The importance of this group lies, as explained in the previous chapters, in constituting a major part of the labour and productive force, in

in this sample that the number of female students significantly outnumbered that of male students, notably in UAE, Tunisia and Jordan, where the percentage of female students is double that of male students (in UAE approximately fourfold the male students percentage). This distribution reflects the realities, as it complies with the general tendency of distribution of male and female students in higher education. Official statistics in all the countries of the world, including Arab countries, show that the female academic presence is constantly

Table 5.1

Distribution of the Experimental Sample

Country	Jordan	UAE	Morocco	Tunisia
Number of Students	76	113	147	57

addition to enjoying the most important requirements for establishing the knowledge society, represented in creativity along with the energy and ability to incur change. This study was performed on an indicative sample comprised of 3,822 male and female students, from public universities in the four countries of the case study, distributed according to gender, specialisation and age. As illustrated in Table 5.4, we notice

This study was performed on an indicative sample comprised of 3,822 male and female students, from public universities in the four countries of the case study, distributed according to gender, specialisation and age

Table 5.2

The Structure of the Final Version of the Field Study Tool

	Axes of Interest
Status of the Youth as the Knowledge Capital	Information about the Respondent Values and Tendencies Belonging and Citizenship Cultural Effectiveness Economic Effectiveness Participation/Political Orientations Societal Effectiveness Openness and Global Intercommunication
Opinions of the Youth about the Transfer and Localisation Mechanisms	Translation Scientific Research Use of ICT Media Agreements and Partnerships
Opinions of the Youth about the Enabling Environments	Youth Institutions Knowledge Environment (University Education System) Political Environment Economic Environment Societal Environment Technological Environment Financial Tools
Pre-perceptions and Pre-Judgments Regarding the Transfer and Localisation of Knowledge	
Suggestions on the Contribution of Youth in the Transfer and Localisation of Knowledge	

Table 5.3

Distribution of Cognitive Skills and Their Reliability

Skills	Cronbach's Alpha
Problem Solving	0.82
Written Communication	0.99
Searching for and Processing Information	0.93
Use of Technology	0.88
Use of a Foreign Language in Understanding and Writing	0.92
Skills Combined	0.882

increasing. This might be due to the fact that education is still, for women, the main gateway through which they guarantee their self-fulfilment and assert their presence on social and economic scenes.

Meanwhile, many studies show that attaining high ranks in education is of no interest to males anymore. This is due to the prevalence of unemployment among university graduates and the lack of correlation between scientific degrees and job opportunities, prestige or wealth.

The percentages of students vary from one specialisation to another in all the countries participating in the study (Table 5.5). This is due to several reasons, some of which are objective and others are circumstantial. The objective reasons lie in the actual distribution of the students in the relevant universities (in Tunisia for instance, the number of students in human sciences and languages exceeds the number of students in engineering or medicine specialisations). As for the circumstantial reasons, during the field research in Tunisia, for instance, the data collection process at the time was interrupted because of strikes in the Faculty of Science.

As for age, the average age of students participating in the questionnaire ranged from 21 to 22 years, given that we have recorded, in all countries, the presence of students whose age exceeds 30 years. Although constituting a minority, the presence of students aged over 30 indicates that the higher education system is not restricted to a certain age group. If true, this would serve as a good indicator of providing opportunities for lifelong learning. It is yet to be confirmed whether these cases were due to delay in education (failure, interruption), or cases resulting from a desire to continue university education.

This indicative field study is a quantum leap that enhances the analyses of this report and touches on reality through a field approach that encompasses a category of the youth group. Therefore, the report aims at attaining results that will help us understand the status

of the youth, their opinions and positions, far from any generalisation.

Data Processing and Statistical Analysis

Following correction and data entry according to the set manual, the database for the statistical analysis was prepared. Analysis was performed along the following lines:

- The average (the arithmetic mean), the standard deviation, and the lowest and highest score, in order to study the general tendency of the group and the extent of its homogeneity or discordance regarding the data related to the section in the conceptual model, entitled “the status of the youth cognitive capital”
- Comparing the results obtained from the students according to gender and specialisation to analyse the general trends of the differences

This indicative field study is a quantum leap that enhances the analyses of this report and touches on reality through a field approach that encompasses a category of the youth group

Table 5.4

Distribution of the Sample According to Gender

	Jordan	UAE	Tunisia	Morocco	Total Sample
Male Students	28.6%	19.5%	27.65%	45.1%	31.6%
Female Students	71.4%	77.8%	72.35%	54.9%	68.1%
No Answer	0%	2.7%	0%	0%	0.3%

Table 5.5

Distribution of the Sample According to Specialisation

	Jordan	UAE	Tunisia	Morocco	Total Sample
Managerial Sciences	21.4%	41.7%	18.6%	7.6%	19.8%
Humanities Sciences and Languages	33.4%	20.1%	42.7%	39.6%	35.6%
Engineering Sciences	19.5%	37.5%	5.3%	16.7%	17.5%
Medical Sciences	25.7%	0.7%	33.4%	36.1%	27.1%

Table 5.6

Distribution of the Sample According to Age

	Jordan	UAE	Tunisia	Morocco	Total Sample
Average Age	21.42	22	21.82	21.11	21.52
Standard Deviation	1.05	1.29	1.71	1.57	1.46
Youngest	19	18	18	18	18
Oldest	37	29	35	27	37

- A descriptive analysis of the students' answers to the conceptual model section, titled “The opinions of the youth and their perceptions of the enabling environments”.

It is to be noted that these tools (the questionnaire and tests) that we have introduced in this report, represent a powerful qualitative and quantitative addition to what the Arab world needs in terms of measures of the readiness of the youth to access the knowledge society and the associated skills, values and knowledge.

Undertaking such studies and using these tools to do so, perhaps for the first time in the Arab region, is an attempt at filling the gap by measuring the readiness of the Arab youth and identifying the relevant strengths and weaknesses. These studies are supposed to constitute the basis in the overall planning and organisational processes aimed at leading the Arab region into a knowledge economy and knowledge society. The addition of the field study in this report, which focused on young people in the university cycle, is complementary to the tools that were introduced in the previous report. Research tools in later reports addressed Arab adolescents in their final stage of school/pre-university.

Thus, we have contributed to providing integrated tools for the Arab region that should be built upon and used extensively. This is a very important issue if we compare the Arab region to the developed world, notably Europe. The developed world has established its tools to measure such dimensions among the youth and to be a continuous subject of study through which the planners and decision-makers can design policies that prepare and enable the youth to face the changing world.

The performance of the sample members participating in the test on “cognitive skills” is around average

Results: The Knowledge Capital

Overall Results on Cognitive Skills

Generally, we notice that the student scores ranged between 17.13 and 92.85. The arithmetic mean (average) equals 55.81; so, if we assume that the minimum level needed to approve the possession of skills in their minimum is to get a score of 50 out of 100, we conclude that the performance of the sample members participating in the test is around average. The percentage of those who received a score of 50 and above is 68.2%, while the percentage of those who got a score of 75 and above is 6%. The value of the standard deviation does not reflect

Table 5.7

Overall Result of Students on Combined Cognitive Skills

	Arithmetic Mean	Standard Deviation	Lowest Score	Highest Score
Jordan	51.25	11.81	18.05	81.20
UAE	64.01	11.08	18.67	92.85
Tunisia	51.83	11.55	20.63	81.20
Morocco	61.21	11.28	17.13	92.33
Total Sample	55.81	12.66	17.13	92.85

The total scores for the five cognitive skills combined range between 0 and 100.

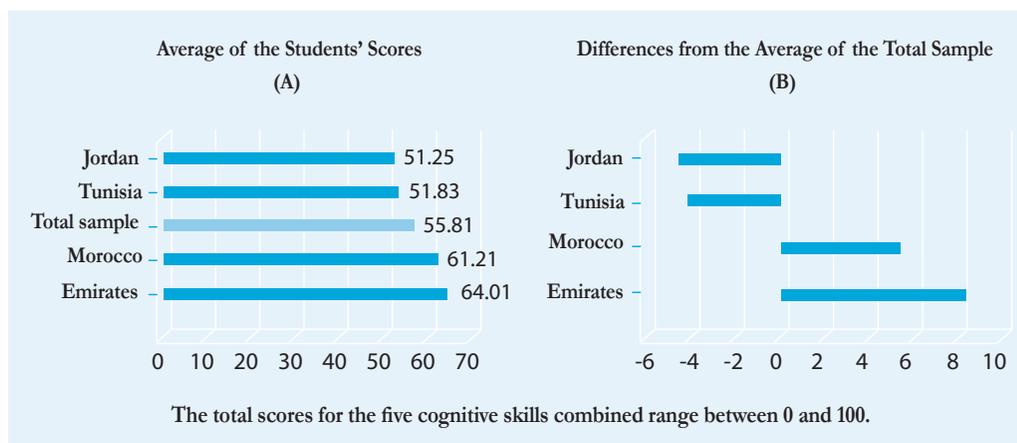
a large variation between the members of the sample, which means that there is a degree of homogeneity in the results. As for the performance of each country individually, we notice that the Emirati students were better than their counterparts in other countries, followed by the students in Morocco, while the students of Tunisia ranked third followed by the Jordanians.

The comparative advancement of Emirati students can be explained by the strategy the government set for 2011 and 2013 and which included seven priorities, the most important of which was the transition to the knowledge economy, in order to build the capacities of the human capital capable of producing knowledge; the cornerstone of sustainable human development.

With regard to the situation in Jordan, the results indicate a weakness in the different levels of education, particularly in the areas of cognitive communication through writing and the use of languages and technology. This clearly reflected on the sample results, which demonstrated that the performance of the students in the test is considered within the limits of the average, and about 46% of the students even ranked below the average in the field of cognitive skills, not to mention that only 2% received a score higher than 75%. This indicates that the acquisition of high cognitive skills was in individual cases. These individual differences refer perhaps to the fact that some of the students rely on personal interests to develop their cognitive skills in the different areas of languages and technology.

Figure 5.1

Countries' Results in Cognitive Skills Combined



The overall performance of the members of the participating sample in the skill to solve a problem from everyday life is acceptable

The absence of similar previous evaluation studies precludes the comparison of this result to others. Nevertheless, the general orientation revealed by the studies of TIMSS, PIRLS, and PISA, despite the different areas of interest and age groups they deal with, confirms that the Arab countries – with a discrepancy between them – lag behind in cognitive skills in general, whether these skills are related to mathematics, science or literacy. In TIMSS for example, the UAE ranked first among the Arab countries, while Morocco remained until the very last session in 2011 in last ranks. Jordan and Tunisia progressed in certain sessions and regressed in others (in 2007, Jordan progressed and Tunisia regressed and in 2011, Jordan regressed and Tunisia progressed).

Detailed Results on Cognitive Skills

Problem-Solving Skills

A total of 85 students scored zero (2.2% of the total sample), while only 851 students scored 20 (22.3% of the sample). The arithmetic mean (average) amounted to a score of 14.12 out of 20, 4 scores higher than the minimum level required to approve the possession of the skill (i.e. getting 10 degrees out of 20). Therefore, we conclude that the overall performance of the members of the participating sample in the skill to solve a problem from everyday life is acceptable, noting a 34% variation ratio as per the values of the arithmetic mean

and the standard deviation. This means that there is a variation among the students in dealing with the problems of everyday life, despite this skill's importance in establishing the rules of systematic thinking and its use in all life aspects.

Problem-solving skills are considered essential for social, economic and professional success. Some educators and specialists in vocational training even consider them critical² from the higher skills that the individual acquires through the school formation, and which need to be strengthened in the context of the ongoing acquisition of knowledge. The ability to identify a problem, determine the different factors contributing to it, and develop a coherent plan to resolve it is required to deal with the problems of the everyday life, as well as the problems associated with certain professions.

Problem-solving skills are considered essential for social, economic and professional success

According to a similar study³ conducted in Western countries (Australia, Canada, Hungary, Italy, Norway, New Zealand, the Netherlands, Switzerland, Bermuda, Mexico and the USA) between 2003 and 2008, we find a confirmation of the link between problem-solving skills and the literacy skill. Solving a written equation or problem is determined by the extent of the person's ability to read, understand and interpret what is written. The study proved that these two skills are based on the cognitive resources, which are based on

working memory, processing speed and the accumulated knowledge and experiences. This would create a systematic difficulty in measuring problem-solving skills, which mostly rely on written tests that put the subject in various simulated situations. This study concluded that the countries where members suffered from a deficiency in problem-solving skills were threatened by an inability to adapt to the transformations taking place in the field of work and the difficulty of establishing a sustainable culture to acquire knowledge.

This weakness can be due to several factors, including that the school and university educational system does not work well at building the suitable writing capacities for students by making them write research or short articles or dwell in other areas of written expression. This is evident from their job applications. Perhaps the high numbers of students in university classes is one of the reasons for the decline in writing capacities, making the possibility of focusing on scientific research and writing a dilemma in many colleges and universities.⁴ Add to this the role that the culture of pictures and symbolic expressions resulting from the use of modern means of communication plays. Studies show a link between this culture and the declining levels of the language skills as a form of expression. Writing as a form of communication is closely related to language and social communication skills and it has continued to regress to give way to alternative forms based on the symbolic and digital expression.

Table 5.8

Total Result for the Students in Problem-Solving Skills

	Arithmetic Mean	Standard Deviation	Lowest Score	Highest Score
Jordan	13.95	4.83	0	20
UAE	14.65	4.81	0	20
Tunisia	13.65	4.72	0	20
Morocco	14.54	4.83	0	20
Total Sample	14.12	4.81	0	20

The scores of the problem-solving skill range between 0 and 20.

Written Communication Skill in Arabic

The scores that the students obtained ranged from 0 to 20, and only 53 students scored 20 (1.4% of the sample). However, 193 students scored zero (5% of the total sample). The arithmetic mean was 9.78 out of 20 scores, and this shows that student performance in this skill was below average. We also note a large variation between the members of the sample, as the percentage of discrepancy was 48.67%, which reflected varying levels in writing ability (from very poor to excellent). This result merits a pause, to look into its causes and ways to overcome it. When talking about accessing the knowledge society and looking into ways to transfer and localise knowledge, it does not make sense that we accept that university students about to graduate are this weak in the Arabic language, as well as in foreign languages, as we will see later. Add to this that the status of the Arabic language, in its comprehensive notion, is an element of identity and it is supposed to play a role in achieving development.

The volatile linguistic reality in many Arab educational systems often contributes to the emergence of a state of turmoil in language skills. In Morocco, for example, teaching in elementary, primary and secondary schools is done entirely in the Arabic language, but in scientific and administrative colleges and the faculties of engineering and medicine, all courses are taught in French, which reflects negatively on the level of perfection in both Arabic and French. The effects of this linguistic deterioration are deeper in the majors that are taught in Arabic, especially humanities and social sciences, which are specialities that require a theoretical and conceptual effort that can only be achieved by perfecting the language of research and teaching. This reflects negatively on the overall level of these majors, particularly on published scientific and research papers.

In this regard, Omar Barman says that “language should be a tool for development, and it will not be so, unless it produces knowledge that can be of benefit, especially since we are in the era of the knowledge economy that is based on knowledge investment and dissemination in a globalised

When talking about accessing the knowledge society and looking into ways to transfer and localise knowledge, it does not make sense that we accept that university students about to graduate are this weak in the Arabic language , as well as in foreign languages

world... By using language, which means by using it as a development tool, we aim at proving its effectiveness in accelerating advancement, since it produces knowledge frameworks and intellectual contexts by itself.”⁵

With regards to the relationship between language and development and cognitive advancement, one Arab theorist believes: “he who has the slightest amount of prudence knows that it is impossible for any society to establish a cognitive system without owning a linguistic system that is comprehensive, joint and deep-rooted with various dimensions in thought, spirit and creativity, because the language is the necessary immanent carrier of every development achievement.”⁶

The hope of the Arab countries to produce and disseminate knowledge cannot be achieved without the participation of the Arabic language in this process. Moreover, this participation cannot be serious and meaningful without perfecting the use of the Arabic language in research, application and cognitive communication achieved with research institutions and others. It is enough to look at nations around us, nations that have been able to achieve a quantum leap in a short time, to see the status they have bestowed on their national languages, not out of closeness or compensation for an identity crisis, but because they were certain they could advance it and turn it into a serious cognitive tool.

Skill of Searching for and Processing Information

The arithmetic mean for this skill was 12.94. If we consider that the minimum score required to possess the skill is 10 out of 20, the overall performance of individuals in the sample participating in the test exceeded this threshold by nearly 3 degrees. Around 80% of the participants passed this threshold. However, the value of the standard deviation reflects a variation estimated at about 40% between the results of the students.

This result is worthwhile because it indicates that the surveyed university students had

Table 5.9

Total Result of the Students in the Written Communication Skill in Arabic

	Arithmetic Mean	Standard Deviation	Lowest Score	Highest Score
Jordan	9.64	4	1.25	20
UAE	10.90	5.56	0	20
Tunisia	9.93	4.12	1.25	20
Morocco	9.22	5.59	0	20
Total Sample	9.78	4.76	0	20

The scores of the written communication skill range between 0 and 20.

an acceptable level in information finding skills, which are considered essential to acquire knowledge and develop it. These skills are necessary in all majors because in the absence or weakness of the ability to search for information and process, analyse and evaluate it towards a particular goal, no student, regardless of the field of study and research, could take advantage of the huge amount of information available and employ it to upgrade their knowledge. Furthermore, this skill is the sole guarantor to establish the bases of a life-long learner society.

The reason for the modest results is perhaps that humanities and administrative faculties do not significantly focus on research and development, and the adoption of subjects taught along pedagogic theoretical frameworks at the expense of practical applied education based on the preparation of research and the use of references. It could be argued here that the great pressure on the logistical capabilities of universities and the accumulative number of students in the majority of university faculties – in

The hope of the Arab countries to produce and disseminate knowledge cannot be achieved without the participation of the Arabic language in this process

the surveyed university students had an acceptable level in information finding skills, which are considered essential to acquire knowledge and develop it

Table 5.10

Total Results of Students in the Skill of Searching for and Processing Information

	Arithmetic Mean	Standard Deviation	Lowest Score	Highest Score
Jordan	12.50	5.04	0	20
UAE	13.74	5.14	0	20
Tunisia	12.57	4.90	0	20
Morocco	13.43	5.34	0	20
Total Sample	12.94	5.14	0	20

Scores for searching for and processing information range between 0 and 20.

particular in humanities and administrative faculties – is a clear reason for the outcome of the previous results.

If we go back to the studies that focus on this skill, such as PIRLS that is concerned with the evaluation of the reading skill, which is related to the acquisition of the literary experience to acquire information and use it, we find that the results of the latest session of 2011 revealed a large disparity between the participating countries. In the case of Dubai, “the students showed a relative and statistically significant strength in reading to acquire information and use it, and their achievement rate reached 488 points. They got 466 points in reading in order to gain literary experience.” Comparisons showed that the performance of Emirati students was still behind that of their non-Emirati colleagues in reading, mathematics and science.⁷ The overall results for the fourth class level in the participating Arab countries were below the international average. UAE (40th internationally and 1st among Arab countries with an average of 439) preceded Morocco (45th internationally and the last internationally and in Arab countries with an average of 310). Saudi Arabia, Qatar and Oman respectively ranked 41st, 43rd, and 44th (with averages of 430, 425, and 391). Jordan and Tunisia cannot be brought into this comparison because they did not take part in the study. Dubai and Abu Dhabi participated as part of the list of independent nine participants, with Dubai ranking 6th with an average of 476 and Abu Dhabi ranking 8th with an average of 429.⁸

Based on the results of this sample, one can say that Arab students still have a long way to go to acquire the skill of using technology

Skill of Using Technology

The results of the total sample ranged between 1.03 and 18.46 with an arithmetic mean of 11.86 out of 20. This means that the overall performance of the individuals participating in the test sample is considered within the limits of the average. We note here that 22.8% of the students have not attained the minimum required level, while 10.2% got 15 or more. On the other hand, the value of the standard deviation reveals the homogeneity of the sample, which means the absence of any large variation between the students tested.

Based on the results of this sample, one can say that Arab students still have a long way to go to acquire the skill of using technology. We do not mean by this the daily normal use of communication tools, but rather the advanced use to search for knowledge, develop it and develop one’s self. It is important in this context to emphasise that the use of technology is not considered an independent domain. The development of the youth capacities to search for information and knowledge, and understand, analyse and communicate this information and knowledge through advanced technologies is emphasised. Compared to the results stated in the previous Arab Knowledge Report (2010/2011) with regards to the possession of students in their last secondary class in the technology use skill, there was a relative improvement. In fact, the average of the total sample was 11 out of 25, with differences between the countries participating. As for the cases of the UAE and Jordan, we noted improved results for the former but regression for the latter.

These findings raise several questions, especially when viewed in light of the budgets allocated by Arab countries, including those that participated in the study, to import technologies and equip educational institutions with computers and their efforts to digitise the curriculum and lessons. They also participate in updating operations in an attempt to integrate education technologies into the teaching processes. The situation suggests an imbalance in the relationship

Table 5.11

Total Results of Students for the Skill of Using Technology

	Arithmetic Mean	Standard Deviation	Lowest Score	Highest Score
Jordan	11.08	2.45	3.08	17.95
UAE	13.12	2.64	1.03	18.46
Tunisia	11.56	2.29	4.62	17.95
Morocco	12.50	2.85	1.03	18.46
Total Sample	11.86	2.66	1.03	18.46

Scores for the skill of using technology range between 0 and 20.

between the output and the size of the resources allocated for this purpose.

With regard to the situation in Jordan, this result is a real shock in light of the national trends toward the spread of the use of technology in various professional and scientific fields in the country. The results perhaps indicate the universities' weak interest in urging students to use technology academically, despite the good level of internet prevalence in the country and the relative freedom in the areas of its use. The same applies to the UAE, as the average it obtained in this study does not reflect the reality of its progress in this area. The UAE occupies advanced ranks in the Arab region and also on a global level in the report of 2013 on the Information and Communication Technology Development Index.⁹ This confirms once again that the technology use skill certainly does not mean the simple use of social media and technical devices, but requires a real use of technology out of awareness of its importance and how to use it, benefit from it and turn the entire society into a knowledge society.

In the case of Morocco, the level that students showed in the technology use skill was questionable when compared to other results, such as the rapid increase of the rates of internet connectivity, particularly among young people. A report by the National Telecommunications Regulatory Agency noted that the internet bubble in Morocco never stopped growing year after year, as it was able to achieve a growth rate that exceeded 70% in 2012 alone, with 3.18 million internet subscribers until the end of December 2013, compared to 1.8 million in 2010. The third generation technology (3G) managed to acquire 81.4% of the internet bubble in Morocco, compared to 18.5% in 2010.

It should be noted here that the daily culture of using data, understanding information and gaining experience is considered more important than technical knowledge. Therefore, it is important for the individual to know the types of technologies and their different uses, operating systems

and electronic software, but what is more important is how this knowledge is employed in the learning path, professional career or the scientific mentality that is developed through the conscious use of knowledge, and the technological culture that the individual acquires and which leads to excellence and perfection.

Skill of Using Foreign Language (English/ French)

We concluded that the overall performance of the individuals in the sample test was very weak, as the average of the sample did not exceed 7.09 points out of 20. It should be noted that the percentage of those who received zero was 28.6%, while 34.4% received scores of 10 or above, which indicates a lack of skills in English or French, both in understanding and writing. The value of the standard deviation revealed a significant variation of 85% between the sample individuals. While the UAE and Morocco results were to some extent acceptable (higher than 10), the results of Jordan and Tunisia were remarkably low.

There is no doubt that these results are largely due to the system of secondary education and the status of foreign languages in this system. In Jordan, for example, despite the fact that English is taught from early grades in public schools, there is a general complaint about poor foreign language skills among students in public schools, as opposed to private school students. And since the vast majority of Jordanian university students come from public schools, university graduates in English language skills are in need of more support. In Tunisia, studies have revealed disparities between students in their ability to use foreign languages, depending on the social category and the specialisation. A study completed in 2013 found that students in the universities of Sfax and Sousse have good language skills or at least an above-average level.¹⁰

In Morocco, as is the case in Tunisia and the Maghreb countries in general, the French language is still the most widely

The overall performance of individuals in the sample test in the skill of using foreign language was very weak

Table 5.12

Total Result for the Skill of Using Foreign Language

	Arithmetic Mean	Standard Deviation	Lowest Score	Highest Score
Jordan	4.07	5.11	0	20
UAE	11.58	4.20	0	20
Tunisia	4.09	5.15	0	20
Morocco	11.50	4.32	0	20
Total Sample	7.09	6.03	0	20

The scores of the skill of using foreign language range between 0 and 20.

This decline in the level of language skills among university students, in both Arabic and foreign languages, causes concern and even scepticism towards the achievability of the ambitions of the Arab countries with regards to the transfer and localisation of knowledge

used communicative means in the fields of economy, science and knowledge in general. Aside from the extent of appropriateness of this choice to the requirements of globalisation and the knowledge society, it is noted that the phenomenon of a “language collapse” in the proper use of French is no less dangerous than the expressive and communicative skills in the mother tongue, especially if we take into consideration the simplicity of the language in the exercise and the fact that it only required two skills: the general understanding of the text and writing a paragraph of a maximum of 100 words. This language decline can be attributed to the accumulation of linguistic weaknesses in earlier stages of education. For instance, a UNICEF study showed that the proportion of Moroccan students who got the required levels of mastering the French language did not actually exceed 2.2% despite the fact that the school materials are effectively taught in that language.¹¹

This decline in the level of language skills among university students, in both Arabic and foreign languages, causes concern and even scepticism towards the achievability of the ambitions of the Arab countries with regards to the transfer and localisation of knowledge. To what extent can students properly comprehend the materials being taught, not to mention the ability to use foreign references or engage in scientific research almost entirely dominated by a different language? With which tool will this ambition be achieved? If university students, who are supposed to form this critical mass needed in the process of the production of knowledge, lack the ability

to communicate in their mother tongue and are unable to understand the language of others and use it to communicate with other cultures and to get knowledge, how will knowledge be transferred and localised in their own countries?

In Morocco, for example, despite the attention given to the French language (followed by English), the assessment of academic achievement in Morocco for 2008 revealed a weak outcome, as the average academic achievement in the French language ranged between 28% and 35% in the primary and secondary stages.¹² In this regard, the Supreme Education Council in Morocco stressed during a conference organised in 2009 “that the problem of teaching and learning languages is considered one of the fundamental issues of the educational system with direct internal and external impacts”. It added that the failure to acquire the basic language competencies and skills required in accordance with the objectives set was due to the confusion and the blurred long-term strategic vision, especially with regards to the teaching of languages in Morocco.¹³ The report of the conference concluded that “the control of linguistic competencies and the quality of teaching them is central to achieve equal opportunities, access the knowledge society and technology, and achieve comprehensive development in its various dimensions and levels.”¹⁴

In the Levant and the Arabian Gulf, the English language is of utmost importance and in some countries, this importance has even exceeded that of the Arabic language and is almost becoming the first language of communication. In contrast, studies and reports indicate a decline in the level of possession of the English language among young school and university students. In a seminar held in Saudi Arabia in 2011 (Seminar on Foreign Language Teaching and Cultural Globalisation) to discuss the issues of teaching foreign languages in the Kingdom, participants pointed out “the absence of a clear vision for teaching foreign languages in our countries, because choosing the foreign languages and identifying the

ways of teaching and learning them is still subject to random contributions, individual unregulated efforts, unplanned initiatives, as well as attempts that lack scientific rooting”¹⁵.

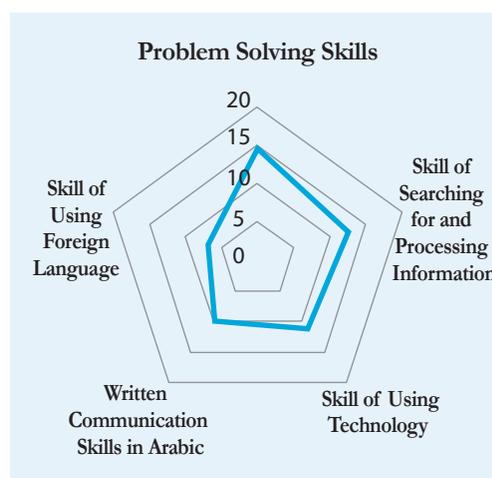
Analysing the Differences between the Cognitive Skills

The study of the results recorded for the various targeted skills reveals the following:

1. There are positive correlations between all targeted skills, which means that they serve each other. The highest correlation was between the use of technology skill and foreign language skill, which is a logical result in light of the English or French language dominance in technology.
2. There are statistically significant differences between all the skills. In descending order of skills most possessed: problem-solving, information processing, technology use, writing communication in Arabic, and foreign language (English or French).

However, these differences lose some of their meaning if we take into account the interactive nature of these skills. Despite their relative independence, these various skills do not operate in a separate linear

Figure 5.2
Students’ Results for Cognitive Skills

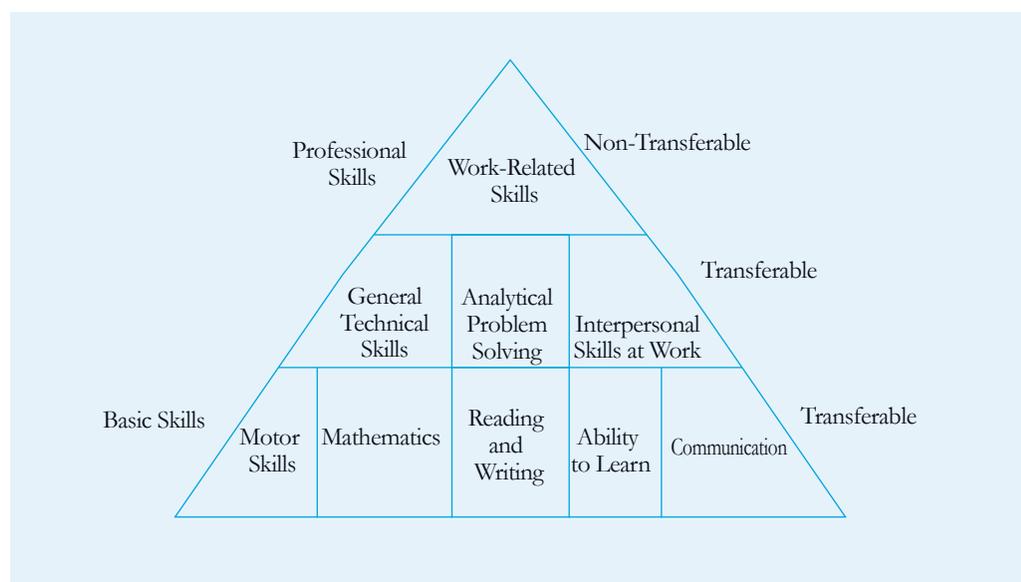


Skills constantly need updating and developing in light of scientific and technological advancements and in accordance with the requirements imposed by the nature of each professional activity

manner but in an interactive circle manner, which means that the degree of possession of a certain skill will necessarily affect the extent of the possession of the other skills. Therefore, the weakness of communicative skills, in Arabic or in a foreign language – considered essential inputs to knowledge – can result in priority being given to the practical-applied skills at the expense of the theoretical-analytical skills that can only be achieved with a mastery of language.

In this context, the reports of the Organisation for Economic Cooperation

Figure 5.3
Skills Pyramid



Source: OECD & Canada Statistique 2011.

Whatever the image in the Arab countries is, no one can deny today the existence of deep humanitarian and social concerns with regards to values, amid the rampant phenomena of infighting, rejection, injustice, discrimination and other behaviours that attest to the disruption of the human values system

and Development (OECD) note that the weakness of basic skills among the category of adults is usually paired with weaknesses on economic and social levels, as people who have a certain level of literacy, numeracy and problem-solving skills (at least the third level on the skills ladder, which consists of 5 points according to the OECD study) are more likely to get a stable full-time job and ensure respectable salaries, join social organisations and participate in social life.¹⁶

On the other hand, studies distinguish between three levels of skills, pending on their type and ability to be transferred:

- At the base, we find the “basic” skills that everyone is supposed to have, regardless of speciality and area of work. These skills are: communication, ability to learn, reading and writing, mathematics and motor skills.
- At the second level, we find the professional skills that can be transferred, namely: personal and inter-personal skills, analytical problem solving, and general technical skills.
- At the top of the pyramid, we find the professional skills that cannot be transferred because they are specific to certain work domains but not others.

It should be noted that the process of acquiring these skills does not end when the individual finishes educational and obtains a diploma. Skills constantly need updating

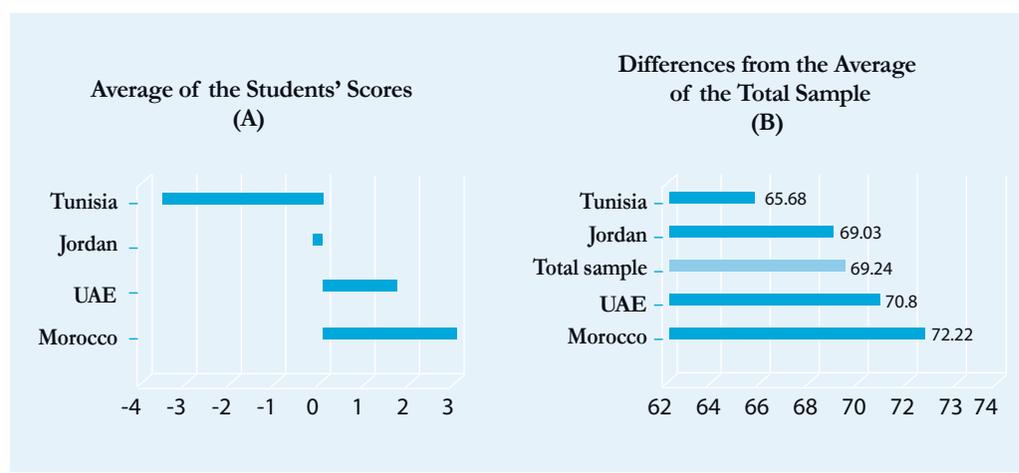
and developing in light of scientific and technological advancements and in accordance with the requirements imposed by the nature of each professional activity. From here comes the importance of what can be considered the mother of all skills, “learning how to learn”, as this is the only guarantee for the establishment of the rules of a “learning” society. As prospective studies have revealed with regards to a constant flow of new knowledge and the development of tools, formation and enabling will not be limited to a particular activity that could become valueless in the short term. The demand will rather be directed towards the need for continuous rehabilitation. The culture of updating will impose itself on scientific diplomas a deadline, after which they can become expired or void, in order to resist the rigidity of cognitive skills and respond to the continuous need for new skills.

Values

The average score of the students on the scale of values was 69.24 out of 100. Nearly 92% of them got 50 and above, 46.3% of these got 75 and above. This indicates that the majority of the students demonstrated their possession of almost all the values studied. The value of the standard deviation indicates a variation estimated at 30% between the members of the sample. If we compare this result to that of the previous Knowledge Report, we find a remarkable

Figure 5.4

Results for Values by Country



similarity in terms of the higher scores in values compared to those in skills and in terms of the order of participating countries. Morocco maintained the lead, followed by UAE then Jordan.

However, it is important to look at these results in all countries with much caution, because we are talking here about what the students stated, and this may not necessarily match the values they really possess or practice, especially when viewed in light of studies that reveal a decline in human and moral values and the growing tendency towards violence, not only in the Arab region, but the entire world. For example, French researcher Daniel Martin issued in 2009 a study entitled “Distrust Society: How the French Model Society Is Destroying Itself”. In the study, he highlighted through observation, numbers and evidence a decline in moral values in France, such as the loss of the meaning of individual commitment, the loss of the sense of duty, and other moral and social values.¹⁷

Whatever the image in the Arab countries is, no one can deny today the existence of deep humanitarian and social concerns with regards to values, amid the rampant phenomena of infighting, rejection, injustice, discrimination and other behaviours that attest to the disruption of the human values system. There are increasing calls for agreements, organising seminars and conferences, and issuing declarations calling for the promotion of dialogue, understanding, harmony and cooperation between nations, religions and cultures, as well as the protection of cultural diversity.¹⁸ The aim is to build a new culture devoted to dialogue, citizenship, respect for difference, tolerance, justice and other supreme human values required to attain real peace between individuals, peoples, nations and civilisations.

In this regard, the responsibility of educational institutions will increase when it comes to building a value system for young people through school projects and education programmes. These are considered the most important vector of values; interaction and dialogue between various educational parties

Table 5.13

Total Results for Students in Terms of Values

	Arithmetic Mean	Standard Deviation	Lowest Score	Highest Score
Jordan	69.03	9.96	0	92.31
UAE	70.80	27.45	0	100
Tunisia	65.68	31.77	0	95.38
Morocco	72.22	7.81	30.77	92.31
Total Sample	69.24	20.50	0	100

The scores of the values range between 0 and 100.

and educational practices geared towards the introspection of human values rather than teaching by instruction based on guidance and preaching. In this case, values can become mere slogans recited when needed, without being translated into concrete behaviours that manifest themselves even in the absence of supervision and punishment.

Among the events that countries and institutions have organised to spread human values and standards, we recall, for example, a Saudi initiative to make “Curriculum Schools” adopt a project to build and enhance values as an important and essential principle to achieve its educational and teaching mission. Another example is the “local development management in Qatar charity” initiative, which focuses on teaching, spreading and qualifying individuals with supreme values, especially in the minds of the new generation. It is also worth mentioning the initiative of the Arab Thought Foundation, in conjunction with the UNESCO Regional Bureau for Education in the Arab States in Beirut, represented by “the dialogue and social cohesion project through the support of common human values” (murals), seeking to raise awareness about the role of the human values system in determining attitudes and behaviour at the regional, national and local levels.¹⁹

Effectiveness of the Youth

Before revealing the results, we point out that the meaning of “effectiveness” intended in this report is the actual and prolonged participation of respondents in one of the relevant investigated fields (cultural,

The responsibility of educational institutions will increase when it comes to building a value system for young people through school projects and education programmes the responsibility of educational institutions will increase when it comes to building a value system for young people through school projects and education programmes

We note that the level of youth effectiveness varies from one field to another; it was the weakest in political participation and the highest in cultural effectiveness, except in the case of UAE which was best in economic effectiveness

economic, social, political). This effectiveness is the outcome of interaction between opinion and behaviour, in the sense that effectiveness is a stance based on a voluntary behaviour that is thought about, and not a spontaneous or implicit behaviour. In this sense, cultural effectiveness has been measured through questions aimed at identifying the culture of the students, such as questions relating to historical events in their home countries and the region, the geographical nature and the titles of books they read, whether Arab or foreign, in addition to questions about the cultural activities practiced and their quality. Cultural effectiveness was measured based on the same concept, using questions similar to those asked regarding participation in volunteering and community activities and the types of activities. Economic effectiveness was measured with regards to participation and working for a fee or for any project.

For ease of comparison, the scores of the different types of effectiveness were unified. Types were measured on a scale ranging between 0 and 1; the closer the value was to 1, a stronger degree of effectiveness was indicated.

We note that the level of youth effectiveness varies from one field to another; it was the weakest in political participation and the highest in cultural effectiveness, except in the case of UAE which was best in economic effectiveness. This suggests that the sample of young people surveyed has an acceptable level of general culture, which means they know the properties related to their countries (historical and geographical properties and the literary and art figures), and their level is weaker in relation to their activities and social participation. It should be noted that there is a very large disparity between the respondents, as reflected in the value of the standard deviation that exceeded in some cases the value of the arithmetic average.

Although the cultural effectiveness index seemed relatively better than the rest of the efficiencies, this should not prevent us from noticing that the region (governments and

peoples) has been witnessing a significant decline in the interest in cultural aspects, especially in the last years. There is no doubt that the situation in the region on political, economic, social and other levels within the framework of the so-called “Arab Spring” has played an important role in this decline, due to mounting security, economic and social stability concerns.

In relation to social effectiveness, studies generally agree on the reluctance of young people to do volunteer work, and on the immaturity of the volunteering culture partly due to social habits, coupled with the weakness of the culture of development and partnership concepts and of associations in community development in Arab societies. A field study conducted by the Arab NGO Network for Development (ANND) showed that the Arab youth aged 15 to 30 years were the least interested groups in volunteer work, compared with their counterparts in other countries (in Canada, for example, the proportion of active participation in volunteer work is 91% of the population aged over 15 years). A World Bank report released in 2012 also showed the weakness of direct participation of the Moroccan youth in public affairs.²⁰

The weakness of political effectiveness – organised political participation regulated by various political parties and movements and with varying degrees of trust – seemed at odds with the degree of interest in political affairs, as reflected by the Arab movement, the so-called Arab Spring, in which young

Table 5.14
Effectiveness Levels among Students

	Jordan	UAE	Tunisia	Morocco	Total Sample
Cultural Effectiveness*	0.65 (0.17)	0.58 (0.25)	0.60 (0.17)	0.54 (0.24)	0.60 (0.21)
Social Effectiveness	0.38 (0.31)	0.30 (0.32)	0.24 (0.31)	0.33 (0.32)	0.32 (0.32)
Economic Effectiveness	0.38 (0.48)	0.60 (0.48)	0.42 (0.49)	0.41 (0.49)	0.43 (0.49)

* The arithmetic mean from 1 is directly followed by the standard deviation in brackets.

people played a pivotal role, through demonstrations and marches and through the internet and social networking sites. However, the significant role of the youth in changing the stagnant political situation quickly retreated, as they found themselves playing marginal organisational roles that did not differ much from what was available to them before the “Arab Spring”. In a few months, the “revolutionary youth” powers that were behind the events turned into an object of tug-of-war between major parties and groups of weak influence. The youth’s powers were unable to produce basic documents that showed their position and priority choices, either during or after the outburst of the “Arab Spring”.

With regards to economic effectiveness, the index calculated for this sample confirmed the weak involvement of university students in activities with a financial return. This is not surprising, in light of the worsening unemployment crisis among graduates in the Arab region as well as students who have not yet graduated. We have already shed light on this issue in its various manifestations, causes and repercussions in the previous chapters.

In general, it is necessary to emphasise that the effectiveness of students in any field depends – in its pace and forms – on the level of awareness and understanding available to them through the family or the society in its different institutions, such as schools, universities or media outlets. It should be noted here that the weakness of youth participation in public life in all its aspects does not diminish the importance of participation through irregular and unorganised political economy values. From this perspective, the effectiveness of virtual social networks is greater than classical social ties, as political and social efficiencies can be measured through indirect participation via forms of electronic mobilisation (Facebook, for example).

Citizenship and Belonging

The knowledge of the foundations of citizenship among young people included

Table 5.15

Scores of Students in Citizenship and Belonging

	Arithmetic Mean	Standard Deviation	Lowest Score	Highest Score
Jordan	0.43	0.24	0	1
UAE	0.53	0.28	0	1
Tunisia	0.42	0.30	0	1
Morocco	0.45	0.27	0	1
Total Sample	0.45	0.27	0	1

in the study seems limited, as the arithmetic mean was below 0.5, which is the minimum acceptable level. When we look at the two extreme ends of the scale, we notice that the percentage of those who got the lowest score (0) was 14.2%, while only 2.2% scored the highest (1).

There is a link between the aspects of effectiveness we already discussed and the issue of citizenship. Citizenship has several integrated and interdependent dimensions, including the political (relating to rights and freedoms), economic (relating to the distribution of wealth and production), social (relating to social justice), and cultural dimensions (the protection of the language and cultural particularities of individuals and groups). While many studies have confirmed the importance of these dimensions, they give priority to the political dimension, stressing that the political realities of Arab countries do not serve the sense of citizenship.²¹ If we accept the validity of the aforementioned, we understand the reason behind the weakness in the index of assimilation of the concept of citizenship among surveyed young people.

With regards to the sense of belonging, results revealed by current research indicate the same direction shown in other studies, such as the fifth edition of the annual survey by Asda'a Burson-Marsteller in the Arab world.²² The survey noted that the region’s youth were increasingly taking pride in their Arab national identity, in conjunction with their increasing adoption of contemporary values and ideas, especially since the events of 2011.²³

The effectiveness of virtual social networks is greater than classical social ties, as political and social efficiencies can be measured through indirect participation via forms of electronic mobilisation (Facebook, for example)

Openness and International Intercommunication

Table 5.16

Scores of Students in Openness and International Intercommunication

	Arithmetic Mean	Standard Deviation	Lowest Score	Highest Score
Jordan	0.30	0.15	0	1
UAE	0.28	0.16	0	0.83
Tunisia	0.24	0.16	0	0.83
Morocco	0.26	0.15	0	0.92
Total Sample	0.27	0.16	0	0.92

It seems that the level of youth openness internationally is very weak, and the average degree of this variable did not exceed 0.30 out of 1, with 83.6% of the sample scoring below 0.5 out of 1

It seems that the level of youth openness internationally is very weak, and the average degree of this variable did not exceed 0.30 out of 1, with 83.6% of the sample scoring below 0.5 out of 1. This result indicates a significant shortfall among young respondents in their involvement in organisations and activities of regional or international nature, their engagement with people from outside their own country and their participation in scientific or cultural competitions with these people.

This situation is considered a “normal” result and outcome of the shortfall we already highlighted, especially with regards to the linguistic and technological competencies and skills necessary for openness and communication. Young people are increasingly attracted by social networking sites and this is largely due to the fact that they lift the language barrier and adopt symbols and other methods that are liberated from the shackles of languages. Social networking sites are dominated by the exclusive use of hybrid languages that mix and often use the Arabic and Latin alphabet, along with numbers and symbols that compensate for the absence of the vocal sounds exclusive to the Arabic language.

Among the factors that have contributed to low levels of openness among university students is the issue of academic mobility not getting the focus it deserves, by considering it an additional academic option for international and exchange students, especially if the quality requirements are available and the bureaucratic hurdles

are reduced. From this standpoint, Arab universities remained almost isolated from the regional and international space and did not benefit from the academic mobility that has become, in the last two decades, a consistent and strong trend, and even an additional financial resource in the most popular universities. In fact, according to the UNESCO 2012 estimates, the proportion of foreign students enrolled in Arab countries is around 26% of the global number of students studying outside their home countries, and so is still low compared with Central and Eastern Europe (37%), for instance.²⁴ This is evidence of the weakness of university relations with the outside world, despite the introduction of new global programmes to educational levels, especially at the graduate level, in a number of Arab countries, including Jordan.

Box 5.1

Social Media and the Knowledge Society

During the Arab Strategy Forum (ASF) organised by the Mohammed bin Rashid Al Maktoum Foundation in Dubai in March 2013 under the title “Social Networks and Knowledge Society,” participants stressed the importance of such networks and their effect on the youth, with calls to harness them for the service of the Arab youth, to employ them to move to knowledge societies, deepen the values and ideas of good citizenship and transfer the cultures of openness to the Western world. The ASF warned against these networks and the risks of their transition into channels to pass ideas that are destructive and damaging to young people and their countries.

Source: UNIM 2013.

In the absence of this academic mobility, modern means of communication remain important alternatives to communicate with the world. In this regard, the field research revealed that Facebook comes at the forefront of social networks used in Jordan, Tunisia and Morocco, while the use of Twitter takes the lead in UAE. The topics related to personal relationships were the most discussed by young people on these networks, while those related to knowledge came to 13.5%. This may be a sign of a weakness in focusing academic programmes on the issues of scientific and

cognitive communication with the outside world and with the latest items displayed or shared on social networks. This increasing use of social networking sites – compared to the regression recorded in the knowledge of modern technology and its use for research purposes – makes us question the efficacy of the policies governing the actual use of modern technologies in higher education and the extent of its readiness and ability to provide the conditions for the efficient integration of the youth in the transfer and localisation of knowledge.

Analysis of the Results According to the Gender and Specialisation Variables

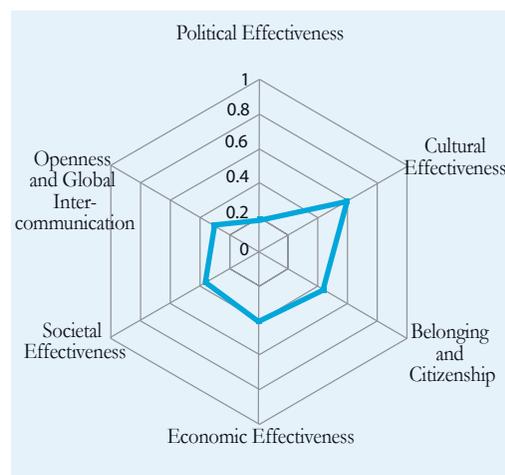
- With regards to gender, the significant differences between male and female students emerged in the following skills:
 - The writing communication skill in Arabic for the benefit of female students
 - The skills of technology use and the English language for the benefit of male students

These results reinforce the same trend that was revealed by the latest session of the PISA study in 2012. The study revealed a clear superiority of female students from the 15-year-old category in all fields, especially in Jordan and Qatar, and to a lesser extent in the UAE, and finally in Tunisia.²⁵

With regards to the rest of the variables, female students scored better results in the variables of values and citizenship, while male students scored better in the variables of economic effectiveness, openness and political effectiveness. The trends of these results reflect the effect of the social and economic structure of the Arab society, especially when it comes to cultural, political and economic openness. The structure of the population characterised by its conservativeness and the traditional division of roles makes the contribution of the male youth category in the cultural, political and economic life greater than that of female students, as these activities are linked to efficiencies that go beyond the university community.

Figure 5.5

Comparison between the Various Components of Youth Effectiveness



Female students scored better results in the variables of values and citizenship, while male students scored better in the variables of economic effectiveness

- With regards to the specialisation, there are significant differences between the students, as follows:
 - In the problem-solving skill, there were statistically no significant differences;
 - In the communication skill in Arabic, the students majoring in management scored better than the students studying all other majors;
 - In the information processing skill, the students majoring in management scored better than the students studying all other majors;
 - In the use of technology skill, the students majoring in engineering scored better than the students studying all other majors. The students majoring in medicine scored better than students majoring in humanities, and so did the students majoring in management;
 - In the use of foreign language skill, the students majoring in engineering scored better than the students studying all other majors. The students majoring in medicine scored better than students majoring in humanities, and so did the students majoring in management.

Significant differences have emerged in the variable of values, in which engineering students scored better than management students; in the two variables of economic

and cultural effectiveness, in which management, engineering and humanities students scored better than medicine students; and in the variable of openness, in which engineering students scored better than management, medicine and humanities students. Meanwhile, there were no significant differences in the variables of political and social effectiveness.

When comparing between the various components of the youth effectiveness, we noted differences of varying importance, as shown in Figure 5.5:

Some of these results call for additional studies on the factors and reasons that lead to them, their significance and what education policymakers should do to address them.

Youth's Opinions on the Transfer and Localisation of Knowledge and the Necessary Enabling Environments

We notice from Table 5.17 that more than 60% of the student sample in the four countries concerned with the study (71% in Morocco) were not familiar with translated books and references related to their university subjects. This may be due to the fact that university libraries do not hold these books and references, or to the students' desire to check the original sources, although the level of their performance in the foreign language skill makes us question the extent of their ability to understand and assimilate the content in the original language. Moreover, the fact that the education process in most Arab universities depends on the requirements of the education system and books that teachers provide, does not encourage students to look for other references.

We can add to this the fact that the youth are unaware of the importance of the sciences and knowledge in written form and their lack of interest in getting to know the culture of other societies. Educational institutions are also somewhat not fulfilling their desired roles to encourage students to research, study, explore what is being written

in these books and consider the familiarity with translated foreign books as part of the education process.

This finding is consistent with the study prepared by the Ministry of Culture, Youth and Community Development in Dubai²⁶ on the prevailing cognitive trends among young Emiratis in the age group between 18 to 23 years. The study demonstrated that young people are reluctant to go to public libraries and look for public knowledge.

In Tunisia, this situation seems linked to two issues: The first relates to the seriousness of available options relating to scientific translation, because production remains weak despite the work achieved by the National Foundation for Translation. The second issue relates to the extent students are seeking scientific gain outside the framework of formal courses, which are often in French, with the exception of courses in humanities and social sciences. However, all of these factors cannot make us ignore another problem that is no less important in driving us away from translated books; the “poor” translation or the different translations of terminologies – the absence of a uniform glossary for each speciality.

Table 5.17

Students' Familiarity with Translated Books That Are Relevant to Their Major

	Jordan	UAE	Tunisia	Morocco	Total Sample
Yes	39.3	28.1	31.1	28.7	32.8
No	59.2	65	56.9	71.3	62.6
No Answer	1.5	6.9	12	0	4.6

The difference in the usage of terminologies between the Maghreb and Mashreq countries is an issue that has been raised on more than one occasion, as it has had a great impact on the translation and transfer of Arabic content. The reasons behind the differences in terminology between the Maghreb and the Mashreq and the conflict arising in this aspect have also been discussed. Researchers have called for a policy for all Arab countries to codify

The education process in most Arab universities depends on the requirements of the education system and books that teachers provide, does not encourage students to look for other references

Table 5.18

Students' Opinions on the Usefulness of Translated Books for Them (%)

	Jordan	UAE	Tunisia	Morocco	Total Sample
Compensated for a Great Shortage in Arabic References	26.0	21	37.9	27.7	26.3
Added to Available Arabic References	44.3	55.9	44.9	44.1	45.7
Benefited Me but Were Not Necessary	26.8	19.6	25.2	23.1	24.7
Did Not Benefit Me	2.9	3.5	2	5.1	3.3

the language to keep up with international progress in science. As mentioned earlier, and as one scholar confirmed, “the Arabic language cannot have a strong base, unless it is a scientific language, in which the researcher and the learner find something to learn. In addition to the realisation of the other related supporting circumstances, this matter can only be mastered through focusing on the translation of science works, whether humanitarian or basic sciences. In fact, science works to bring back words that became confined to dictionaries and that no one remembers... this way Arabic words are brought back to their real status of usage and circulation”.²⁷

According to the results listed in Table 5.18, about 45% of the students considered translated books and references a mere aid to what they already gained from Arabic references. If we add to this proportion the students who said they found translated references useful but not necessary, we conclude that the vast majority were content with Arabic references. One of the following two hypotheses can explain this situation: the first is that these translated references are not as widely available as the Arabic references, urging students to depend more on the latter. The second hypothesis is that students are not comfortable using foreign languages, as we already mentioned. Moreover, benefiting from these books and references was linked to the language of teaching. There is no doubt that there are many good translated books and references, but students tend to be reluctant to check them because they require more effort in translating the content when preparing presentations, conducting research or answering in French or English during exams.

Whatever the reason is, the conclusion remains: students are not drawing knowledge from its sources and in its original language, and this is, in itself, considered an obstacle to the transfer and localisation of knowledge, especially in the absence of an organised and forethought translation project, within the framework of a vision for the localisation of knowledge. In this context, it is necessary to praise the role of a number of bodies concerned with translation issues, such as the pioneering and active Turjuman Series²⁸ in the Arab Centre for Research and Policy Studies; the National Council for Culture, Arts, and Letters in Kuwait, the National Centre for Translation in Egypt and the Arab Organisation for Translation in Lebanon. These centres have enriched Arab libraries with a great number of translated reference books in the fields of humanities and social studies in general, and in economic, social, political and cultural sciences in particular. There is still an urgent need for other similar initiatives that enrich the Arabic library with useful publications in the various fields of knowledge.

Students' Opinions of on Academic Research

Looking at the proportions of those who said they had conducted research or presentations since they started their university studies, as indicated in Table 5.19, we notice that they seem to constitute an acceptable proportion in general, with the highest being in UAE followed by Jordan. This proportion remained at around 50% in Morocco and Tunisia. However, we must not forget that more than 30% of the students answered “no” (i.e. they never conducted research), with the exception

It is unreasonable that a student finishes university education without conducting research work or getting trained in preparing presentations and delivering them in public

As indicated in Table 5.20, it seems that the path of academic research is full of difficulties, according to the students, notably with regards to the weakness of the scientific training they receive, the scarcity of financial resources and the lack of references

Table 5.19

Preparing Research or Presentations since Starting University Studies (%)

	Jordan	UAE	Tunisia	Morocco	Total Sample
Yes	65.5	79.3	52.3	54.5	61
No	33.0	14	35.6	45.5	34.4
No Answer	1.5	6.7	12.1	0	4.6

of the UAE students. This is surprising, because whatever the specialisation is, it is unreasonable that a student finishes university education without conducting research work or getting trained in preparing presentations and delivering them in public. Moreover, if these answers were true, they would show that university education is still book-based, relying on lectures and storing knowledge in a consumptive manner that does not contribute to the graduation of individuals who are able to think freely and search for information, criticise it and employ it to produce knowledge.

It should be noted that the preparation of research or presentations depends on the system in place at the university and on the nature of the major. In the early stages of university education, the work prepared is often closer in nature to reports and it does not reach the level of scientific research with a comprehensive scientific method, especially in majors that do not offer lessons about the types and methodologies of scientific research. The majority of the research is in the form of a collection of some previous research or studies, whether from books and magazines or through searching via technological means. The

researcher's personality and point of view on the topic being discussed does not appear in the research or reports, so at the end of the day, the researcher does not acquire any significant additional knowledge.

As indicated in Table 5.20, it seems that the path of academic research is full of difficulties, according to the students, notably with regards to the weakness of the scientific training they receive, the scarcity of financial resources and the lack of references. This indicates that researches and presentations are often perceived as a mere target to fulfil university requirements rather than a way to build real knowledge. The answers of the students were interesting in that a large proportion confirmed the lack of references, which might not be true, at least not in the universities where the survey was conducted. Some of the faculties in UAE, for example, have special libraries, depending on the nature of the major. This provides students with the opportunity to borrow books and references or obtain them through library websites.

The answers of the students probably stem from the fact that they do not know what books and references are available in the libraries, or do not have the bibliographic research techniques. However, it must be recognised here that many university libraries have not yet acquired modern technologies and are still relying on manual search techniques in accumulated records, so it is not surprising to see students avoiding them, as they know that internet search engines can provide them with what they need with less effort and shorter time.

Table 5.20

Students' Opinions on the Type of Difficulties They Encountered in Research (%)

	Jordan	UAE	Tunisia	Morocco	Total Sample
Difficulties Related to the Weak Scientific Training we Receive	37.7	21.9	33.9	38.2	33.9
Difficulties Related to the Weak Orientation and Guidance by the Supervisor	24.9	20.9	24.2	37.0	31.6
Difficulties Related to the Scarcity of Material Resources	33.3	14.8	30.7	32.9	29
Difficulties Related to the Weak Infrastructure (Libraries, Laboratories...)	25.2	9.2	35.8	23.2	24
Difficulties Related to the Lack of References	24.6	43.9	37.9	35.0	33.7
Other Difficulties	8.2	8.3	9.1	7.5	8.2

Students' Opinions on Partnerships and Agreements between Universities and Other Institutions

As for student knowledge of partnerships and agreements between their universities and other institutions, we notice a split in the answers as demonstrated in Table 5.21. While around half of the students in Jordan and the UAE stated that they are aware of these partnerships, the majority in Morocco and Tunisia tended to deny that they were aware of such agreements.

In all cases, the percentage of students who were not aware of partnerships and agreements was worth taking into consideration, whether their unawareness stemmed from the absence of such partnerships and agreements or from the fact that this information was not shared with them. If we take Morocco for example, we find that 71.6% of the students claimed not to be aware of these partnerships, which goes against the 2003 university reform, that considered partnerships as an indication of the openness of the university on its economic and cultural surroundings, a criterion for its national and international classifications, as well as a key indicator to assess its level and effectiveness.²⁹ Thus, this rate reflects a weakness in universities' institutional communication, which may be due to the lack of continuous updating of websites. These results are interesting, because part of the scientific research and studies is funded by grants and partnerships with foreign universities, international organisations and contractors from the national and international private sector. Whatever the reason may be, it indicates a lack of comprehensive utilisation of the benefits that a university's openness to other institutions (academic, economic and other institutions) can bring, with regards to the formation of students and their preparation for active life.

Intercommunication between universities and institutions, notably industrial and financial ones, is indispensable for each country seeking to produce knowledge that will benefit the economy and society. This

Table 5.21

Students' Awareness of Partnerships and Agreements between Their University and Other Institutions (%)

	Jordan	UAE	Tunisia	Morocco	Total Sample
Yes	56.9	48	26.3	28.4	40
No	42.6	44.7	61	71.6	55.5
No Answer	0.5	7.3	12.7	0	4.5

requires improving interaction between external institutions and researchers, boosting confidence in scientists and researchers and in the findings, creations and innovations that they come up with. It also requires issuing the necessary legislation to ensure the funding of university laboratories, applying a number of regulatory procedures, ensuring they are of a high degree of effectiveness, and motivating the capital owners to invest in the applied scientific research. Thus, the results of research, discoveries and scientific innovations turn into an important economic wealth.

We notice that student knowledge of partnerships and agreements was limited to two parties: first, foreign universities and second, research centres. Economic institutions follow in a relatively far third rank, while research laboratories abroad occupy the last rank. This is an actual reflection of reality; as at this stage of higher education, opportunities of openness to research laboratories, notably abroad, is not available due to the limited space allocated for research at this stage. As for the openness to economic institutions, it is often reserved for some majors and often takes the form of temporary training to complete an educational unit. It also misses in most cases the guidance and serious follow-up that ensure real benefit.

Partnerships and cooperation agreements between universities and other institutions and the establishment of companies and partnerships within the universities are the fundamental requirements for building the knowledge economy and sustainable development. In addition to their

Intercommunication between universities and institutions, notably industrial and financial ones, is indispensable for each country seeking to produce knowledge that will benefit the economy and society

Many specialised youth organisations and institutions concerned with youth affairs have emerged in many Arab countries

Table 5.22

Students' Awareness of Institutions That Have Partnerships and Agreements with the University (%)

	Jordan	UAE	Tunisia	Morocco	Total Sample
Other Universities within the Country	49.5	41.4	33.5	39.5	43.5
Foreign Universities	59.6	55.8	66.2	64.3	61
Economic Institutions	20.3	41.4	15	16.5	22.1
Research Centres	55.9	48.6	41.7	41.6	49.5
Laboratories outside the Country	10.4	13.1	19.9	11.3	12.7
Other Institutions	5.4	6.8	3	2.7	4.7

contribution with the government sector in funding university projects, the revenues of these partnerships and companies may constitute a financial and services pillar that contributes to solving a national problem or meeting basic community needs, as well as creating job opportunities. In this context, we mention the companies that were established within the universities and that launched products successfully internationally: Gatorade, Genentech, and RIM.

When it comes to student awareness of the existence of youth institutions concerned with the transfer and localisation of knowledge, the result looks interesting, as it indicates the seriousness of the implications of preparing the youth to contribute in the transfer and localisation of knowledge. In fact, more than 70% of young respondents denied knowing any youth institution concerned with the transfer and localisation of knowledge, and this confirms one of two following cases: either these institutions do not exist, or they are not effective in the required form in reality, or they do exist but young people are not aware of them. All these cases suggest a failure in the drafting or implementation of an effective

policy to activate the role of the youth and their institutions in the transfer and localisation of knowledge. It is noticeable that the last two decades have witnessed a significant increase in youth institutions, especially following the events in the Arab countries in 2011. Many specialised youth organisations and institutions concerned with youth affairs have emerged in many Arab countries. However, those who follow this movement will notice that many youth institutions are still facing difficulties related to their establishment or to enhancing their independence, in addition to funding difficulties and the challenge of promoting the professionalism of the staff working in these organisations.

In relation to the type of services provided by the youth institutions in the four countries, the majority of the answers were distributed between training and guidance/consultative services in UAE, Jordan and Tunisia (with varying ratios) and between advisory and training services in Morocco. It is to be noted that the question was on the services provided by external institutions, and not those offered by universities to students enrolled in them, such as health-related services, transportation, housing and others.

Table 5.23

Students' Awareness of the Existence of Youth Institutions Concerned with the Transfer and Localisation of Knowledge (%)

	Jordan	UAE	Tunisia	Morocco	Total Sample
Yes	35.2	23.5	18.2	17.2	24.3
No	63.9	68.8	68.9	82.8	70.9
No Answer	0.9	7.7	12.9	0	4.8

As they are the assets of the future and in order for them to be a truly productive capacity and active contributors in the production of knowledge and the achievement of development, young people need good guidance that provides them with psychological, social and academic services and assistance that enables them to overcome difficulties and develop their potential to achieve compatibility in all its forms. That is why we see universities all around the world keen to establish centres for guidance and counselling in order to provide organised care, according to well-thought-out and rational principles and foundations. These efforts must be strengthened, in order to expand the circle of interest of these institutions and

Box 5.2

The Arab Youth Observatory

Arab countries are witnessing the prevalence of many organisations and institutions targeting the youth, such as the Arab Youth Observatory, which was established under the umbrella of the Arab League, as part of the implementation of the decision of the Arab Kings and Presidents Summit in Khartoum in 2006 and the efforts to activate the strategic directions of the Arab Declaration that called for youth empowerment and strengthening their participation in development efforts. It is to be noted that many officials and representatives of national, regional and international governmental and private institutions and organisations working with the youth in the Arab region have contributed to preparing and approving this Arab Declaration. The declaration is intended to serve as a major guide and reference framework in the preparation of regional and national policies aimed at empowering young people. As stated in the declaration, the observatory aims to: (1) collect and disseminate reliable, modern and significant data concerned with the youth at the Arab regional level and establish a regional comprehensive and renewable database; (2) develop an Arab vision to empower the Arab youth and activate their participation in the development population strategies and policies; (3) support the capacities of the national youth institutions and organisations concerned with youth empowerment and the development of youth leadership capabilities; (4) and activate the dialogue between various concerned parties and gain the support of decision-makers and officials in favour of policies aimed at youth empowerment and their participation.

Source: League of Arab States 2012. (Reference in Arabic)

Table 5.24

Students' Awareness of Types of Services* Provided by Youth

	Jordan	UAE	Tunisia	Morocco	Total Sample
Financial	14.3	26.6	11.4	39.5	14.8
Advisory	29.5	40.3	29.2	64.3	30.4
Guidance	52.9	54	67.6	16.5	59.8
Training	66.3	72.6	38.9	41.6	56.2
Mediation to Immigrate	11.7	12.9	20.5	11.3	12.8
Other Services	2.6	1.6	3.8	2.7	2.8

*(Institutions may offer one or more services)

organisations to include services related to revealing creative capacities, providing necessary support for pioneer research projects and enabling outstanding students, which will help them achieve excellence and strengthen their competitiveness.

Students' Opinions on the Effectiveness of the Currently Prevailing Higher Education System with Regard to Their Contribution in the Qualification of Students to Transfer and Localise Knowledge

Students' Opinions on the Current Higher Education System

Table 5.25A

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	4.9	25.5	53.1	16.5
UAE	2.6	5.8	43.3	48.3
Tunisia	15.9	50.6	31.5	2
Morocco	19.9	41.7	29.2	9.2
Total Sample	11.5	33.4	40	15.1

Results of Table 5.25A show a variation in the level of satisfaction with the higher education system in its entirety from one country to another. In Tunisia and Morocco, the majority tended to say that the effectiveness of the system prevailing currently was weak, while Jordanian students considered it acceptable. Answers of the Emirati students were distributed among “high effectiveness” primarily and “acceptable effectiveness” secondly. The highest rates of dissatisfaction

In Tunisia and Morocco, the majority tended to say that the effectiveness of the system prevailing currently was weak, while Jordanian students considered it acceptable. Answers of the Emirati students were distributed among “high effectiveness” primarily and “acceptable effectiveness” secondly

(respondents who said the effectiveness is weak or inexistent) were in Tunisia (60.5%), followed by Morocco (61.6%), then Jordan (30.4%).

This question is related to the higher education system as a whole. However, many previous reports and studies confirm that the weakness does not exclude any component of the higher education system. The First Arab Report for Cultural Development, prepared by the Arab Thought Foundation in late 2008, points to the poor quality of higher education in the Arab region from an international perspective and the challenges facing the quality of education issues in the Arab world (see Chapter 4). As stated in an article by a specialist in charge of coordinating the interventions relating to higher education in the World Bank Group³⁰ as part of a lecture entitled “The Higher Education at a Crossroads”, higher education in the whole world is currently facing a number of challenges, such as the link between higher education and student readiness for employment, quality assurance, finance, equal access to higher education and its completion, enterprise management, internationalisation, institutional diversification and the push and pull between research and education. The specialist called for “higher education [to] be able to better adapt faster and more efficiently in service of economic and social requirements”.³¹

Students' Opinions on the Academic Research System

Table 5.25B

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	5.4	29.1	48.2	17.3
UAE	2.6	9.9	46.8	40.7
Tunisia	16.5	36.2	36.4	10.9
Morocco	21.0	42.9	26.6	9.5
Total Sample	12.1	32.2	39	16.7

In relation to the degree of satisfaction with the effectiveness of the academic research system, the answers were mostly distributed between “weak effectiveness”

and “acceptable effectiveness,” with the exception of UAE, where answers tended towards “acceptable effectiveness” and “high effectiveness”. This refers to a degree of dissatisfaction among students with regards to the academic research system. In fact, a lot of students perceive research as a mere procedure to complete an educational phase or to obtain a graduate degree. Moreover, misunderstanding still prevails between researchers and field practitioners; researchers accuse practitioners of not appreciating research, while practitioners accuse researchers of “staying in ivory towers” and seeking to satisfy their scientific curiosity, regardless of the usefulness of their research and the extent to which society benefits from it. This negative look at research will not change unless the academic system is improved and its relationship with each country’s reality and development needs is strengthened.

Students' Opinions on the Teaching Methods in Universities

Table 5.25C

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	7.0	36.0	45.6	11.4
UAE	1.3	9.2	48.3	41.2
Tunisia	17.5	48	32.7	1.8
Morocco	47.6	19.5	16.9	16.0
Total Sample	20.4	30.5	34.7	14.4

We notice that the majority of the students oscillated between recognising the “acceptable” or “high” effectiveness of the teaching methods, as is the case in the UAE, in contrast to the majority of the students in Morocco which was distributed between the “no effectiveness” and the “weak effectiveness” answers. In Jordan and Tunisia, the majority remained distributed between the “acceptable effectiveness” and the “weak effectiveness” answers. Overall, with the exception of Emirati students, the satisfaction with the teaching methods in universities seems limited, and this cannot be surprising to any follower of the situation of higher education or reports issued in this regard. In fact, teaching methods in most

Overall, with the exception of Emirati students, the satisfaction with the teaching methods in universities seems limited, and this cannot be surprising to any follower of the situation of higher education or reports issued in this regard

Arab universities are still tied to the old educational philosophy that perceives the mind of the student as a container to save and retrieve information. Teaching methods adopted by the majority of professors are still traditional, and of a vertical character, based on lessons and lectures given in accordance with the pattern of “from one person to a group”, and this pattern is almost devoid of all forms of real pedagogical interaction. These lectures are supported by a series of publications or books that are considered the primary source of information with which the students charge their brains and download the information onto the exam paper, thus ending the relationship with the knowledge contained therein. The information provided in these lectures, notes or books are often unchangeable, as they are repeated without any development or update.

However, there are individual initiatives by some university professors who practice the method of dialogue and discussion and diversify the methods of student participation in the construction of lessons that contribute to the development of intellectual abilities and research skills and foster a culture of dialogue and discussion that helps develop the personalities of university students and reveal creative capacities. However, these professors constitute the lowest percentage among other educators and, therefore, their ability to make a true quantum leap in the university teaching methods remains limited. In the absence of qualitative development in the educational practices of Arab universities, the phenomena of academic laziness among university students, their reluctance to read and learn, their disinclination towards scientific research and discovery, and their disinterest in university libraries are expected to worsen. This is expected to lead to the spread of negative cognitive trends and behaviours, such as dependency, cheating during exams, opportunistic dealing with cognitive contents and lack of appreciation of science and knowledge value.

This paragraph discusses a very important issue, that of the evaluation of knowledge

and skills and other gains that university students acquire, i.e. the issue of evaluation methods adopted in universities. In general, the majority swung between acknowledging that adopted evaluation methods were either “weak” or “acceptable”. As is the case in the previous paragraph (relating to teaching methods in universities), the results separated Jordan and UAE on one hand (precedence of the “acceptable effectiveness” answer), and Tunisia and Morocco on the other hand (precedence of the “weak effectiveness” answer). This means that in all cases, a percentage of students, ranging between 19.3% and 69.7%, were not satisfied with the academic evaluation methods.

Students' Opinions on the Evaluation Methods in Universities

Table 5.25D

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	10.7	35.6	42.5	11.2
UAE	4.5	14.8	46.4	34.3
Tunisia	19.9	49.8	27.5	2.8
Morocco	24.4	32.2	25.1	18.3
Total Sample	15.9	35.1	34.6	14.4

In fact, the issue of academic evaluation is considered one of the most important dilemmas of the higher education system due to its direct link to the question of the quality of higher education outputs to the labour market and society as a whole. If the screening or selection system – supposed to be the passport to active life and ensure eligibility to participate actively in economic and social life – is dysfunctional or its credibility is uncertain (i.e. its ability to evaluate what should be evaluated), its effectiveness remains in doubt. This is probably one of the reasons behind the spread of dissatisfaction among business owners and employers with the preparation of graduates and the poor compatibility of their qualifications with the requirements of high productivity and global competitiveness.

The problem of evaluation is not separate from other difficulties of the higher education system in general, particularly the issue of university teaching practices.

In the absence of qualitative development in the educational practices of Arab universities, the phenomena of academic laziness among university students, their reluctance to read and learn, their disinclination towards scientific research and discovery, and their disinterest in university libraries are expected to worsen

Evaluation methods will continue to be limited to teachers' personal interpretations and opinions about what they think is the most important to teach and evaluate, as long as the goals of higher education and teaching practices are still focused on teaching knowledge and retrieving it, or on training of some primary skills that cannot be transferred or developed, without paying real attention to personal or behavioural dimensions. Evaluation methods will also continue to be limited as long as the goals cannot be revealed within an integrated vision about the characters needed for the graduates of higher education.

It should also be noted in this regard that the information available regarding evaluation in universities are incomplete and dispersed. This makes it impossible to diagnose weaknesses, due to the lack of studies on the subject (both nationally and internationally); especially since evaluation practices in universities are not explicit enough, according to a document issued by the Supreme Council for Evaluation in France on the evaluation of university students.³² The document raised a number of problems that the university evaluation system suffers from, and these problems are fully applicable to what is happening in Arab universities. We particularly mention among these problems; the absence of a unified vision of the evaluation, its methods, standards and the forms to employ its results, even within the same major; the overlapping functions assigned to the evaluation; the absence of accurate knowledge of the students' perceptions of the evaluation and its impact on their relationship with knowledge; and the successive evaluation processes and the required time and energy for prior preparation, which reflects negatively on the learning process and the quality of the evaluation. The report concluded that these factors would put the concept of the "national diploma" in doubt in many countries of the world.

In this context, the idea of establishing a qualification system capable of determining the levels of effectiveness in all majors is seriously suggested. This shall ensure an

impartial equivalence of diplomas and would enable the transfer and fruitful exchange of competencies on the internal and external levels.

Students' Opinions on the Books and References Available for Students

Table 5.25E

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	5.2	20.5	44.6	29.7
UAE	1.9	9.3	40	48.8
Tunisia	15.4	37.1	37.6	9.9
Morocco	24.8	25.9	24.5	24.8
Total Sample	12.7	24.5	36.6	26.2

As is well known, various references constitute an essential component of the formation of the student, whether these references are books that establish theoretical knowledge, or those that complement the practical aspects and support theoretical formation. These references are often imported or expensive and students cannot afford them. Therefore, universities are responsible for providing them through university libraries. However, students often complain that these libraries do not provide the necessary references or do not provide them sufficiently, in a way to give everyone the chance to benefit from them in a timely manner. This perhaps explains the respondents' varying degrees of satisfaction with these books and references. With respect to the degree of satisfaction with the books and references available to students at universities, the highest satisfaction rate (acceptable and high effectiveness) was among Emirati students, followed by Jordanian students, then their colleagues in Morocco, and finally in Tunisia.

Whatever the factors behind the dissatisfaction of a considerable percentage of students with the books and references their universities are providing, university libraries need more care and their equipment needs to be updated. Moreover, libraries need to be enriched with the latest and good publications that are appropriate

With respect to the degree of satisfaction with the books and references available to students at universities, the highest satisfaction rate (acceptable and high effectiveness) was among Emirati students, followed by Jordanian students, then their colleagues in Morocco, and finally in Tunisia

to the needs of various majors. They should also make use of modern documentation software technologies to help students do their research and allow them to remotely view references through subscriptions in virtual libraries. This is without overlooking the need to encourage the movement of writing and production and stimulate the process of publishing good-quality literature, as the share of the Arab region in international publications remains the weakest.³³

Students' Opinions on the Educational Equipment and Tools

Table 5.25F

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	8.5	37.5	40.8	13.2
UAE	1.3	3.6	28.5	66.5
Tunisia	23.3	48.2	25.2	3.3
Morocco	23.9	32.5	25.6	18.0
Total Sample	15.4	33.9	31.2	19.5

In relation to educational equipment and tools available in universities, UAE ranks first among countries participating in the survey with the highest rate of satisfaction among students (95% answered with “acceptable” and “high” effectiveness), as opposed to Tunisian students, 71.6% of whom stated that the effectiveness of the educational equipment and tools in their universities were either weak or absolutely non-existent. Jordan and Morocco rank between the two, with a satisfaction rate of 54% and 43.6% respectively.

There is no doubt that the provision of educational equipment and tools in academic institutions is linked to the local financial capabilities of each country and its ability to conclude agreements with donors and stakeholders. It worth noting here that due to the growing numbers of male and female students in universities, many academic institutions faced the urgent need to provide spaces necessary to secure the process of teaching and learning. In order to deal with this pressure, classrooms have been converted or established, many of which

are lacking the most basic elements of an educational academic environment, which adversely affects the quality of acquired education and skills.

The effect of the absence or lack of equipment and tools on students varies from one major to another. Although these tools are required for all majors for further clarification and for the improvement of the learning and teaching process, the inadequate availability and quality may become a hindrance to majors that are of a practical or technical nature and those that require manual processing, experimentation, disassembly and installation. Today, this issue is becoming increasingly important, in light of the fundamental role that technological tools and means are playing to improve the educational process and provide it with more flexibility and effectiveness.

Students' Opinions on the Educational and Pedagogical Level of University Professors

Table 5.25G

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	5.0	19.7	50.9	24.4
UAE	1.8	6.4	41.6	50.2
Tunisia	9	22.6	53.8	14.6
Morocco	25.0	25.5	26.0	23.5
Total Sample	11.3	20.3	43.1	25.3

Based on the distribution of the percentages in the table (5.25G), we note that, with the exception of students in Morocco, about half of the respondents tend to acknowledge that the level of scientific and pedagogical ability of the teachers is of acceptable effectiveness (Jordan and Tunisia) or of high effectiveness (UAE). But this trend, albeit important, should not overlook another percentage of students – ranging between 7.1% (in UAE) and 50.4% (in Morocco) – that tended to question this effectiveness by stating it is weak or absolutely non-existent.

This question addresses a vital issue in the higher education system: the scientific and pedagogical effectiveness of the teaching staff in university, as they have a significant

In relation to educational equipment and tools available in universities, UAE ranks first among countries participating in the survey

With the exception of Emirati students, the majority in Jordan, Tunisia and Morocco expressed their dissatisfaction with the system of incentives offered to students

Studies show a decline in motivation among students, as many of them find themselves studying majors that they do not like or that do not match their abilities, because of the guidance and admission system

impact on the quality of the outputs. The interest in the qualifications of university professors, particularly in relation to educational practices, has doubled in recent years, in the context of what is known as academic pedagogy. In fact, the selection of university teachers in most Arab countries is subject to a basic standard, which is obtaining a graduate certificate, a master's or doctoral degree, which attest to the ability to carry out academic research more than the ability to teach. Therefore, the issues relating to the selection of appropriate teaching methods and education administration methods and to the organisation and transfer of knowledge remain subject to personal interpretation. Add to this the high number of students and the consequent imbalance in the orientation proportions, as appears through the rising index of students per teacher, and the deficiencies in equipment, tools and laboratories, in addition to the lack of quality control on the work of teachers in universities. These and other factors do cast a shadow on teachers and affect their ability to carry out their work in the best possible ways.

Students' Opinions on the System of Financial and Moral Incentives Offered to Students

Table 5.25H

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	35.2	36.9	20.9	7.0
UAE	9.7	19	36.4	34.9
Tunisia	47	39.5	11.2	2.3
Morocco	26.5	25.4	24.6	23.5
Total Sample	32.1	31.8	21.7	14.4

With the exception of Emirati students, the majority in Jordan, Tunisia and Morocco expressed their dissatisfaction with the system of incentives offered to students. Although the absence or weakness of financial incentives is justified, since they are linked to the funding issue in higher education and the limited budget allocated to it, especially in "poorer" countries, the absence or lack of moral incentives indicates a lack of awareness or interest in motivating students, pushing them forward and

improving their relationship with knowledge. This happens amid a growing importance of this factor, given the decline in the value of education and knowledge in the perceptions of young people, due to the prevalence of unemployment among graduates or their inability to land a job compatible with their educational diploma.

In this context, studies show a decline in motivation among students, as many of them find themselves studying majors that they do not like or that do not match their abilities, because of the guidance and admission system. Moreover, many of them enrol in university without having a specific project of "life", so they spend their education years, without realising neither the value of the knowledge they receive nor its usefulness after graduation. Some researchers even believe that many students lose their motivation slowly.³⁴

In order to maintain a high level of motivation for students, the pedagogical activities suggested to them must be able to influence their perception of the benefit of the knowledge provided and their perception of their skills and ability to control their course.³⁵ Therefore, and for the benefit of the students, it is necessary to give the incentive systems the importance they deserve, by organising awareness campaigns and a variety of activities within the faculties, universities and in their surroundings to engage students in the educational project and enable them to face it with a strong desire of achievement and excellence. Motivation becomes even more important to face the problem of some students' reluctance to join certain majors of importance to development, such as technical majors.

It is worth noting that the university is not responsible alone for motivating students, financially and morally, but rather all the institutions concerned with the outputs of the university and all civil society organisations, because this is a multidimensional issue that needs coordination and integration between the family, as well as learning and social environments.

Students' Opinions on the Practical Training System During Studies

Table 5.25I

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	20.2	37.6	29.8	12.4
UAE	5	17.9	42.2	34.9
Tunisia	32.7	42.6	20.6	4.1
Morocco	25.1	30.9	25.5	18.5
Total Sample	22.5	34.3	28.1	15.1

Based on the answers of the students regarding practical training during studies, it seems to be one of the weaknesses of the higher education system. According to students, practical training lacks effectiveness or is of weak effectiveness, at rates ranging between 56% in Morocco, 57.8% in Jordan and 75.3% in Tunisia, unlike the UAE where this rate was 22.9%. The majority's dissatisfaction can be explained by the scarcity of training opportunities offered to students by universities, due to the lack of cooperation agreements and formal partnerships between faculty departments and institutions (production and service institutions in the public and private sectors) concerned with majors they cover. Therefore, students are forced to confront this need alone, and search for institutions that will accept them. Moreover, benefiting from these trainings still depends on the seriousness of the institutions receiving students and their desire to provide them with an experience of real added value.

In prestigious universities – as the report discussed in Chapter 4 – practical training is considered an integral part of the formation of the student. Training is conducted in an orderly manner and in accordance with clear agreements with the concerned institutions. It is also subject to strict procedures, starting from choosing the institution, identifying the project that the student works on and defining the role of each party and the expected outcome, in addition to other details that could even reach the determination of the ownership of the product and the value of the reward.

It must be noted here that partnership and cooperation between universities and relevant external institutions depend on the extent to which university curricula and courses meet the urgent needs of these institutions or companies (from both the public and private sector) and on the trust in the possibility of achieving mutual benefit and ensuring the rights of all parties. In France, for example, there are clear legal provisions and terms in the Labour Charter that determine the conditions of practical training that benefit students. A “help desk on professional integration” is also available in every university, and it aims at determining the institutions that provide training for students and connecting the two parties in the framework of recognised agreements. The training must end with a report that the students prepare in which they determine what they have acquired and give their opinions on the quality of care the institution provided during training. Training is considered an essential part of the educational journey of the student.³⁶

Students' Opinions on the Compatibility of the Knowledge Provided by the University with the Requirements of the Labour Market

Table 5.25J

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	16.5	40.7	34.0	8.8
UAE	4.5	14.3	46.4	34.8
Tunisia	30.5	43.4	22.4	3.7
Morocco	27.4	25.2	25.2	22.2
Total Sample	21.3	33.4	30.4	14.9

There is today what looks like a consensus on the existence of a large gap between the outputs of higher education, the requirements of the labour market and the needs of development. This gap takes two forms: on one hand, it floods the labour market with majors unrelated to society's need for highly qualified people, and on the other hand, it provides graduates in required fields, but lacking the minimum necessary skills of the major they are studying.³⁷ In this context, the answers of the students confirmed what Chapter 3 referred to with

There is today what looks like a consensus on the existence of a large gap between the outputs of higher education, the requirements of the labour market and the needs of development

Students need real empowerment to gain abilities that go beyond mere preparation for a profession and equip them for life

regards to an imbalance in the proportions of the distribution of students between applied and literary majors, and the weak compatibility between the knowledge offered by universities and the requirements of the labour market. The proportions of respondents who acknowledged the weakness or lack of the effectiveness of this compatibility in Jordan, Tunisia and Morocco were 57.2%, 74%, and 52.6% respectively. The answers of the Emirati students were more positive, as only 18.8% were dissatisfied with this compatibility.

Students' Opinions on the Current System of University Admission

Table 5.25K

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	15.5	35.8	38.6	10.1
UAE	3.8	10.7	48.5	37
Tunisia	19.6	38.3	37.7	4.4
Morocco	27.6	25.9	24.9	21.6
Total Sample	18.4	30.3	35.7	15.6

With the exception of Emirati students who were almost unanimous in their answers on the effectiveness of the adopted system of university admission, the students from the remaining three countries split into two categories: one moved towards denying the effectiveness and the other moved towards supporting it, with a slight precedence of the first category. This in itself is a natural reflection of the reality produced by this system (satisfaction among those whom the system has helped join the major that matches their desires and capabilities, versus dissatisfaction among those whom this system prevented from achieving their goals).

There is no doubt that academic orientation is one of the thorny issues about which the graduates of secondary school complain. In most Arab countries (Egypt, Sudan, Syria, Jordan, Iraq, Oman, Tunisia and Algeria), students are directed and admitted in various universities and majors in a centralised manner, electronically. However, the admission is decentralised by higher education

institutions in Qatar, Bahrain and Lebanon. Other countries have also other admission requirements. For example, Saudi Arabia conducts additional tests for applicants who wish to enrol at universities at the country level, through the National Centre for Assessment in Higher Education. Some public faculties in Lebanon also have additional requirements, such as competition entries and tests of mastery of a foreign language.³⁸ This is what is required in public universities, while private universities are obliged to reject those who do not get their certificate of completion of secondary school studies. Aside from that, private universities enjoy more freedom and flexibility to determine their own admission conditions. Since admission is mostly based on the results of the final exam in secondary studies and the student's desire, if the grades match, taking into account the absorptive capacity of the university faculties and institutes, this system can lead to various forms of waste and exclusion, despite the fact that it has some pros.³⁸

Students' Opinions on the Activities Organised by Their Faculty or University

Table 5.25L

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	14.7	33.0	39.6	12.7
UAE	2.8	14.1	40.6	42.5
Tunisia	41.1	33.9	20.3	4.7
Morocco	27.0	25.0	25.0	23.0
Total Sample	22.9	28.4	31	17.7

It is known today that the formation of a student's character is not exclusively done within university halls or through lessons, lectures and classroom activities alone. Students need real empowerment to gain abilities that go beyond mere preparation for a profession and equip them for life. Therefore, in addition to educational and academic activities, we find that advanced systems give great importance to extra-curricular activities and events. This is contrary to the situation in many Arab universities, which look more like an institution that provides theoretical lessons and whose role ends with the end of

lectures. Arab universities have few spaces allocated to cultural activities and sports and lack well-studied programmes that achieve integration between academic activities and various parallel activities. This perhaps explains the dissatisfaction dominating the answers of the students, especially Tunisian students, and to a lesser extent Moroccans and Jordanians. On the contrary, the answers of Emirati students stated in their majority that the activities organised by universities in parallel with the teaching activities are efficient (83.1% answered with “acceptable” and “high” effectiveness).

Students' Opinions on Internet Availability

Table 5.25M

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	6.9	15.6	40.2	37.3
UAE	0.9	4.1	20.1	74.9
Tunisia	42	26.1	23.6	8.3
Morocco	29.7	27.8	20.2	22.3
Total Sample	20.9	20	28	31.1

Answers reveal a noticeable discrepancy between the countries concerned with study in terms of available opportunities for using the internet. Emirati students ranked first with a rate of almost 95%, followed by Jordanian students with 77.5%, then the Moroccans with 42.5%, and finally Tunisians with 31.9%. Whatever the proportion of internet availability for students, the most important question remains: why and how do they use the internet? And what is the share of the cognitive aspects in this usage?

The results of the field research, which was completed in the context of preparing this report, showed that knowledge-related topics did not exceed 19.4% of discussed topics on social networks, while social topics rank first with 29.4%, personal relationships second with 26.3%, while political topics rank fifth with 6.3%. In the UAE, a 2012 study on the reality of internet use among young Emiratis for cognitive formation, conducted by the Ministry of Culture, Youth and Community Development and the Decision-Making Support Centre of

Dubai Police, showed that only 1% of the time young people spent on the internet was devoted to searching for information and exploring its sources.

In Tunisia, reports indicated that the growing reliance on the internet had contributed to the improvement of research methods via electronic references and sources, notably the most widely used search engines. However, this reliance does not live up to the level of mastery of specialised electronic resources, such as databases and virtual libraries, despite the important role some of these play in universities.

Students' Opinions on the Interactive Electronic Means That Allow Remote Educational Communication between Students and Teachers

Table 5.25N

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	22.9	34.9	28.1	14.1
UAE	2.6	6.4	32.2	58.8
Tunisia	42.3	31	20.3	6.4
Morocco	23.1	28.4	26.9	21.6
Total Sample	24.8	28.4	26.5	20.3

Despite the widespread use of information and communication technologies and the increasing emphasis on the importance of their integration in the teaching and learning process, we note that this trend is still struggling in many Arab countries. This was revealed in the student answers with regards to interactive electronic means that allow them to communicate remotely with their professors. Although the level of satisfaction with these means reached 91% in the UAE between “acceptable” and “high effectiveness”, it did not exceed 26.7% in Tunisia, 42.3% in Jordan, and 48.5% in Morocco.

The e-learning system is considered one of the most promising educational and technological trends, and it is expected that a great revolution will occur in educational concepts, teaching aids and the relationship between students and education service

Despite the widespread use of information and communication technologies and the increasing emphasis on the importance of their integration in the teaching and learning process, we note that this trend is still struggling in many Arab countries

There is no doubt that the provision of resources remains one of the biggest problems facing higher education in low-income countries

providers, pushing major countries to compete to possess and take advantage of these means, allocating huge budgets to them. Statistics indicate that the global volume of the e-learning market is estimated at more than \$11 billion annually, 60 to 70% of which is concentrated in the United States. Statistics also indicate that 30% of vocational education and training in Europe is generally done electronically. While this percentage in some European countries reaches 10-15%, it increases to 50% in Scandinavian countries. Finland, Germany, Spain and France are at the forefront of European countries that get a significant proportion of revenue from e-learning. In the Arab world, the UAE spearheads the Arab countries that are pioneers in this area, in terms of size and investment, which is expected to reach \$24 million in this field over the next few years.

The First International Conference on e-Learning that was held in June 2013 in Cairo under the title “e-learning in the Arab world: challenges and prospects of development,” gave great importance to addressing the problems faced by e-learning in the Arab world, the challenges it faces in the knowledge society and its role in achieving the principle of continuing education. The diagnostic process revealed the need to link the reality of e-learning in the Arab world with telecommunications services in the region and the infrastructure, networks, services and devices associated with them, since these factors play an important role in the prevalence and potential growth of e-learning. Studies on the status of telecom sectors in Arab countries in general also showed that most of these sectors had been controlled by the public or government sector for many years. This had resulted in additional challenges reflected by a governmental entity’s monopoly of the telecommunications sector and a weak telecommunications infrastructure, due to the lack of competition and the spread of bureaucracy in the public sector in Arab countries in general. Monopoly has also led to an absence of competitiveness in this sector, resulting in infrastructure and services that do not live up to required levels.

Students' Opinions on the Financial Resources to Support University Research Projects Carried out by Students

Table 5.250

	No Effectiveness	Weak Effectiveness	Acceptable Effectiveness	High Effectiveness
Jordan	29.2	41.6	20.7	8.5
UAE	7.2	17.1	37	38.7
Tunisia	59.2	28.2	6.5	6.1
Morocco	26.5	22.5	24.1	26.9
Total Sample	30.6	29.9	20.4	17.1

Field survey results vary considerably in the views of students in terms of effectiveness of resources allocated to university student research projects, where the proportion of those who viewed that it was effective (acceptable effectiveness and high effectiveness) reached 75.7% in the UAE compared to 12.6% in Tunisia, with Jordan (29.2%) and Morocco (51%) in between. There is no doubt that the provision of resources remains one of the biggest problems facing higher education in low-income countries. This is especially applicable in centralised systems where a supervisory authority allocates a determined budget and sets the terms for its spending, and where the educational institution does not have any other funding sources in the form of grants or cooperation agreements and partnerships.

The financial support that a student might need to complete research varies from one discipline to another, and increases the more the discipline is related to the fields of applied sciences and technologies. Hence, it is necessary to find channels for additional resources to be devoted to enhance research efforts and improve research quality.

For instance, Abu Dhabi University granted research scholarships to undergraduate students and funded a number of selected research projects, in a step aimed at promoting scientific research among students during the academic year 2009-2010. On another level, the Sultan Qaboos University in Oman in 2011 started applying a programme to support student research, targeting

undergraduate students studying in Oman's higher education institutions, colleges and universities, in order to offer them the opportunity of carrying out research projects in their fields of interest, either in their own institutions or in cooperation with other institutions inside the Sultanate.

Students' Perceptions of the Effectiveness of Certain Enabling Environments in Knowledge Transfer and Localisation

This part will discuss student perceptions of certain aspects of enabling environments, or rather student perceptions of youth integration in the transfer and localisation of knowledge processes. These include the contribution of certain bodies and organisations in this regard, the status of freedoms and rights, as well as the role and contributions of the private sector, institutions and economic and governmental patterns. This also covers student perceptions of other issues related to knowledge transfer and localisation, as well as motivating and impeding factors.

Sense of Trust in the Ability of Organisations to Contribute to the Youth's Integration into the Processes of Knowledge Transfer and Localisation

The statistical tables in the annex³⁹ reporting the students' trust in the ability of organisations to contribute to youth

integration into the transfer and localisation of knowledge processes reveal different levels of trust expressed by students. These levels varied from one country to another and from one authority to another.⁴⁰ In general, there was a similarity between UAE and Jordan, and between Tunisia and Morocco. The majority of Jordan and UAE students showed a (acceptable or deeper) trust in the ability of civil society organisations, media, trade unions and professional organisations to contribute to knowledge transfer and localisation. However, this was not the case for Tunisian and Moroccan students, the majority of whom seemed to be sceptical about these bodies (weak or zero trust). As for political movements and parties, Jordanian, Tunisian and Moroccan students all showed weak or no trust in them at 66.8%, 87%, and 91.9% respectively.

Students' Opinions on the Status of Freedoms and Rights

Generally speaking, student respondents showed positive attitudes towards the status of freedoms in their respective countries. The majority answered with "excellent status" or "good status" with a certain disparity in percentages. The highest percentages were scored by Emirati students and the lowest by Tunisian students. Tunisia's percentages seem interesting in particular, because anyone following Tunisian news after the so-called Arab Spring Revolution would notice the considerable expansion of freedom at

Students expressed positive attitudes when it came to certain social conditions, such as gender equality and social justice

Figure 5.6

Level of Students' Trust in the Ability of Bodies and Organisations to Contribute to the Youth's Integration into the Transfer and Localisation of Knowledge Processes

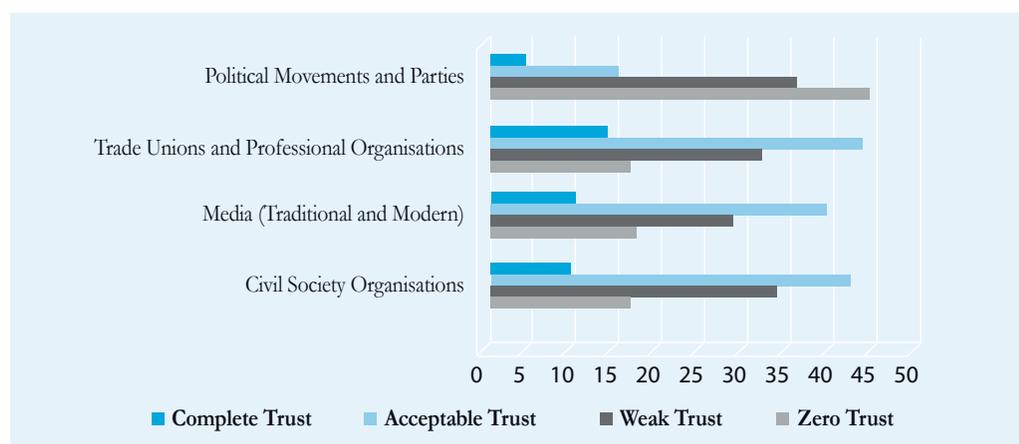
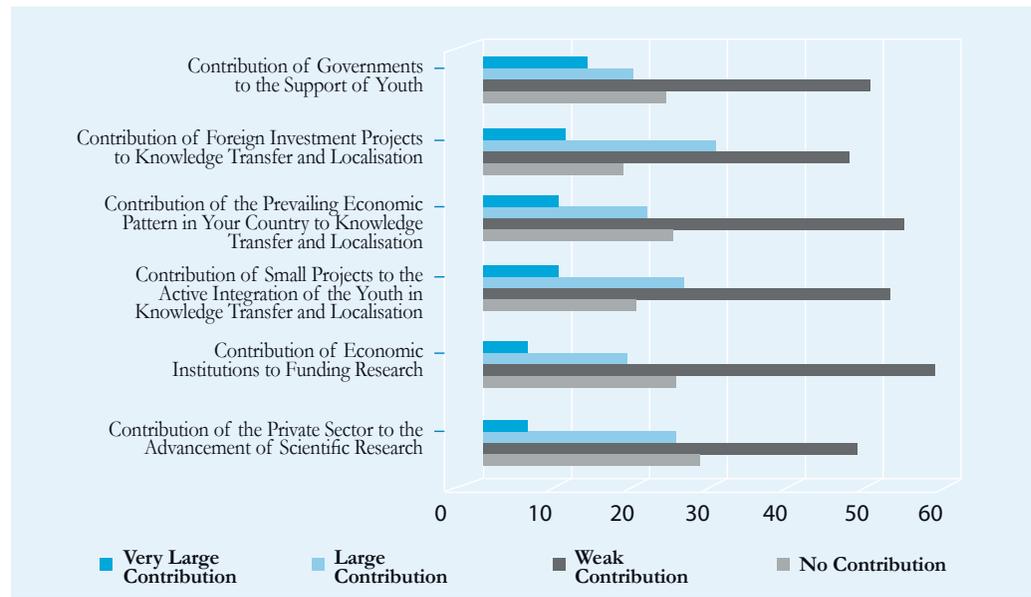


Figure 5.7

Students' Perceptions of the Role and Contribution of the Private Sector, Institutions, and Economic and Governmental Patterns



Students in all four countries also seemed to disagree that the process of transfer and localisation contributed to more dependency on developed countries, and they agreed that the process was not part of their current concerns

all levels and among all categories. That is why Tunisia's fourth ranking in terms of student perception of the status of freedoms makes us wonder: Is the status of freedoms in Tunisia really the worst? Or did the post-revolution situation make the Tunisian youth expand their demands beyond what their peers were asking for in other countries?

Students expressed positive attitudes when it came to certain social conditions, such as gender equality and social justice. With respect to public affairs and political activity, negative attitudes prevailed in Jordan, Morocco and Tunisia (with the majority choosing "bad" and "very bad" status). This was especially clear in terms of youth integration in political life, with the negative majority reaching as high as 53.1% in Jordan, 63.1% in Tunisia and 72% in Morocco. Negativity also prevailed in terms of the fight against corruption and accountability possibilities, which are considered among the fundamentals of good governance.

Students' Opinions on the Role and Contribution of the Private Sector, Institutions and Economic and Governmental Patterns

Based on tables included in the annex⁴¹ and Figure 5.7, unlike Emirati students

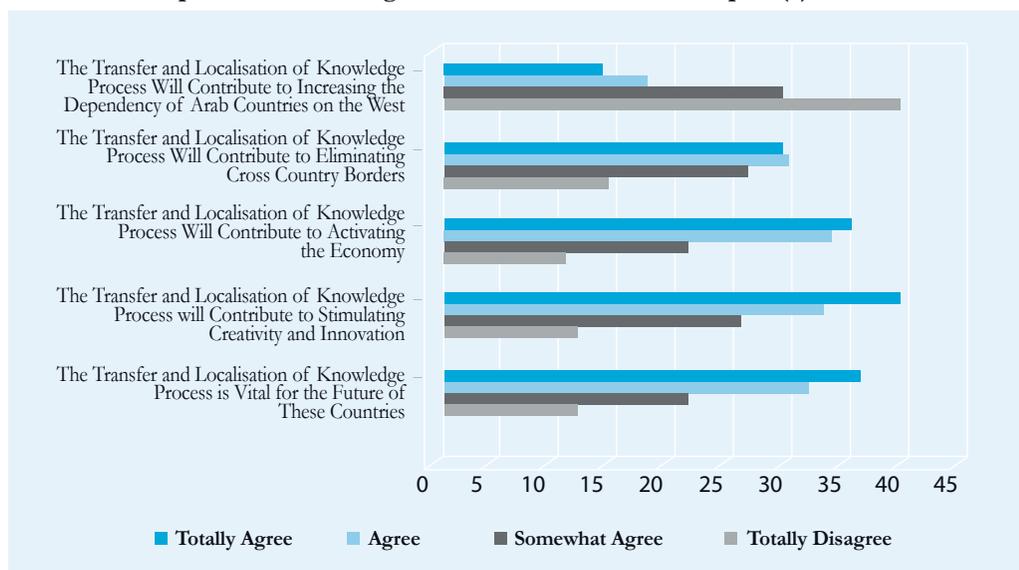
who confirmed the positive contribution of numerous players and factors when it came to the youth and the development of knowledge, respondents in Jordan, Tunisia and Morocco had a negative opinion, expressing the poor contribution of these players and factors, at percentages as high as 90% in a number of topics. According to respondents in these countries, all the components of the economic scene (economic institutions, private sector, economic pattern and investment projects) seemed to lag behind, in terms of performing their role, which includes funding scientific research and transferring and localising knowledge. They also viewed governments as delinquent in terms of offering support to young people.

Students' Opinions on the Topics of Knowledge Transfer and Localisation

Figures 5.8 and 5.9 and the table included in the annex⁴² illustrate student answers on knowledge transfer and localisation topics. A similarity was clear in their perception of many issues related to knowledge transfer and localisation, such as its contribution in limiting unemployment, stimulating creativity, removing borders between countries, fostering competition and reducing social inequalities. Students in all

Figure 5.8

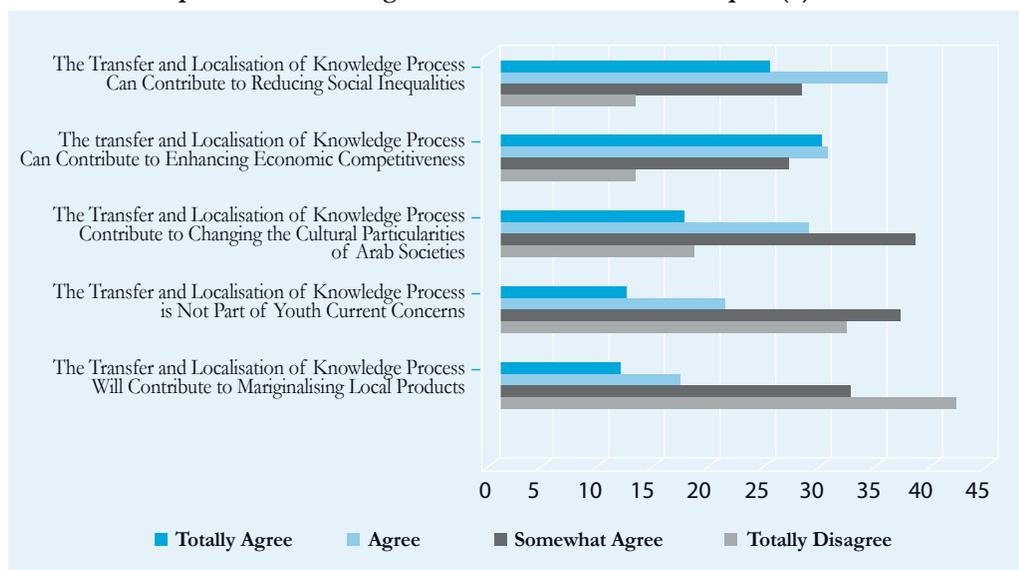
Students' Perceptions on Knowledge Transfer and Localisation Topics (a)



The employment issue seemed to be a common area of interest for the students of Jordan, Tunisia and Morocco

Figure 5.9

Students' Perceptions on Knowledge Transfer and Localisation Topics (b)



four countries also seemed to disagree that the process of transfer and localisation contributed to more dependency on developed countries, and they agreed that the process was not part of their current concerns. On the other hand, discrepancies appeared in student perceptions of the following issues:

- “Contribution of knowledge transfer and localisation to changing cultural particularities of Arab countries”: While Jordanian and Emirati students

expressed their agreement with this idea, their Tunisian and Moroccan peers tended to oppose it.

- “Contribution of the transfer and localisation of knowledge to marginalising local products”: This idea received rejection from the majority of students in Jordan, UAE and Tunisia, while it was met with the approval by the majority of Moroccan students.
- “Contribution of the transfer

and localisation of knowledge to activating the economy” and the consideration of “knowledge transfer and localisation vital for the future of Arab countries”: This idea was met with the approval of the majority of students in Jordan, UAE and Tunisia, but not those of Morocco.

Motivating and Impeding Factors in the Integration of Youth in Knowledge Transfer and Localisation

Figures 5.10 and 5.11 and the tables in the annex⁴³ show an agreement among the majority of students in all four countries that all the factors (included in the question

An interesting result was the percentage of students who stated that “gender equality is unavailable” (regardless of whether it is necessary or unnecessary). Unavailability of gender equality scored 18.8% in UAE, compared to 44% in Tunisia, 50.4% in Morocco, and 50.9% in Jordan

Figure 5.10

Students’ Perceptions on Motivating and Impeding Factors in Youth Integration in Knowledge Transfer and Localisation (a)

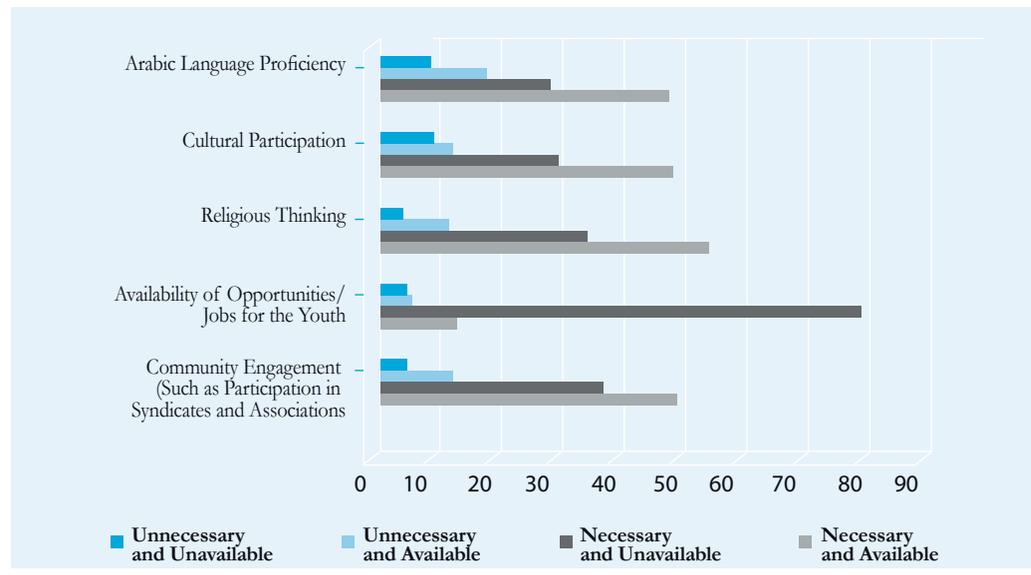
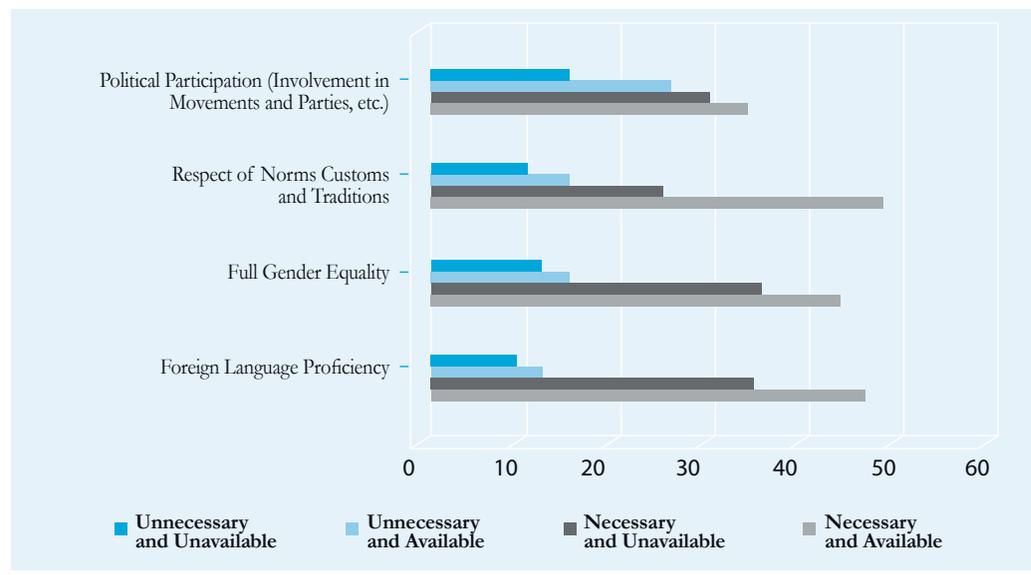


Figure 5.11

Students’ Perceptions on Motivating and Impeding Factors in Youth Integration in Knowledge Transfer and Localisation (b)



on acceptable and unacceptable motivating factors) are necessary to facilitate youth integration in the transfer and localisation of knowledge, at rates that exceeded 80% in most cases. Only three factors were considered unnecessary by the majority of Moroccan students, including “cultural engagement”, “full gender equality”, and “respect of customs and traditions”. However, percentages varied from one country to another in terms of the availability of these “necessary” factors, whereby it scored at least 60% in the UAE but did not exceed 28% in Morocco.

The employment issue seemed to be a common area of interest for the students of Jordan, Tunisia and Morocco. Students in all three countries admitted its necessity and yet its unavailability at high rates that reached 78.7%, 84.9%, and 89.8% respectively. It is only natural for employment to score such a high and distinct percentage compared to other required but unavailable motivating factors, since unemployment and the extent of compatibility between university qualification and the labour market are among the key challenges and concerns faced by the youth and society today. An interesting result was that nearly 50% of Moroccan students regarded religious thinking as necessary but unavailable. This issue is particularly striking, especially amid the spread of Islamic movements among students, and requires more in-depth study to understand how these students perceive religious thinking as a contributor to the transfer and localisation of knowledge, as well as the type of knowledge required in this context.

Another interesting result was the percentage of students who stated that “gender equality is unavailable” (regardless of whether it is necessary or unnecessary). Unavailability of gender equality scored 18.8% in UAE, compared to 44% in Tunisia, 50.4% in Morocco, and 50.9% in Jordan. It is worth exploring this issue to look into the reasons that would drive around half of the respondents in three countries to deny the presence of equality, despite the procedures and legislation of

varying degrees of importance adopted in these countries in order to reduce gender discrimination.

Summary of Research and Findings

The results of field research allowed us to draw a clear picture of the situation from a sample of male and female university students of various disciplines from four Arab countries: UAE, Jordan, Tunisia and Morocco. The results of this study were highly consistent with what was mentioned in associated analytical studies and literature presented in this report, throughout its chapters. Data was collected through a cognitive skills test, as well as a questionnaire on values, effectiveness and enabling environments. This data revealed the following:

Cognitive skills: There is a major discrepancy in the levels of possession of cognitive skills. Particular weakness appeared in written communication skills, in both Arabic and foreign languages. Even the relative progress made in problem-solving skills still needs to be further proven using more complex situations, given the ease of the proposed scenario. As for the skill of technology use for research and knowledge purposes, it scored average rates. These results all seem to be taking the same trend as revealed in previous studies, both regionally and internationally (despite the variation in their areas of focus and methodologies). These results are worrisome, especially when viewed from the perspective of capacity building for knowledge transfer and localisation. They provide proof once again of the poor knowledge readiness of the youth to actively participate in efforts towards mastering knowledge and developing it in their own countries, as a result of not having the necessary tools, particularly technological and linguistic skills.

These skills constitute the fundamental basis for managing the affairs of everyday life and meeting the requirements of an active professional career. The inadequate

The so-called Arab Spring societies that are stumbling in their democratic transitions are perhaps only proof of the lack of a culture of active participation in public life and of the immaturity of relevant practices

possession of these skills among university students nearing graduation will widen the gap separating Arab countries from developed countries and question their ability to transform into educated societies capable of competing at the global level in knowledge transfer and localisation.

Value system: The values test among young people appeared to be much better than their knowledge status. Results revealed positive attitudes towards a set of knowledge values (such as appreciation of education, academic integrity and studiousness), social values (modesty and cooperation) and universal values (respect of freedoms and religious tolerance). This attachment to high values, if it is really derived from strong convictions and reflected in behaviours in daily life, is a positive indicator that should be developed and strengthened to further spread an enlightened culture and noble human values capable of creating a deterrent force against ignorance, dependency, violence and exclusion.

Effectiveness: Except for cultural effectiveness, students expressed a weakness in all aspects of effectiveness, with a certain variation from one aspect to another. The lowest rates of effectiveness were scored by the political and social aspects. This is an interesting result given the negative impact that this weakness can have on building social capital. Participation in public affairs, in its various manifestations (volunteering activities, political participation and involvement in associations), is one of the fundamentals of establishing democratic societies. The so-called Arab Spring societies that are stumbling in their democratic transitions are perhaps only proof of the lack of a culture of active participation in public life and of the immaturity of relevant practices.

Citizenship: Results showed that the notion of citizenship was still not mature, except in UAE which scored a relatively higher rate of maturity. However, answers were dispersed in general. While some students associated the notion of citizenship to the

location, others associated it with history or belief.

This dispersion causes concern over the necessity to fixate this concept in the minds of young people, in order to integrate them into the process of the transfer and localisation of knowledge. This emphasises the urgent need to raise awareness to correct these notions first, and to translate them later into actual attitudes and actions.

Global openness: Efforts to transfer and localise knowledge must necessarily pass through openness of the actors which produce this knowledge and know its secrets and mechanisms. This is why the ability to intercommunicate and open up to other people and cultures is among the key features that students need to interact positively with knowledge outcomes, in order to benefit from them and contribute to their development. However, the research revealed a low degree of openness among student responders. This can be attributed to several reasons that have been already identified.

In order to achieve the desired benefit, efforts must be expanded and strengthened towards developing openness among the youth in the framework of a well-informed policy, based on clear objectives and accurate criteria for the selection of openness destinations (including universities, academic laboratories, training centres, research institutions, clubs and scientific associations), that will broaden the experience of students and enhance their competitiveness.

Enabling environments: Students generally expressed varying degrees of satisfaction with the enabling environments available to them. A significant satisfaction with all aspects discussed in the questionnaire seemed clear among Emirati students, followed by Jordanian students. Answers of Tunisian and Moroccan students tended to show “dissatisfaction”, as they mostly expressed varying degrees of criticism that reached the peak in matters related to the government’s contribution to youth

Efforts to transfer and localise knowledge must necessarily pass through openness of the actors which produce this knowledge and know its secrets and mechanisms.

The values test among young people appeared to be much better than their knowledge status

support and the contribution of the private sector and economic institutions in funding and advancing scientific research. A high percentage of student responders also expressed their total dissatisfaction with the higher education system, namely teaching methods, and the academic research system, whether in terms of funding, availability of appropriate references and framing, or instructional equipment and tools. There is no doubt that there are several factors that have led to this negative attitude, including: Student overcrowding, which creates its own dynamic affecting the inputs and outputs of the education system as a whole, whether in terms of efficiency or quality. This forces professors to dictate their lectures or print them, and substantively eliminates any possibility of engaging and interacting with students and following up on their research. Another factor is the total absence of any training or preparation for higher education professors, in terms of pedagogy of university teaching (university teaching methods).

These results are extremely important, because they represent a sample of the obstacles facing the transfer and localisation of knowledge and the youth's ability to contribute in the process. These results should be presented to academic authorities, followed by political authorities, in order to delve into the readiness of existing university systems to face two main challenges: The first is a direct and short-term challenge related to the system's ability to provide high-quality outcomes that meet the labour market requirements. The second challenge is strategic and long-term and relates to the capability of the university, as the main incubator of research and innovation, to provide the conditions necessary to achieve an added value that reinforces the mechanisms of knowledge transfer and localisation and allows the youth to engage in the process effectively.

Quality: This issue is closely related to the shortcomings mentioned already. Many efforts were made for the development of an institutional framework in many Arab countries in order to ensure quality.

Moreover, national committees and bodies were established to monitor quality and a number of Arab universities obtained institutional or programme accreditation from competent international agencies.⁴⁴ However, the key performance indicators are still below international levels, especially in terms of student-to-faculty ratio, quality of the educational process, quality of research laboratories equipment and facilities and compatibility of outputs with the requirements of employing entities. Moreover, there are no well-informed incentives or accountability systems to encourage the players to improve their performance and enhance the internal and external effectiveness of the higher education system.

In this context, this report confirms that the Arab region should make more efforts to collect information on performance indicators, such as student learning outcomes, developed skills, research capabilities and capacity to enter the labour market. The Arab region should also take the important step of linking its governance models to performance indicators to be able to build its policies on accurate information.

Knowledge transfer and localisation and student perceptions of this issue: The youth perceptions of the transfer and localisation of knowledge seemed positive in general. Respondents expressed their interest in the matter and admitted its positive impact on economy and society. They also admitted its positive impact on creativity stimulation, reduction of social inequalities, elimination of borders and reduction of unemployment. At the same time, the majority also admitted the ability of knowledge transfer and localisation to change the cultural particularities of Arab countries and to marginalise local products. In terms of the knowledge transfer and localisation process contributing to dependency on the West, attitudes varied.

These trends reflect a willingness among the youth to deal with the issue of knowledge transfer and localisation and to

The youth perceptions of the transfer and localisation of knowledge seemed positive in general

participate in it. However, this willingness, even though important, will be of no avail if not backed up by the acquisition of productive knowledge and technological skills that develop among young people a culture of hard work and self-reliance and a philosophy of creativity and innovation.

Arabs are facing an opportunity and a challenge at the same time. And the result depends on what we do now and in the future. The future is not a destination, but a choice we make ourselves, depending on how we invest our energies and how capable we are of capitalising on them and on the experiences of the others.

Source: Abdullab Al Turkmani 2009. (Reference in Arabic)

ENDNOTES

- ¹ UNDP and the Mohammed bin Rashid Al Maktoum Foundation 2012. (Reference in Arabic)
- ² Reef et al. 2005.
- ³ OECD & Canada Statistique 2011
- ⁴ Khaled Al-Wazni, background paper for the report.
- ⁵ Arab Thought Foundation 2012b. (Reference in Arabic)
- ⁶ Abdel Salam Al Mosdi 2011. (Reference in Arabic)
- ⁷ Human and National Development Authority 2012. (Reference in Arabic)
- ⁸ Mullis et al. 2012a.
- ⁹ For more information, see Annex 4, Table A 4-13.
- ¹⁰ Quoting Abdelwaheb Ben Hajaidh in a study to be published by the Youth National Observatory and World Bank on the integration and social and economic participation of youth in Tunisia.
- ¹¹ El Ghordaf 2005.
- ¹² Abdel Majid Al Tajdadi 2012. (Reference in Arabic)
- ¹³ Abdel Majid Al Tajdadi 2012. (Reference in Arabic)
- ¹⁴ Abdel Majid Al Tajdadi 2012. (Reference in Arabic)
- ¹⁵ Tawasol Website 2011. (Reference in Arabic)
- ¹⁶ OECD & Canada Statistique 2011.
- ¹⁷ Martin 2005
- ¹⁸ UNESCO 2005. (Reference in Arabic)
- ¹⁹ Rafeef Rida Sidawi 2013. (Reference in Arabic)
- ²⁰ World Bank 2012c.
- ²¹ Abdel Malik El-Wazzani 2010. (Reference in Arabic)
- ²² Arab Youth Survey. This survey conducted between December 2012 and January 2013 by face-to-face interviews included 3,000 Arab young men and women between 18 and 24 years old from 15 Arab countries (UAE, Jordan, Bahrain, Tunisia, Algeria, Saudi Arabia, Qatar, Kuwait, Oman, Iraq, Lebanon, Libya, Morocco, Egypt, and Yemen).
- ²³ Asda'a Burson-Marsteller 2013b.
- ²⁴ UNESCO 2014a.
- ²⁵ OECD 2012
- ²⁶ Ministry of Culture, Youth and Community Development, UAE 2009. (Reference in Arabic)
- ²⁷ Haytham Ghalib Al-Nahi 2013. (Reference in Arabic)
- ²⁸ Arab Centre for Research and Policy Studies, 2012 and 2013. (Reference in Arabic)
- ²⁹ Mohammed V University, Agdal 2006.
- ³⁰ Francisco Marmolejo
- ³¹ World Bank 2013b. (Reference in Arabic)
- ³² Romainville 2003.
- ³³ See Chapter 4 of the report.
- ³⁴ Viau 2006. Wicht 2009.
- ³⁵ McCombs & Pope 1994. Brophy 1998. Viau 2006.
- ³⁶ Ministere de l'Education Nationale en France 2014. (Reference in Arabic)
- ³⁷ World Bank 2008.
- ³⁸ Arab League Educational, Cultural and Scientific Organisation (ALECSO) 2012. (Reference in Arabic)
- ³⁹ Annex 3, Table A 3-1.
- ⁴⁰ For more info, see Annex 3, Table A 3-1.
- ⁴¹ Annex 3, Table A 3-2.
- ⁴² Annex 3, Table A 3-3.
- ⁴³ Annex 3.
- ⁴⁴ Adnan El Amin 2008. (Reference in Arabic)

ج
ظ
ن
م
و

CHAPTER SIX:

MOVING TOWARDS
INTEGRATING THE
YOUTH IN THE
TRANSFER AND
LOCALISATION
OF KNOWLEDGE
AND BUILDING
THE KNOWLEDGE
SOCIETY IN THE
ARAB REGION

ع
و
ي

ي

Introduction

Previous chapters have addressed and clarified the status of the Arab youth in terms of their cognitive, cultural, economic and social effectiveness. The enabling environments of the Arab youth were also investigated along with the problems and challenges of capitalising on the Arab youth bulge to make it a source of wealth for achieving comprehensive development. Furthermore, the previous chapter presented the results of field studies regarding the status and problems of development, knowledge and youth in the Arab region. This final chapter addresses the following questions: “what is the Arab situation?”; “what’s next?” and “what should be done?” The analysis in this chapter extends to identify the most important themes and mechanisms of future movement to address this pivotal issue. It concludes by exemplifying a proposed vision for an action plan required for integrating the youth into the transfer and localisation of knowledge in the Arab region. It also presents a figurative model highlighting the components of such a plan and its various interactions.

In line with the Arab Knowledge Reports’ governing principle, the proposition of these scenarios does not, in any case, suggest that they are complete or that they answer all questions. After posing all the topics and problems, these scenarios offer a framework for a proposed vision of future action for both the decision-maker and the Arab citizen. And just as we have repeatedly emphasised, the Arab Knowledge Reports intend to create a status of societal dialogue over the topics presented towards achieving an Arab vision agreed upon by concerned parties. Such a vision would later be translated into the adoption of policies and the creation of programmes and projects. Such programmes would also help accomplish the goal of effective integration of the Arab youth into the processes of the transfer and localisation of knowledge, within the ultimate goal of achieving sustainable human development in the Arab region.

Human Development and Building the Knowledge Society in the Arab Region

In addressing the effective integration of the youth in the localisation of knowledge, the third Arab Knowledge Report 2014 is built on a clear critical understanding that defines the concepts of the complex problematic relationship between the triad of knowledge, youth, and sustainable development. It is also built on an accumulation of knowledge, derived from a series of relevant international reports and literature, as well as on the results of the previous AKRs that have determined a comprehensive and critical vision of the meaning of “knowledge”, “knowledge society” and “comprehensive development” in the Arab society, while also providing suggested approaches for achieving each of these priorities.

This report reached important conclusions stating that human development and the building of the knowledge society in the Arab region are facing many challenges; the most important of which is the knowledge gap. The second challenge is the “youth bulge” and associated concerns in relation to job opportunities, unemployment and capacity building. The third challenge is the reform of the supporting enabling environments, including learning and training systems. Challenges also include freedoms in their broader sense, and the systems and regulations that protect and govern the effective integration of the Arab youth in the processes of the transfer and localisation of knowledge. Despite accomplishments in certain countries, the knowledge gap in the Arab region indicates the absence of the main driver required to access the knowledge economy and the knowledge society to achieve genuine development. Knowledge is linked to development through an organic and dynamic relation; it is a tool for development and a result of it. The internal growth that is expected over the long-term is linked to knowledge elements including the efficiency of Research and Development (R&D) activities as well as the growth

Despite accomplishments in certain countries, the knowledge gap in the Arab region indicates the absence of the main driver required to access the knowledge economy and the knowledge society to achieve genuine development

of human capital which is considered to be the fundamental pillar and pivot in knowledge-based economies and societies. The transfer and production of knowledge in all its forms and manifestations including those related to technology, science, culture and human sciences, as well as the ability to use and employ this knowledge, have become strategic and decisive factors in the economic growth and advancement of the Arab region. This is especially true with ever-increasing globalisation and economic competition.

Most of the indicators and reports, however, record minor improvement in the status of knowledge in the region as they note a continued and widening gap between the Arab countries and the world and highlight the discrepancies among Arab countries themselves. This report also highlights the size of this gap, indicating its importance and severity in relation to sustainable development, by using analyses based on various international and regional indicators. As previously indicated, and according to the latest available data, the World Bank indices, including the Knowledge Index and the Knowledge Economy Index (with its four pillars represented by four sub-indices: Economic Incentive and Institutional Regime, Education and Training, Innovation, and Technology, and ICT infrastructure) indicate the decline of the Arab world's ranking on these scales. In fact, the Arab region only precedes South Asia (rank 7) and Africa (rank 8). According to the Knowledge Economy Index, the Arab world attained 4.21, a score below the global average (5.12).¹ In this same direction, the Arab World Competitiveness Report 2012 highlighted that Arab countries, when compared to a group of corresponding developing countries (13 countries), have a gap of 30% in the latent competitiveness field (innovative energy, localisation of knowledge, human capital and technology).² Each of these indicators emphasises the limited ability to produce, diffuse, and adapt knowledge in the fields of human development. This requires the adoption of optimal strategies for supporting the advancement of knowledge in the Arab region.

The knowledge gap challenge coincides with a “youth bulge”, which is considered a key feature of the phase the Arab region is currently witnessing. Statistics indicate³ that the proportion of the age group of less than 15 years in the Arab region is expected to reach 32% by 2015,⁴ and that 1 in 5 people in the Arab region falls in the age group 15-24 years.⁵ This suggests that the demographic status of the Arab countries raises one of the most complex problems. A large segment of the population is made up of the steadily growing youth, who are supposed to form a real chance of progress using their energy and capabilities. However, the countries are incapable of transforming this youth segment into productive human capital. Add to this the marginalisation and exclusion that the youth is subjected to, and the subsequent turmoil and oscillations that were witnessed in several Arab societies over the last three years, the outcome of which can not yet be predicted. Addressing this critical problem is linked to the challenges of creating the supporting and fostering enabling environments when seeking to move towards the knowledge societies and economies. The challenges of such fostering environments vary, whether in their kind, volume or severity, from one Arab country to another. However, the main challenges facing the fostering environments in Arab countries in general are the weakness of the human-capital forming institutions, especially the teaching, training and scientific research institutions, and the growth of the public sector in the non-productive, wasteful employment of young people's energies. Other challenges include the state's capabilities that are based on rentier orientations adopted in most of the Arab countries and the negative effects on the development process this entails; coupled with the weakness of the private sector which is reflected in the weakness of the manufacturing industries, the entrepreneurship sector; youth unemployment as well as youth migration, or what is known as the Arab brain drain. And, finally, the gap of freedom, in its broad sense, which includes the weakness of accountability and transparency as well as the weakness of institutions' governance.

The main challenges facing the fostering environments in Arab countries in general are the weakness of the human-capital forming institutions, especially the teaching, training and scientific research institutions

Variables and Problematics in Youth Integration and Knowledge in the Arab Region

Within this general framework and comprehensive vision of the topics related to establishing the knowledge societies and economies, it has become clear that the relationship involved in “integrating the Arab youth in the transfer and localisation of knowledge” is not a basic linear one. It is rather a complex dialectical relationship involving profound problems and a set of interactive variables, the most important of which are: knowledge, globalisation, youth and development.

With regard to its transfer and localisation, together with its surrounding global and local settings, knowledge is in itself also problematic. Knowledge economies enjoy various attributes and characteristics that need to be emphasised. These include the intensity of knowledge in terms of production and availability, the intensity of the use of ICT and the emergence of knowledge as an economic product. This comes in line with the growth of knowledge trade due to intellectual property rights, the increase of knowledge workers, the increase of the impact of knowledge through economic sectors, the emergence of knowledge management as increasingly important systems and practices, the emergence of innovation and creativity systems, and the capability of knowledge to be transferred and developed.

The analyses of this report, including the field studies, have asserted that the youth are not a single bloc, but one with different social, economic and cultural components that vary from one Arab country to another, and even within the same country. Despite these differences, there are certain values; elements and traits that are common among all the youth in the Arab world, the most important of which is probably the ability to update and innovate.

As for globalisation, and regardless of the nature of any dispute over its identification or specification, it remains the core of the

civilisation we are living in today and the one we have to handle. Among the paradoxes of globalisation is that some of its positive elements constitute the pillars of the desired knowledge society. Some analysts also praise the competitiveness that has been enhanced by globalisation, whether at the state level or among corporations, thus enhancing creativity, innovation and progress. In parallel, another view deems globalisation to be in the lead in enhancing the control of some states, instead of others, in terms of worldwide knowledge foundations. This is manifested in many facts, but most importantly in the dominance of the Global North over the knowledge production sectors and the international communication networks. Meanwhile, many warn about the risks of knowledge-based economies under globalisation, as they are, just like any other capitalist economy, governed by profit supremacy and self-interest without necessarily paying the needed attention to issues of social justice, which, in many cases, leads to the widening of poverty gaps.

Globalisation has had the greatest impact on forming the identity and awareness of the Arab youth as it has shaped various globalised standards including media materials as well as food, drinks and clothing. These manifestations and the nature of the changes they engender happen to clash in many situations with the social, economic and value-based dimensions of the Arab youth and resulted in many cases in what is known as “the hybrid culture”. The negative and positive effects of globalisation encompass the main mechanism that forms awareness, skills and values of the Arab youth, represented by education and formation systems, especially in universities and secondary education. In the framework of the skills and knowledge globalisation, international programmes and standards, as well as the internationalisation of education were established. Education itself has become a platform for launching the globalisation force in the country. It also strongly imposed on the youth the need to master foreign languages, particularly English. The globalisation movement also requires the youth to be able to understand

Globalisation has had the greatest impact on forming the identity and awareness of the Arab youth as it has shaped various globalised standards including media materials as well as food, drinks and clothing

Knowledge is a concept and a product that comprises all sorts of sciences, culture and arts in all disciplines. Whether implicit or explicit or whether manifested in technologies or coded in programmes, knowledge can be transferred by various means to be used and employed. Knowledge is also a “process” that can be transferred and localised. It is based on the research system in education, universities, research centres, development and innovation centres in institutions, and in ICT, which constitutes the pillar of development, connection and effective work, as well as the support for the development in science and production in this age. The connection between the production institutions and the centres for knowledge production within communication technology networks is also a necessity to ensure the continuation of the transfer and localisation of knowledge, not only as a product, but as a process that guarantees employment and production. As for globalisation, it is in mutual interaction with the progress in knowledge as a product and a process, and in what it achieves in terms of economic growth that expands the opportunities for building an economy based on knowledge.

The Arab countries have to deal with all the knowledge pillars, as they provide and create job opportunities and ensure the active integration of the youth. The required reforms for institutions of production, building policies and developing culture, all play a major role as enabling incubating environments for all these variables. The knowledge revolution we are witnessing highlights the importance of the tetrad of knowledge, youth, development and globalisation. The localisation and use of knowledge, as well as the integration of the youth to ensure the positive effectiveness of the connecting relations between the parties of this tetrad, all require policies and strategies for knowledge management and institution management, as well as establishing good governance and social justice systems. The success in building the knowledge society in the Arab region lies in the capability of the countries striving to achieve this goal in building regulations, mechanisms and networks for sustaining the implicit and explicit knowledge diffusion, building networks and providing advanced economic models.

The analyses of this report showed inconsistencies in the performance of the Arab countries in terms of the effective integration of the Arab youth in the processes of establishing a knowledge society

what goes on around them in the world and therefore requires Arab countries to handle an extensive translation and diffusion movement in order for them to master ever evolving sciences in the world. This also requires focusing on the Arabic language as an incubator for the cultural development process, which in turn represents one of the conditions of success in the processes of the transfer and localisation of knowledge.

Nevertheless, the Arab development structure and its environment define the interaction between the youth and the transfer and localisation of knowledge processes, through their social, cultural and political contexts, and by relying on the extent of what this reality offers in terms of abilities and choices, and of what it involves in terms of opportunities and threats. In this framework, the importance of social justice in knowledge-based development is confirmed. It refers to the close link between the request to transfer and localise knowledge and that of public and societal freedoms. Furthermore, considering development as a means to extend the choices of the youth, in addition to developing their capabilities, makes the relationship between the development environment, the youth and knowledge localisation a mutual and close

one. Youth are the knowledge carriers and development makers. At the same time, the development structures and environments provide more opportunities to prepare the youth to achieve sustainable development and enable them to access the knowledge society.

Discrepancies in the Performance of Arab Countries in Integrating the Youth in Knowledge Transfer and Localisation

The analyses of this report showed inconsistencies in the performance of the Arab countries in terms of the effective integration of the Arab youth in the processes of establishing a knowledge society. This was brought up during the survey of Arab youth effectiveness in four major axes: cognitive effectiveness, cultural effectiveness, economic effectiveness, as well as openness and intercommunication.

Cognitive effectiveness means empowering the youth while equipping them with skills and knowledge qualifications that enable them to assimilate, transfer, employ and localise technology. They also allow them to acquire Arabic and foreign languages skills, which help them communicate effectively

on both local and international levels. There are four basic levels in defining the cognitive effectiveness of the Arab youth to create an effective human capital in terms of capabilities; one that enjoys competence and justice in transferring and localising knowledge. The first level is related to acquiring knowledge, training and forming the basic knowledge capital required for the transfer and diffusion of knowledge, the extent of achieving fair distribution of knowledge opportunities among the youth, and the extent of the ability of the education and training systems to achieve this mission. The analysis showed that the majority of Arab countries were still unable to transform their youth population wealth into knowledge wealth that would bridge the knowledge gap and move into the establishment of knowledge-based economies and societies. The 2014 UNESCO data have indicated the existence of about 7 million illiterate young people, and around 51.8 million illiterate adults (15 years and above) in the region.⁶ These illiterates are not only excluded from the calculations of the knowledge economy but are also excluded from the minimum levels of human life, i.e. a life lived with dignity and social justice. Even though the Arab countries have accomplished adequate quantitative achievements in primary education enrolment rates, data show a failure to provide education opportunities that offer the minimum level of knowledge to move towards establishing the knowledge society. For instance, the gross enrolment rate in secondary education was 74.2% in 2012. Despite being close to the global average (73%), these rates remain below those of East Asia and the Pacific (84.5%), Central and Eastern Europe (93%), and Central Asia (98.6%).⁷ The same applies for the Arab youth higher and university education, where the gross enrolment rate reached 26% in 2012. These rates fall below the global average in higher education (32.01%), setting aside the average in Central and Eastern Europe (70.94%), North America and Western Europe (78.95%), Korea (98.37%) and Japan (61.46%).⁸

The second level in youth effectiveness is related to the extent of achieving an

advanced quality of knowledge acquired from education and training, and the extent of its success in improving cognitive effectiveness among the youth. Despite the progress achieved in many Arab states, particularly in the Gulf, most studies find that the quality of outputs, especially in the pre-university education cycle, still falls below the sought level. As for the outputs of higher education, the absence of scientific studies and evaluations restricts the judgement of their quality to the extent of employer satisfaction with the skills of university graduates. This was refuted by the findings of the studies regarding this subject, which indicated a decline in the quality of outputs and highlighted their incompatibility to the needs of the labour market. The third level is related to the development of self-capacities in the field of information and communication that aim to examine the Arab youth's capabilities and their extent in using information technology, as it constitutes a pillar for progress in the transfer and localisation of knowledge. Various data indicate an uneven spread of ICT, along with a progress in the possession of technological skills among the youth, as well as an expansion of technology use in the Arab region. Nonetheless, there is still a relative gap between the youth in the Arab region and their peers in developed countries while the employment of ICT for the purpose of obtaining knowledge is still limited. Reservations can still be observed regarding the quality of technology employment and the extent of the youth's success in integrating it as an essential mechanism in research, development and innovation, and in dealing with it as an essential structure in the scientific research system. The fourth level is associated with the active participation of the youth in scientific research activities and innovation, and highlights the determinants and obstacles standing in the way of the youth's effectiveness in diffusing and localising knowledge. In this context, and despite the difficulty of accurately defining the youth's net contribution in the research products; innovation and development, the general status of research activities and innovation in the Arab states indicates that the region

Despite the progress achieved in many Arab states, particularly in the Gulf, most studies find that the quality of outputs, especially in the pre-university education cycle, still falls below the sought level

The conflict between the currents pushing towards modernity and others towards tradition – that mostly drift towards the past – has led to the formation of a “hybrid culture” and diverse intellectual currents among the youth

in general is still excluded from the global competition. This comes despite some successes and the existence of inconsistent steps towards anchoring a research and innovation supporting environment. The average production of scientific research articles in the Arab region for every one million people is merely 41 research papers; in comparison with a global average of 147.⁹ The Arab countries spent in 2012 between 0.03% and 0.7% of their GDP on R&D, which is less than the global average, i.e. 2.13%.¹⁰ Similarly, innovation patents in Arab countries are negligible compared to international standards. If Arab countries want to move towards knowledge-based economy systems and knowledge-intensive production, then scientific research and innovation would require special attention and targeted policies that would make them development priorities.

When addressing effectiveness related to the issues of culture, identity, values, knowledge and citizenship, which are overlapping and interactive conceptual concerns, we discern many dilemmas and complex issues. Examining them in the Arab region remains imprecise most of the time and in many fundamental structural subjects. A collective awareness must be built regarding their disparities and interactions, including the problems of dealing with several dualities such as modernity and authenticity, openness and preservation of tradition, all the way to the establishment and adoption of general convictions to determine tendencies and foundations required to

Box 6.1

Globalisation and the Arab Cultural Identity

While discussing globalisation and knowledge societies and their impacts on the Arab cultural identity issue, many neglect the fact that the knowledge-based society, first and foremost, requires rationality in economic management, and is based on a social structure framed in a contemporary culture and great capabilities to communicate. Modern culture has created the economic institutions and has developed the information technologies for more connected and more productive societies.

Source: Kamal Abdul-Latif, background paper for the report.

deal with contemporary issues. And at the forefront of these issues in the Arab region are building knowledge-based societies and economies and the effective integration of the youth in these processes.

Analyses have demonstrated that the political and cultural history of the Arab region, including the Ottoman legacy, the various Arab independence movements, the emergence of conservative intellectual and religious streams and the rise of globalisation, have played a key role as a cultural force in the formation of the Arab mind and the youth in particular. The conflict between the currents pushing towards modernity and others towards tradition – that mostly drift towards the past – has led to the formation of a “hybrid culture” and diverse intellectual currents among the youth. The data also revealed the absence of comprehensive policies to develop culture in the Arab countries, in order to build new cultural structures that are aligned with the transfer and localisation of knowledge, similar to what has been achieved in developed and developing countries such as Japan, South Korea, Malaysia and Singapore. These countries have actually succeeded in establishing new cultural structures that support scientific, technological and social development, and were thus able to achieve comprehensive development in their cultural and developmental status.

Every country in the Arab region faces the necessity of enlightened cultural development that supports modernity, scientific and critical thinking methods and creativity, as well as building social and political rules that enable the youth to expand their opportunities and choices to integrate into the global competitive economy. This would complement the renaissance project without which it would be hard to build the knowledge society, and make the processes of transfer and localisation of knowledge succeed.

As for the economic effectiveness of the youth, it has been noted that young Arab people remain far from employing knowledge in the activities of the economic field, and from appropriately participating in production and development. Several studies attribute the weakness of economic

effectiveness among the youth to several factors, including a decline in the quality of education, the discrepancy between educational outputs and the labour market requirements, as well as the unfavourable structure and conditions of macroeconomics which hinder investment in fixed capital and productivity growth. This coincided with a cultural pattern unfavourable for work values, in addition to social bias against women. Women do not properly participate in the labour market and economic, political and social life, despite achievements made in bridging the gender gap, especially in education. Also, economic effectiveness is related to the Arab youth in many important issues, on top of which lies poverty, with its various dimensions. By linking poor income with other dimensions such as food safety, education and health, we find that the Arab region has failed to build effective mechanisms and policies that achieve social protection coupled with social justice foundations. This is clearly reflected when examining the equality and income distribution issue that is, in turn, linked to the distribution of knowledge, skills and education opportunities.

Openness and intercommunication form a major requirement and regulating line in the overall activities aimed at the effective integration of the youth in the transfer and localisation of knowledge processes. Openness and communication among the youth are centred on several factors, including cultural openness to contemporary data in terms of knowledge, culture, sciences and arts, acceptance of diversity, active contribution to the production of the global culture, as well as the Arab youth's capability to use modern technology to communicate with what they witness in terms of cultural interactions in the surrounding world. Add to that the factor of freedom of immigration and of internal and external mobility. In this setting, the available data revealed an expansion in the circle of openness and communication among the youth in the form of travel for the purpose of tourism, or in the context of regional or international exchange. This would contribute to the expansion of the experiences of the youth,

and give them the opportunity to benefit, in addition to the explicit knowledge, from the implicit knowledge enjoyed by others in developed countries. This, in turn, contributes to the transfer and localisation of knowledge in their original countries.

Box 6.2

Youth Immigration: From 'Brain Drain' to 'Brain Gain'

Serious efforts and strategies in India, China and the Philippines have succeeded in benefitting from their immigrant citizens abroad. At first, they succeeded in building internal scientific and dynamic groups that attract their citizens, either to return, or to participate in research, projects and programmes. Second, they prospered in creating networks and connections between the local scientific groups and the ones abroad, and connecting all of this to international research centres and scientific groups in developed countries. Third, they succeeded in increasing the scientific effectiveness in the nation through continuous education and training, and improving the learning environment in universities and institutes. Fourth, they have succeeded in retaining the new generations through continuous motivation and support. Fifth, they succeeded in focusing on the foreign languages, especially English.

Source: Report Team.

The basic enabling environments are the major pillars for integrating the youth into the transfer and localisation of knowledge. These enabling environments include the higher education system, the scientific research system and the overall development environment, including the infrastructure, business climate, investment projects and the laws and legislations. The analyses revealed a number of obstacles; some are related to the underdevelopment of the education and training systems (enrolment systems, teaching methods, scarcity of the research activities and student density), and others are associated to the weakness of the scientific research system (the weak research budget, lack of motivation and lack of cooperation and partnership networks with the institutions of the public and private sectors). These are, in fact, obstacles related to the stumbling of the development system as a whole in many Arab countries. In this respect, the various development indicators

Openness and intercommunication form a major requirement and regulating line in the overall activities aimed at the effective integration of the youth in the transfer and localisation of knowledge processes

Concerning the student perceptions of the transfer and localisation of knowledge, the answers were mostly positive

confirm the progress of oil-based economies represented by the GCC countries, in comparison with the lowest-income Arab countries that occupy low ranks on Arab and international levels. This indicates the existence of an Arab-international gap, in addition to the presence of another equally important gap, i.e. the Arab-Arab gap, on many levels. These factors have contributed to the aggravation of the labour emigration phenomenon, notably in highly-skilled labour, that has affected national production, despite the financial returns.

Results of Field Studies Strongly Suggest the Need to Act...

The image on the status of the Arab youth and their relationship with the process of transfer and localisation of knowledge is complemented by what the field surveys provided in terms of data retrieved from the youth themselves. In preparing this report, the field surveys conducted within four Arab states (namely Jordan, UAE, Tunisia and Morocco), have pointed out a major inconsistency in the possession of cognitive skills among the Arab youth in the final stages of university, with the emergence of a specific weakness in written communication skills in both Arabic and foreign languages. Despite the differences between one country and another, these findings are analogous to those of previous studies on both regional and international levels. This is a cause for concern especially if we look at it from the perspective of building capacities for the transfer and localisation of knowledge.

However, the status of the youth with regard to the value aspect seemed to be much better than their knowledge status. Their answers revealed positive tendencies towards a set of cognitive, social, universal and personal values. This is contrary to effectiveness, where the students in the study showed a general weakness in the various arenas of effectiveness (especially political and social effectiveness), with the exception of cultural effectiveness. The outcomes also showed that the citizenship concept was scattered between those linking it to a place and those linking it to history or belief, which indicates

that this concept remains underdeveloped for the majority of these students.

The pursuit of the transfer and localisation of knowledge requires openness to the parties that produce this knowledge and possess its secrets and mechanisms. This would occur in the context of a fostering enabling environment that offers the youth opportunities to develop their competences. However, the findings of the current research have revealed a decline in the degree of openness among the sample students. A large percentage were unsatisfied with the university education system, most importantly the teaching methods and the academic research system. Concerning the student perceptions of the transfer and localisation of knowledge, the answers were mostly positive. The participating youth expressed their interest in this issue, and acknowledged its positive impact on the economy and society, as well as its role in stimulating the creativity, reducing social differences and unemployment. At the same time, the majority acknowledged the possible influence of the knowledge transfer and localisation on changing the cultural characteristics of the Arab countries and the marginalisation of local products. Opinions, however, were divided concerning the process of transfer and localisation as a consecration of subordination to the West.

Based on the results previously outlined, we confirm that promoting youth effectiveness and value systems is a collective responsibility, in which the family, school, university and society play a critical role. Also, and not to be neglected here, is the contribution of civil society institutions through the value-based dimensions they consolidate in their activities and the various initiatives they take. These develop the youth skills and their capability to employ knowledge to serve their country's economy and to promote their societies. This should take place in the context of a civic life based on values and principles of tolerant religions, the culture of human rights, ideals and morality based on moderation, mutual respect and the acceptance of diversity and difference.

A major role in the formation of political awareness and its consequences in terms of positive tendencies regarding democratic practices remain ruled by several factors, at the top of which is the education system. With its various human contents, democracy cannot be separated from people's awareness and recognition, and must be realised through education, prior to being manifested in reality. Therefore, education needs greater attention. This heightens the responsibility of governments to provide education for all and the responsibility of the school and curricula to develop positive tendencies towards volunteering activities and establish social networks, as well as anchoring a citizenship spirit and supporting it with a solid base of social standards.

In the process of renewing the cultural structures of the Arab society, citizenship imposes itself as one of the pillars of identity formation, and as an essential introduction to the democratic practice. Citizenship is based on equality in rights and obligations, social justice, the rule of law and other values that respect humans and guarantee their rights to a decent living and effective participation in building human civilisation. This can only be achieved through the diffusion of the culture of positive citizenship starting at childhood, and offering the opportunity, through curricular and extracurricular activities in all education cycles, to practice the various dimensions of this citizenship and absorb them in such a way that they become a part of the person's conscience in the individual, social and global self.

In this context, university systems should bear the responsibility of acquiring the cognitive effectiveness and forming the youth to enrol effectively in the labour market and public life. The responsibility of governmental and non-governmental organisations and youth institutions, is as important considering they are among the pillars that enhance the role of education and training systems. Communication with other young people, either on-line or face-to-face, and opening up to other cultures can enhance the acquisition of life skills. And for that to be achieved, countries must make efforts to develop the

openness horizon among the youth within the framework of a well-planned policy and in accordance with clear objectives and accurate standards. This would help in directing openness efforts appropriately be it in order to select the parties whom openness efforts should be directed (to universities, academic laboratories, training centres, research institutions and scientific clubs and organisations), with the perspective of enhancing the student experience and empowering their competitive capacities.

Future Action: Towards Effective Enabling of the Arab Youth in the Transfer and Localisation of Knowledge

Box 6.3

Bright Spots in Scientific Research

Studies show that there are solid factors that can be built upon. They are manifested, firstly, by the presence of universities, institutions and research centres comprising active scientific cadres. Even if they do not constitute the required critical mass yet, they are however, active participants. There are also some highlights in many fields. In the research field, for example and not exclusively, Morocco has taken the lead in neurosciences, Tunisia in communication sciences and Egypt in agriculture and biotechnology sciences. Egypt and Jordan have taken the lead in the pharmacy and pharmaceutical industry sciences. The GCC countries were ahead in medicine and pharmacy. Obviously, these bright examples are still in a development phase compared to the global levels. However, they can be built upon while seriously addressing the weaknesses of the research field, especially when it comes to developing corporate governance, building motivation systems, devising comprehensive strategies for research and linking the latter to development in the region.¹¹

Source: Report Team.

The region is currently witnessing a historical shift in which it enjoys the youth wealth alongside financial wealth. It is a shift also characterised by the rise of knowledge and technology wealth in which the developed world around us is surging, and which is available due to the globalised nature of accessible knowledge, if the true political and societal will is available; and due to the nature of the

Citizenship is based on equality in rights and obligations, social justice, the rule of law and other values that respect humans and guarantee their rights to a decent living and effective participation in building human civilisation

Scientific studies have confirmed the positive relationship between student achievements in science and maths and the economic progress of society

liberal reality prevalent in the world despite many constraints and obstacles. The triad of financial wealth, human-youth wealth and the global knowledge revolution means that the opportunity of the Arab world to make its breakthrough is presented, even strongly required. It is an opportunity for the countries of the region to move from a traditional rentier economy to knowledge-based economies, and from a youth bulge to a demographic treasure characterised by the economically and socially active youth with what they own in terms of knowledge equipment and effectiveness based on principles of knowledge, skills and values, in order to build a new Arab in a new world-one that enjoys freedom, dignity and well-being.

Box 6.4

A New Education for Building New Cadres

The job map and its management have altered. In fact, new jobs need people who enjoy various experiences and know how to smoothly deal with the diverging and complex technical issues, in addition to those related to management. For example, an IT operator has to be someone mastering technology and protecting it, and must also be an expert in business management. Scientific studies have confirmed the positive relationship between student achievements in science and maths and the economic progress of society. In countries in which achievements in science and maths has increased, and that have moved towards teaching methods based on critical analysis and instilled cooperative education, the production efficiency has also increased alongside an increase in national income. Their economies have also prospered. This is attributed to the formation and enabling of their labour forces.

Source: Sherif Kandil, background paper for the report.

Axes and Mechanisms of Action

The field studies and analyses presented in previous chapters of this report, which revealed the existence of problems and dilemmas that are hindering progress, place enormous responsibility on policy and strategy-makers to act before these challenges get worse and start to threaten stability and growth.

In order for the youth to become an active, knowledge-based economic and social force in building a development renaissance based on knowledge and education, a social cohesion must be built on strong foundations of social justice; enlightened cultural development that changes the social perception of the human being; knowledge; the fair distribution of skills, knowledge and capabilities; handling ICT; enhancing the will of active participation; and updating the innovation systems and promoting them among the youth. Social cohesion imposes social justice as a compulsory condition for the progress of the nations, puts an end to marginalisation and exclusion and integrates youth as an active energy in the transfer and localisation of knowledge, as well as the progress of the nations.

These facts highlight the need to act along clear axes to induce deep changes that are translated into accomplished policies and strategies that can comprise the following:

Building National Institutions for the Integration of the Youth

The youth integration process in the field of knowledge production and diffusion necessarily requires, in addition to training and formation institutions, the establishment of developmental institutions aligned with the production and governmental services sectors, as well as the private sector in various areas (health, education, food, work, employment, technology, arts, environment and science). These institutions must grant the youth the opportunities to deal with an informal education and training system, enabling them to obtain degrees and experiences that the government and the private sector acknowledge. These would act as systems that motivate integration and positive participation, and turn the school-to-work period for the youth and public life from an invalid state, destructive to the acquired skills, to a stage of investment and testing of these skills in reality; which contributes to exploiting and enhancing them. The absence of these institutions in particular, and the absence of mechanisms of integration of the youth in society in

general, in the Arab region, are probably among the most important reasons for the length of the periods during which the youth wait, after graduation, to enter public life.

Arab countries should also work on equipping and building national services programmes for the youth, which would enable them to start their own local projects and programmes that address the development of entrepreneurship and respond to the local needs of the youth. Such programmes would grant the youth formal and informal training opportunities allowing them to gain experiences, knowledge and useful expertise and skills. Add to that other programmes that provide information about the labour market, guidelines for career paths, knowledge of available job opportunities, especially in the private sector, as well as the requirements for obtaining these opportunities. As for communication and marketing skills, they are among the essential skills for the youth. They promote confidence in themselves and in their society, and deepen their belonging and motivation towards the future.

This report also addresses the social responsibility of corporate capital in offering continuous training programmes that prepare for work on one hand, and a continuous reform of the education systems on the other. Continuous education and training must become a permanent philosophy regulated by policies that strive for the knowledge society.

Reforming University

Most Arab universities have numerous problems. At the top of these lies the issue of student density that does not match the absorption capacities of universities and the weak available resources and scientific facilities and the issue related to the status of the teaching staff and their development opportunities. Furthermore to be noted are the lack of traditions rooted in scientific research and the absence of research plans; which have produced a quality of outputs that is below standards.

Box 6.5

India's Experience in Building Democratic Institutions and Organisations for Enabling the Youth

In the institutions established by India during the rule of Nehru, the youth learn, train and work in planning, devising strategies and implementation in the fields of health, food, education, training, labour, employment, culture, arts, behaviour, life values, citizenship and participation and effective handling of the problems of environment, technology and entrepreneurship. They learn through direct work and training as well as the collective practice of knowledge. They act as informal education institutions, working in parallel with the formal education system, as well as with universities and secondary education. While the State defines the public policies, priorities, needs and vision of these institutions, the youth tend, through these institutions, to conduct the operations of planning, implementation, work, learning, training and connection to the labour market. The State and the private sector acknowledge the outputs of learning, in accordance with rules that inspire motivation and mutual trust. These institutions have aimed at: first, enabling the youth through work, participation, education, training, culture, knowledge and development of capabilities; second, achieving equality, addressing gender-based discrimination, supporting women in terms of health, education, work and social protection; third, finding institutional connections and strong ties between the development sectors in society, such as education, health, work, training and other sectors; fourth, building technology networks and research and development systems in the field of youth development and capacity-building; and fifth, creating an effective climate of entrepreneurship connected to knowledge, technology and knowledge economies.

Source: Kumar 2009.

The Arab countries ought to respond to international development resulting from the globalisation phenomenon and associated intensification of competition over higher education markets and the increase of investment costs

The Arab countries ought to respond to international development resulting from the globalisation phenomenon and associated intensification of competition over higher education markets and the increase of investment costs. It has become imperative to take measures to reform higher-education systems, so that they can keep up with international standards and guarantee high-quality conditions, as well as measures of accreditation in order to improve the quality of the human capital and its competitive capabilities, in addition to focusing on the philosophy and systems of continuous learning. Throughout its

Box 6.6

The Institutional Accreditation for Higher Education Institutions as a Mechanism

Obtaining institutional accreditation for higher education institutions can be considered the minimum required to ensure the quality of many elements related to the formation of students for the transfer and localisation of knowledge, and for their acquisition of the knowledge skills required for this process.

According to the Saudi National Organisation for Assessment and Accreditation "Ptamad" (www.ncaaa.org.sa), the quality insurance and accreditation standards for higher education institutions comprise 11 standards that include the institutional context, learning and teaching quality, the support for educating students, infrastructure, and societal contributions.

It is certain that meeting these standards and obtaining institutional accreditation by the Arab universities would effectively contribute to insuring the quality of higher education and the quality of the final product, as well as forming it to be able to contribute to the transfer and localisation of knowledge.

Source: Walid Zibari, member of the report's Reading Committee.

The accelerated and significant change happening worldwide in technology, labour, competitiveness and globalisation has imposed an accompanying adjustment in the environment of international institutions and organisations working in the transfer and production of knowledge

limited years, higher education cannot fulfil the requirements of professional life, as well as those of providing ever-changing economic and social environments and international markets driven by steadily developing technologies. This can only occur if graduates are capable of following the changes and updating themselves independently after graduation.¹²

Facing these challenges requires an increase in budgets allocated to higher education and research, devising strategic objectives and action plans that can be implemented, creating accurate and credible databases as well as high-capacity networks, in addition to encouraging the private sector to contribute to research and university education.

Restructuring and Activating the Research System

The emergence of the government sector in conjunction with the strong role of the state in managing research activities in the region, and the ties of these activities with public universities in most Arab countries, allowed for the domination of bureaucracy,

the centralisation of management and the hierarchal organisational structure of research institutions. This, however, does not match the requirements of building a society, and hinders the proper management of knowledge, in a way that allows communication with the world. It is also incompatible with drafting cooperation frameworks with universities and advanced international research centres. Efficient knowledge management necessarily requires shifting from a bureaucratic and hierarchical structure to governance based on intensive knowledge. In fact, research institutions, as well as R&D and creativity and innovation centres should operate in a "Flat World" and have live interaction that is based on scientific ethics and standards. Knowledge systems should also be connected with national development programmes and plans.

The accelerated and significant change happening worldwide in technology, labour, competitiveness and globalisation has imposed an accompanying adjustment in the environment of international institutions and organisations working in the transfer and production of knowledge. This necessarily requires a new pattern of leadership that enjoys new capabilities and mental models. The Arab region in its management of scientific institutions (universities, research centres and creation and innovation centres), is in need of a new leadership, with specific intellectual characteristics, communication skills and cooperation with the Flat World, in addition to personal capabilities in knowledge management. This aims at building an integrated system of R&D that forms an integral whole for comprehensive relations with economic, political and cultural structures and legislation, as well as information and knowledge bases in their mutual interactions with the R&D system in institutions locally, regionally and globally. Successful knowledge management expresses knowledge connections in its links to effective relations in society.

It is also necessary to establish authorities that are responsible for the collection of data and information on scientific research

Box 6.7

Technology Parks and Business Incubators: Towards Establishing Supportive Environments and Technology for the Localisation of Knowledge

Since the 1950s, so-called technological parks or gardens have emerged, based on the concentration of industries and research institutions in the same space, in order to establish the tie between research and production systems. Drawing on these experiences, a limited interest appeared at the beginning of the 21st Century among some Arab countries to launch such initiatives in the vicinity of universities and industrial areas, and examples of this abound; the El Ghazala Technological Park in Tunisia, specialises in the production of communication applications. This park includes a research centre, an educational institution, a business incubator and start-ups operating within partnerships with foreign institutions from India, the United States and other countries. In Egypt, a city for scientific research and technological applications was established in the area of New Borg El Arab and Alexandria. It is a research body that aims at linking industrial enterprises with scientific research institutions by focusing on technology incubators for small and medium industries. The Arab Science and Technology Foundation was established in the UAE and is based in Sharjah. It aims at strengthening the link between the world of production, universities and research centres inside and outside the Arab world by encouraging companies to provide the funds necessary to employ research in priority areas of economic development.

On another level, business incubators were centred within universities or in technological cities. Business incubators are an intermediate environment between the educational institution and the independent work field. The passage of university graduates through business incubators represents a transitional stage limited in time between the study period and the stage of entering the world of production. Many countries such as China and Malaysia have betted on these structures to support research and development activities and generate technology through the creation of a fabric of innovative institutions in various specialisations. Incubators adopt and host young entrepreneurs who have graduated from academic institutions, providing them with a space for a specific period with the minimum services to help them transform their ideas and creativity to a marketable product. The incubation period usually lasts three years and ends with a final project and then new innovators and projects are welcomed.

Information about success stories achieved by these incubators in the Arab world is still scarce because the production of accurate statistical information is still not part of their institutional practices. Therefore, we do not have sufficient data on the number of job opportunities created every year by business incubators in Arab countries, nor do we have information about entities that were successful after being hosted by, and graduated from, such incubators.

Noureddin al-Diqqi, member of the report's Reading Committee.

In conclusion, there is an urgent need to build supportive and motivating policies and strategies to engage the government and the private sector in developing the scientific research system, including the reform of university, pre-university education and higher education

activities, institutions, policies, cost and its expenditures. One of the results of the absence of this type of institution is that research efforts have become unplanned and not related to the immediate and future needs of the region. We cite for instance the insufficient research in energy, desalination and environment preservation. The absence of such institutions shall hinder the training efforts, result in the absence of agreed scientific standards and delay their localisation through scientific means and methods.

In conclusion, there is an urgent need to build supportive and motivating policies and strategies to engage the government and the private sector in developing the scientific research system, including the reform of university, pre-university education and higher education. This also entails building creativity and innovation systems

in institutions and at the national level, supporting the technology infrastructure in training and research, as well as enhancing the effectiveness of production entities in developing training and establishing motivation systems for the youth in R&D.

Encouraging and Supporting Foreign Investment

Studies have confirmed the importance of Foreign Direct Investment (FDI) in the transfer and localisation of knowledge. There are lessons to be learned from the experiences of those countries which have made progress towards building knowledge economies and dealt with FDI by reducing its disadvantages and maximising its advantages and by establishing conscious standards for integration and cooperation between this investment and the local efforts made in development, the establishment of advanced

Continuous education and lifelong training should be a social motto adopted by the society as a whole

The private sector should support development activities that are based on knowledge, technology and the integration of the economy

technological industries that encourage youth employment and the dissemination of the technology of innovation, scientific research and development. In order for the countries of the region to advance towards modernity and the establishment of the knowledge society, such as the corresponding countries in East Asia and Central and Eastern Europe that have achieved progress in this regard, they have to take into account that FDI is a major indispensable component in the process of the transfer and localisation of knowledge, the transition to modernity, the restructuring and modernisation of institutions, and the establishment of the knowledge economy and the knowledge society.

Encouraging and Supporting the Private Sector

It is necessary to encourage the private sector, support it and stimulate it to create job opportunities for the youth, transfer and employ knowledge and gradually shift from the policy of government employment to develop the personal capabilities of the youth, encourage entrepreneurship and build mechanisms that integrate young people into the labour market. This requires countries in the region to improve the work environment and ensure the proper governance of the public sector, in addition to reducing the size of the public sector and encourage the private sector role in the production and development of the economy. This must happen together with the establishment of links between the youth and the labour market and education through National Qualification Frameworks that also need to be established. These efforts should be made along with the establishment of institutions to support young people in taking advantage of the formal and informal systems of continuous learning that are closely linked to the private sector and its evolving needs.

As already established, it is essential to encourage and support the private sector, but this does not eliminate the role of the State in drafting policies that ensure protection of social justice and citizenship rights. The private sector should support

development activities that are based on knowledge, technology and the integration of the economy. This support should be based on the pillars of social cohesion, without marginalisation or exclusion. These development means should also support the participation and freedom of women and expand opportunities available to them, in particular, in the transfer and employment of knowledge.

Supporting Training Programmes and Capacity Building

It is also necessary to support the public and private sectors along with the civil society organisations in order to enable them to contribute to the establishment of training and capacity building programmes, in light of successful experiences in other countries such as India and Singapore. Continuous education and lifelong training should be a social motto adopted by the society as a whole. Such programmes should ensure the continuity of re-qualification and capacity building for the individuals to enable them to cope with the rapidly evolving job market whose changes are accelerated by the knowledge and technological revolution.

In order to provide high-quality education and training in addition to the qualification of the youth to join the labour market, there must be a high-level commitment from employers; one based on advanced legal and institutional frameworks. In fact, training in work institutions is a process that should be regulated by law and carried out within the framework of government policies and institutions enjoying enlightened governance. There is also a need to make training a part of the formal agreements between companies and universities, along with orientation centres for students in each university to facilitate their enrolment in training in the companies that have signed the agreements, noting that the training certificates should be recognised from the private sector, the government sector and the university.

Training and qualification should focus on providing young people with transferable

general skills, such as problem solving, critical creative and contemplative thinking, logical thinking, having a broad imagination, taking the initiative, flexibility and the analysis of the issues from different perspectives. These skills include trying innovative and creative ideas and making decisions on the basis of experience, empirical evidence and the use of Arabic and foreign languages to stress the value of intercommunication and openness.

The consideration of training leads us to the issue of secondary technical education in the Arab region. It is noted that this education is either exaggerated, as is the case in Egypt, or less available than needed, in varying degrees, in terms of both quantity and quality. It is in both cases an education similar to secondary education but does not lead to university. Hence, it turns into a second-class education socially and outside the scope of the new requirements of the labour markets that should advance on the basis of knowledge and modern technology. In its 2012 Education for All report, UNESCO considered that the separation between the general and technical path in secondary education compounded the issue of inequality in opportunities, increased academic leakage and harmed the professional potential of the youth. Secondary education must be dealt with – for both the technical and general path – on the basis of the availability of a wide cognitive and skill base that prepares young people from either entering the labour market or continuing their education at universities. This way, secondary education becomes a good source to provide universities with young people who enjoy the general skills that help in gaining more specialised skills. Good planning can only be built on a broad

Building education and training systems, producing knowledge and encouraging the private sector are not enough, as governments in the Arab region are still responsible for preparing the general environment for the transition to a productive economy based on knowledge and scientific research. The elements of knowledge, economy and the youth would then merge to achieve economic growth and build a knowledge society and economy.

base of general knowledge and skills. This is the essential mission of secondary education, and this perspective could provide the means for adopting the philosophy of continuous learning for everybody for life.

Building Arab Qualification Frameworks

The UN message entitled “Youth as a Smart Investment” indicates that investment in the youth and families in the Arab region is mainly focused on education and training. However, the majority of young people cannot benefit from these investments or even use their skills, due to the low value of the acquired skills that are not compatible with the requirements of the labour market, in addition to not giving great importance to the factor of merit in getting a job. From here comes the need to adopt qualification systems for young people to get education and jobs, in addition to making available the various education fields and the second-chance options as essential elements in the development of the productive workforce. A society that is based on merit reflects in a clearer way the needs of the market for education and training systems. It thus directs the demand for “appropriate” skills in the “appropriate” areas and bridges the gap between the needs of the market and

The majority of studies agree on the need for state intervention with effective mechanisms to support the private sector and civil society organisations to integrate young people into the labour market. This is done through providing the sector with knowledge, skills and technical training and making it acquire life and social communication skills and standardising this relationship in light of new “National Qualification Frameworks” linking the levels of skills and knowledge and the levels of the labour market. This can also be achieved by building institutions to support young people after graduation – or even during their studies – and linking between the general and technical secondary education and the university. All of these are important mechanisms, but their activation requires institutionalising them in the form of constitutional, legislative and legal rights to protect young people and motivate the private sector. The mechanisms should also be enabled to function on the basis of good governance.

A society that is based on merit reflects in a clearer way the needs of the market for education and training systems

Good planning can only be built on a broad base of general knowledge and skills

the outputs of the education and training system.

The experience of the European Union countries since the 1990s and the current experience of East Asian countries emphasise the importance and necessity to establish a National Qualification Framework to integrate labour, especially young people, in the knowledge economy. The Arab world should also use the National Qualification Framework as a way to join the global competitive markets. The National Qualification Framework is the mechanism that links the knowledge and skills provided by the various education stages, levels and programmes on the one hand, and the knowledge and skills required in the labour market in production and services on the other hand. It should therefore be an important element in the recruitment process due to its inclusive standards that regulate the skills and knowledge needed for the job market at various levels and also its ability to contribute to the development of education, training and assessment tools. This is in addition to their motivating role in activating production in the private sector and encouraging confidence in young people and the abilities, knowledge and skills they provide.

Transition to Knowledge-Based Development

The current global changes dictate considering and addressing the impact of many variables on the status of economic, social and cultural structures in the Arab region. We must interact with these variables, benefit from the opportunities they provide and avoid the risks involved. The most important impact of international changes on the economy is the underlying shifts in the labour market and the economy structure manifested in arbitrary changes in the behaviour and structure of the institutional organisation of the labour market. Production and services enterprises in the labour market are seeking to achieve highly-efficient institutional performance and highly-flexible institutional systems that focus on achieving quality with distinct

Box 6.8

The Experience of Singapore

The experience of Singapore emphasises important pillars, including the dependence on high-skilled human capital that has intense knowledge, the attraction of FDI and maintaining stable and peaceful relations with neighbours (China and Malaysia, mainly), while improving the business environment, finance and fighting corruption. This is accompanied by the interest in R&D, establishing the national qualification degree (the framework of national qualifications) to provide the needs of the industry with the required standards, and engaging it into continuous training programmes. All of this sits in the shadow of the social justice principle, not “social welfare”, starting from providing shelter to every citizen, building an education system that offers high-quality education to society, and providing governmental support to education and health.

Source: Ahmed Kawaz, 2011.

standards, diversifying economic structures, raising productivity, encouraging the behaviour of initiative-taking, creativity and problem solving, as well as building the systems of scientific research, development, innovation and creativity. In the context of globalisation and the knowledge and technology revolution, these new systems were based on a network for communication and information exchange directly between all employees. They produced new patterns of social and cultural relations, relying on directness, access to information, transparency, expansion of the base of participation, accountability and the rule of law. These conditions also allowed the internationalisation of knowledge and skills and the movement of capital. If the Arab region aspires to advance, it will not be in isolation from these changes, and it should build the policies and strategies to achieve socio-economic, cultural and historical progress that links it to global civilisation and makes it a competitive partner.

The Arab states are required to adopt the developmental state model, based on the foundations and pillars of building a knowledge society. They also need to exclude the model of the rentier economy-based state, so that it enjoys the capacity of turning the remarkable capabilities and human

The Arab states are required to adopt the developmental state model, based on the foundations and pillars of building a knowledge society

resources in the region into a base that develops social cohesion and integration, and works on the transfer and localisation of knowledge. The localisation of knowledge is among the major levers in economic growth. It guarantees the rights and welfare of the Arab human being. Likewise, it also reduces poverty, creates decent job opportunities and regards social spending as a true investment for the future and an enforcement of the citizens' right to education, health and work. The state should be supportive of effective institutions and good governance, more submissive to accountability and strict in enforcing the rule of law, supportive of the individual's participation, and assertive of positive citizenship. Development, in this sense, achieves effective competitiveness and positive integration in the global civilisation, in its present global sense.

Social Justice, Citizenship and Preserving Social Cohesion

The concept of social justice is an essential axis in development that strives to build a knowledge society. However, building this society is not limited to establishing the knowledge economy, despite its importance. The knowledge economy, by nature, is concerned essentially with economic growth and is more interested, as any other capitalist economy, in profit than in the cause of equality and citizenship. Hence, the focus is on the element of social justice and on transcending the knowledge economy in its narrow sense, and seeking to establish the knowledge society which is an integrated "state" of progress and human welfare. This is why we emphasise the tetrad of knowledge, social justice-based development, globalisation and youth, as four dimensions that ought to be integrated in order to ensure success of the transfer and localisation of knowledge and to establish a knowledge-based progressive society. We also underline the issue of citizenship for the equality, active participation and enabling of women in the Arab region; these are indicators of social justice which is a pillar for development that achieves the integration of the youth and asserts their effectiveness as well as

the development of their cognitive and economic capabilities.

The knowledge-based development that seeks the establishment of the knowledge society based on social justice will face no contradictions between the freedom of the market and the state. The market and the state are integrated in achieving development in this sense. The state is also responsible for supporting and developing the private sector so that it assumes its role in achieving a comprehensive and non-exclusionary development that encourages everyone, and assumes its social responsibility, provides decent job opportunities, and encourages participation among all citizens without any discrimination or exclusion. The state is also responsible for providing protection policies and legislations that ensure the enforcement of rights and provide the fundamental structure for technology and the transfer and localisation of knowledge. In the context of market freedom and state support, the private sector enhances competitiveness by investing in the human capital and in localising and producing knowledge and human welfare.

Administration and Good Governance of Institutions

It is essential to discuss the reform of institutions based on good governance and the development of a flexible structure that promotes expertise, individual capabilities and plurality. One of the obstacles to progressing in the transfer and localisation of knowledge and the integration of young people to move forward towards modernity in the Arab region lies in the relationship between the traditional cultural structures and the rentier economic structures. This backward cultural and economic mix excludes the youth instead of integrating them, supports disintegration instead of achieving cohesion and imposes cognitive structures that impede the path of modern institutions – such as universities, research centres and others – in their progress towards the transfer and localisation of knowledge; thus preventing the region from completing the modernisation and growth project and from establishing the knowledge society. The changes in the revolution of knowledge, technology and globalisation impose institutional reforms based on scientific research, development, creativity and innovation, in addition to transparency,

The knowledge economy, by nature, is concerned essentially with economic growth and is more interested, as any other capitalist economies, in profit than in the cause of equality and citizenship. Hence, the focus is on the element of social justice and on transcending the knowledge economy in its narrow sense, and seeking to establish the knowledge society which is an integrated "state" of progress and human welfare

the fight against corruption, knowledge management and openness to the world on the basis of mutual dependence. The efficiency of these institutions is asserted through increased productivity and through the cultural, scientific and economic openness to the world.

Supporting Arabic Language Reform Programmes and Advancing it Towards the Knowledge Society

We must look at reforming the use of the language and its role in the knowledge society as an opportunity for the prosperity of another aspect of regional collaboration and integration and for strengthening cooperation between the involved institutions at various levels, and through the engagement of all expertise within and among the Arab countries. The translation and language reform also constitutes an area of partnership outside the Arab region, since

Box 6.9

Efforts by the League of Arab States to Develop the Arabic Language

The League of Arab States has always advocated for a more focused approach to the Arabic language in schools and universities, as well as in the street, in homes and in the printed and audio-visual media outlets, both to learn and teach it. The League highlights the need to pay special attention to the Arabic language curricula in order to improve the quality of its teaching and provide skills as the historical, social, cultural and scientific communication tool. For example, the conference of the Arabic Language in Education Between Identity and Creativity called for the need to emphasise the cultural distinguishing character; develop the teachers' pride in the Arab and Islamic identity; support their confidence in the Arabic language and its ability to assimilate modern sciences; meet the communication needs in life without confining them to specific purposes; support efforts aimed at the use of modern technologies; and take advantage of these technologies in the areas of language teaching. It also recommended to call on the Arab League Educational, Cultural and Scientific Organisation (ALECSO) to establish a centre to address the development of the Arabic language in terms of learning and teaching, as well as the study of its current status and the development of relevant curricula and teaching methods, while taking care of the qualification of its teachers.

Source: Ahmed Kanaan 2004.

the publication, translation and distribution partnerships might be an opportunity to revive the translation movement from the perspective of the transfer and localisation of knowledge and the perspective of global cooperation, as well as in terms of supporting the areas of publishing and culture in the Arab region.

ICT applications are expected to have deep and widespread effects. However, the nature and extent of these effects depend on what the relevant parties do to build and strengthen the different categories and patterns of the Arabic content. If the governments and other parties concerned fail in generating and disseminating the cognitive content that is closely related to social and economic conditions, cultural structures and citizens' aspirations, it is likely that most of these effects will have negative consequences. In fact, the opportunities that new technologies offer are accompanied by significant risks and they require informed approaches that keep up with rapid technological development and employ it in the pursuit of sustainable, balanced and comprehensive socio-economic development. The Arab countries can then look forward to a better future, in which new technologies play a supportive role in responding to the chronic crises in the region, both on the cognitive and developmental levels.

Box 6.10

Promoting and Developing the Language

It is not enough to call for the promotion and development of language learning. We must build the foundations of clear initiatives on regional, national and institutional bases. The objectives should include the reform of the language itself. Without such initiatives, the language speakers will not succeed in investing in the capabilities offered by the current and future internet technologies.

Omar al-Bazri, member of the report's Reading Committee.

Learning Foreign Languages as a Gateway for the Constructive Interaction with the World

The emphasis on the Arabic language stems from its link to the issue of identity and

ICT applications are expected to have deep and widespread effects. However, the nature and extent of these effects depend on what the relevant parties do to build and strengthen the different categories and patterns of the Arabic content

social cohesion and the enabling of people to achieve progress and master the link to modern technology and digital culture. However, this assertion brings us necessarily to the importance of the youth's acquisition of foreign language skills in reading, writing and understanding – notably the English language, which has become the first language of communication in the scientific, commercial and internet sectors – so it becomes a lever and a tool to achieve direct communication with the world.

No one can deny the extreme importance of foreign language education in this age, for learning these languages provides knowledge of sciences and communication with them. It also achieves communication and acculturation with the world. This does not only apply in Arab countries, but also to all the countries of the world. Although English ranks first among the languages of the world in the percentage of people who learn it, reports indicate a growing demand for other languages such as German, French, Chinese, Japanese, Russian and Spanish, as well as Arabic. Developed countries such as the United States and Britain have encouraged the teaching of foreign languages in general and higher education, as politicians and businessmen believe that remaining a key player in global competition, both politically and economically, requires the prevalence of bilingualism and multilingualism among peoples, as one of the requirements for global competitiveness.¹³

However, the fate of teaching and learning languages in Arab countries depends, from our point of view, on two facts:

- The first is internal, represented in the fears many specialists expressed claiming that teaching foreign languages might lead to the marginalisation of the Arabic language, thus harming the unity of cultural fabric and social cohesion among Arab peoples;
- The second is objective, represented in providing a strategic vision for language teaching and in securing the means

necessary to achieve this goal. These means are many and some of them – or perhaps the most important – include the good formation of teachers and professors and the building of the necessary infrastructure, such as educational tools and language laboratories.

Successful experiences in East Asia in the transition to knowledge societies and knowledge economies inform us that the attention these countries geared towards the English language was one of the factors that contributed to, and supported, their success as was the case in Malaysia, India and China. It should be noted in this regard that learning languages within the regular classroom is no longer sufficient to achieve high levels of language proficiency that enables using it correctly. It rather requires the provision of opportunities for using it in different situations of everyday life. There are some promising global initiatives in this field, such as the experience of Singapore. In the context of its continuing efforts to encourage the correct use of the English language, fearing that weak language skills might affect its reputation as a centre for business, Singapore launched a campaign called “Speak Good English” to push the level of the language forward. For this purpose, it hired the most famous comedian who imitates women in Singapore; Kumar who impersonated the role of “Queen of Grammar” in a series of videos, in which the Queen taunts the citizens because of the way they use the English language.¹⁴

Cultural Development

Taking care of the youth, equipping them with knowledge and skills, and forming them as a knowledge capital constitute the decisive factor in enabling developing countries, including Arab ones, to bridge the knowledge gap and move forward towards the establishment of knowledge economies and societies. Due to the link between cognitive efficiency and the systems of social and cultural upbringing, studying the latter is one of the most pressing topics to help us understand the organisational

No one can deny the extreme importance of foreign language education in this age, for learning these languages provides knowledge of sciences and communication with them

The factors of integration between the countries of the region are still represented in language and religion, as well as in history and geography, which together represent the attributes of a common identity

context of formative scientific operations to which the Arab youth are exposed, and their responsiveness to the requirements of involvement in the dissemination and production of knowledge and the shift towards a knowledge-based economy.

Therefore, countries should emphasise the need to bring about an enlightened cultural development that supports critical scientific thinking, a spirit of scientific research of innovation and creativity and the values of diligence, proficiency and excellence. This cultural development should also support the setting up of social and political norms that enable young people to expand their choices and their integration into the global competitive economy, for the purpose of completing the scheme of modernity, without which it would be hard to ensure the success of processes of the transfer and localisation of knowledge or to build a knowledge society. In addition, establishing the culture of positive citizenship in the Arab countries does not abbreviate the concept to the mere belonging to a geographical spot; to the formal possession of an identity card or national passport; or the mere feeling of links shared with members of the community, such as

Box 6.11

Cultural Development is a Condition for Sustainable Development in the Arab Region

Decision-makers may not be surprised that the most important determining factors of development are mainly uneconomic, such as the rule of customs and traditions, the loss of constitutional life despite the existence of a constitution, (how can the rule of constitutional institutions and the loss of constitutional life be present at the same time?), the absence of a growth project in general, and the lack of an upscale educational system that serves the growth project in particular. The economic solution in developing countries often depends on other variables, including cultural, social and political ones. These conditions are necessary for growth and development, and if they remain absent, it would be difficult to talk about stages of transition, and they will be unsustainable if they actually happen.

Source: Ahmed Kawaz, 2011.

blood, neighbourliness, habitat and way of life. The establishment of the culture of positive citizenship expands to include granting the citizen rights and duties. This cultural system will be a framework to regulate the relations between the citizens themselves and between them and the state, as well as to support moral values. The need to stimulate active participation in the areas of public life should also be encouraged.

Achieving Economic Integration in the Arab Region

The achievement of regional economic integration has become imperative for the development of the countries of the Arab region, and this calls for accelerating efforts and optimising them in this direction. The factors of integration between the countries of the region are still represented in language and religion, as well as in history and geography, which together represent the attributes of a common identity. However, this identity has not yet achieved an integration based on institutional factors, development programmes, or a conditioned futuristic vision in integrated plans, as has happened in the countries of the European Union, for example. The transition to a diversified economy is based on knowledge as an unlimited source, on dealing with the requirements of globalisation and the blocs it imposes, and on a fierce competitive environment that imposes regional blocs and integration in the Arab region, along the lines of international economic blocs. Therefore, achieving economic integration in the Arab region requires the establishment of comprehensive strategies and policies, supported by an infrastructure, a road network, plans for civil protection to link the region's countries to each other and to other blocs, such as Europe, and the drafting of plans that support small businesses and youth entrepreneurship. This integration is also based on a collective interest to achieve peace in the region, consolidate the factors of stability, prosperity and human rights and manage migration and labour mobility between countries. It also

necessitates the evaluation of work projects and organisations throughout the Arab region, according to the training systems and advanced technological research they provide.

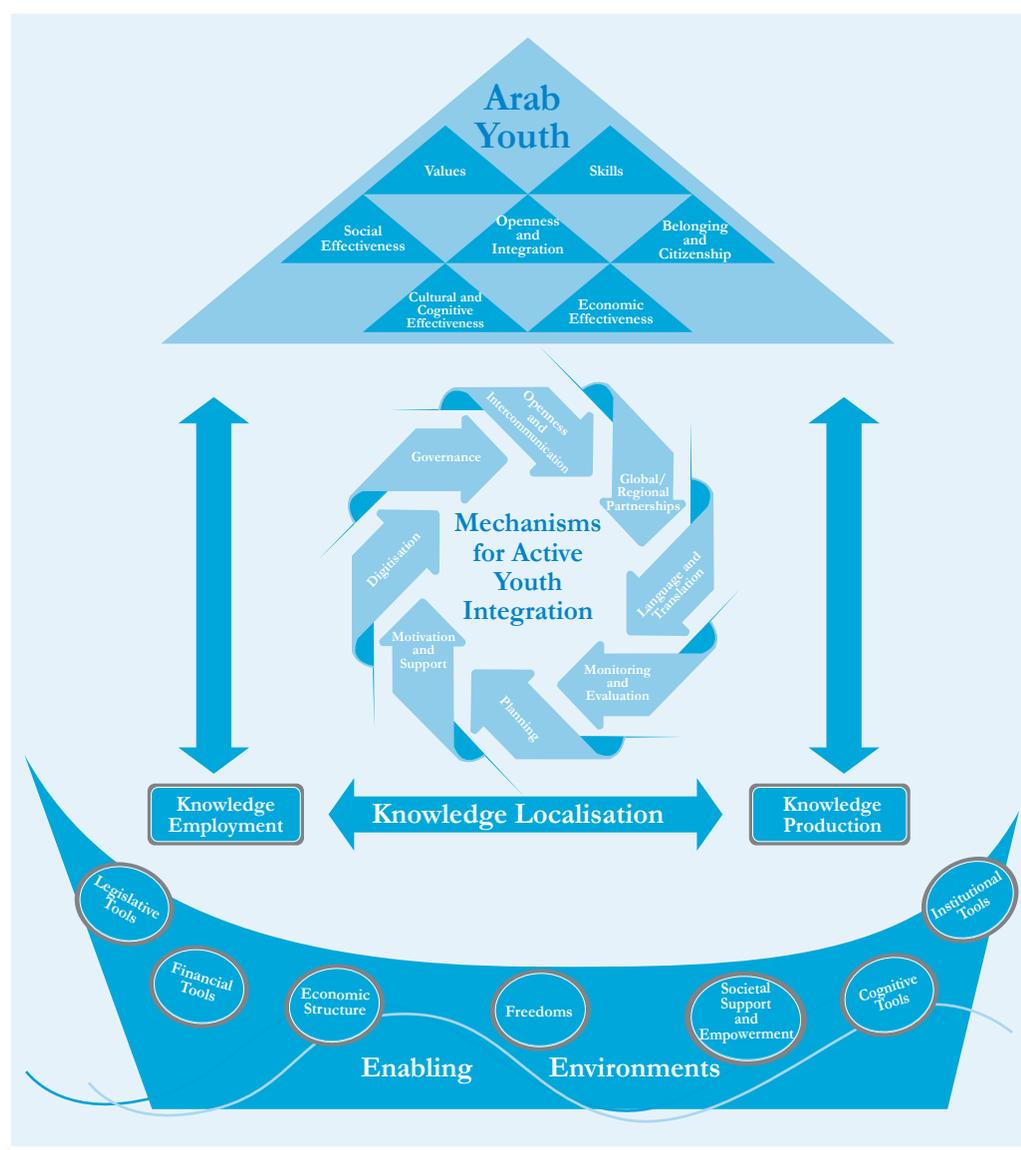
This integration is capable of ensuring Arab countries sustainable development based on economic diversity, varied growth sources and the establishment of knowledge-based economies. This shall open the door to modernity, the establishment of the knowledge society and the realisation of a comprehensive growth that provides people with well-being and dignity throughout the Arab region.

A Metaphorical Model to Move for Future Action

Future action towards efficient youth integration in the transfer and localisation of knowledge depends on the availability of the four major elements previously mentioned; first, enhancing the enabling systems of the Arab youth; second, strengthening the systems of the localisation of knowledge, including the operations of its transfer, production and effective employment in order to promote human development; third, providing the fostering and supportive environments for the first two elements; and fourth, the mechanisms required in

The positive critical vision adopted in this Third Arab Knowledge Report is an urgent call to seize the opportunity to integrate knowledge, innovation and technological progress - as it constitutes a leverage for development - while focusing on youth and future generations

Figure 6.1
Moving towards the Active Youth Integration in the Process of Knowledge Transfer and Localisation



There is a strong opportunity to prepare young people, provide them with formation, enable them and actively integrate them into the processes of localisation of knowledge and contribute to construction and progress

the field to achieve a positive interaction between the three aforementioned systems, in order to achieve an influential and active movement of the Arab youth to transfer, localise and employ knowledge, leading to the ultimate goal, i.e. the establishment of knowledge societies and economies and the achievement of comprehensive and sustainable development throughout the Arab region.

Figure 6.1 represents a ship sailing through the seas of knowledge with its strong structure, solid base, regularly-operating engines and a sail that takes it to the shores of progress and growth. We use this figure as a metaphor that portrays the march of Arab communities in the middle of local, regional and global challenges. The structure of the ship represents the strong enabling environments that foster and support all the growth aspects we desire. The base of the ship symbolises the system of structures, processes and basic institutions for the transfer, localisation and employment of knowledge. A sail representing the youth is fixed to the base of the ship, and correspondingly, young people serve as the captain in this figurative perception. The ship's engines are the mechanisms that enable young people to access the skills, knowledge and abilities that qualify them in this cognitive process. The youth are the sail in the ship of the Arab societies, and the mechanisms are the engines that ensure harmony, provide youth efficiency and facilitate their integration into the processes of transfer and localisation of knowledge. Hence, the ship of the Arab societies enjoys competitive advantages thanks to the work of its youth. It is a ship capable of sailing, facing the cultural, economic, social and political encounters, breaking the waves through knowledge and capabilities, and safely heading forward with sound visions, policies and strategies thanks to the capabilities and skills of its young people. The ship has a strong body, sail and base of science, knowledge, research and development systems. It provides people in the Arab region with prosperity, on the foundations of knowledge and social justice.

Conclusion

The positive critical vision adopted in this Third Arab Knowledge Report is an urgent call to seize the opportunity to integrate knowledge, innovation and technological progress - as it constitutes a lever for development - while focusing on youth and future generations. Despite the impact of recent events and fluctuations in some Arab countries, and the relative political and economic instability that was coupled with the youth-led political and social movements; those events have opened up real opportunities to achieve the aspired reform and establish a more transparent and efficient governance. There are also opportunities to build more efficient institutions to unleash the economic potential of the Arab countries and mobilise the potential of the youth to transform the current youth bulge from an enlarged human mass threatening to explode, into a human capital and real wealth that acts as a lever for moving towards the transfer and localisation of knowledge; and for establishing a knowledge economy and knowledge society within the overall perspective of achieving sustainable development. The reform that the people of the Arab region seek cannot meet the demands of the young people unless it is allied to better life standards and positive youth citizenship. This is the gateway to achieving comprehensive reform, which turns the Arab rentier economy, based on natural resources and the traditional factors of production, into a knowledge-based economy in the systemic sense that we have already presented. This requires providing the conditions and requirements of success, most importantly the establishment of an enlightened rational culture and enabling environments that foster and support progress in education and scientific research, as well as the incorporation of solid standards of social justice and reform. In all cases, there is a strong opportunity to prepare young people, provide them with formation, enable them and actively integrate them into the processes of the localisation of knowledge and contribute to construction and progress. Knowledge is the lever in

building a new society that contributes to the world's progress in the new context of globalisation. Young people's possession of knowledge, skills, and values within an Arab vision to access the knowledge society, is the right way to realise the objectives of

the integration of the youth in the process of transfer and localisation. This will help the Arab countries establish foundations of sustainable human development based on positive citizenship and social justice.

ENDNOTES

- ¹ Report team calculations based World Bank Data KAM; World Bank 2012a.
- ² Arab Planning Institute 2012. (Reference in Arabic) For more details, refer to Chapter 1.
- ³ For more details, refer to Chapter 1.
- ⁴ Report Team calculations based on the US. Census Bureau Data 2014. Refer to the Annex number 4, table A 4-1.
- ⁵ UNPY & ESCWA 2011.
- ⁶ For more details, refer to Chapter 4 and Annex 4, table A 4-5, UNESCO 2014a.
- ⁷ For more details, refer to Chapter 3 and Annex 4, table A 4-7, UNESCO 2014a.
- ⁸ For more details, refer to the Annex 4, table A 4-7, UNESCO 2014a.
- ⁹ UNESCO 2010b.
- ¹⁰ Refer to Chapter 4, figure 4.3.
- ¹¹ For more details, refer to Chapter 4.
- ¹² Ibn Abdel Aziz EL-Akl 1432 AH. (Reference in Arabic)
- ¹³ Tawasul 2011. (Reference in Arabic)
- ¹⁴ Reuters 2014. (Reference in Arabic)