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Arab Knowledge Report 2014

Youth and Localisation of Knowledge

=Summaries=



Youth and Localisation of Knowledge

Summary 1

The integration of the youth and the localisation of knowledge in the Arab World is a vital issue for the present and the future. In addressing this issue, the current report offers a pivotal step in the journey towards establishing the knowledge society, for which the Arab youth are the main pillar. It is a quest to enable the Arab youth to actively participate in achieving sustainable human development in their countries through the wide horizons of the knowledge society.

As the region's population steps into the 21st Century, the Arab communities are no longer capable of sustaining traditional development approaches. They need to adopt innovative development approaches to enable them to effectively address the growing challenges on various social and economic levels, as well as on local, regional and international levels. Given the association of knowledge with power and progress, building the knowledge society and economy in the Arab region has become a necessity for prosperity and competitiveness in the current age of globalisation. At this stage in history of science and technology, and with the implications of this knowledge and technological revolution in terms of population boom and a tremendous openness to various nations that constantly compete over the control of knowledge sources and world leadership, the Arab states are facing major challenges. The question is no longer about how to constantly adjust to this "globalised" and "renewable" reality, or how to deal with its impacts and challenges while incurring the least possible damages and maximising its benefits. It is rather about how to change the facts of our reality, including opportunities and challenges, how to deal with these challenges and how to increase the opportunities and transform them to support the empowerment of minds and spirits capable of establishing knowledge societies in the Arab region, while effectively contributing to the global knowledge system and the advancement of human civilisation.

The report emphasises that, given the importance of the youth at all stages, addressing the challenges at the present time is of utmost importance. The development phase that the Arab region is going through clearly shows the growing role of the Arab youth and their emergence as a critical mass. The youth are the most powerful age group in society, with the greatest impact on determining the overall developmental course and trends as well as on instilling change and hope for progress in the Arab future. The youth are the pillar of every nation and the most important resource to invest in for achieving integrated and sustainable development. As the Arabic proverb states: "investing in humans is better than investing in stones". Targeted initiatives and effective strategies should be devised to develop the capacities of the youth and turn them into a positive productive force. They must not be merely a force of criticism and objection, but rather one that builds and develops society on all levels. The most important of these levels is knowledge, as it is the foundation from which communities and nations can rise.

The Arab region today – at a time when its people are aspiring to achieve comprehensive and sustainable development – needs to concentrate on two vital areas: establishing the knowledge society and actively engaging the youth in the establishment of this society, while providing the required enabling environments through social justice and supporting the values and principles of enlightened citizenship. The authors of the report believe we are suffering from a knowledge gap that is driving us further apart from the world and are facing challenges in finding the required enabling environments. Yet, there still exists a historic opportunity to build the knowledge society, fuelled by the momentum of the rising youth and their energies and desires to change for the better to achieve sustainable human development and the welfare of the Arab people.

The Inherent Relation between Knowledge and Development

The report confirms the organic and dynamic relationship between knowledge and development which remains one of the basic principles that has been highlighted in both the first and second knowledge reports. We have established that knowledge is a tool and an outcome of development and have associated the right to knowledge and development with renaissance and enlightenment.

Accordingly, the report confirms the importance of addressing the transfer and localisation of knowledge as a doorway to development, with an emphasis on the centrality of the human element in this correlation,

especially the youth. Thereafter emerges the pressing need to highlight the issue of enabling the Arab youth and inspect the enabling environments available to them, in view of assisting the officials and stakeholders in setting plans and strategies for achieving active integration of the youth in the processes of knowledge transfer and localisation.

A Multi-Faceted Knowledge Gap

While the Arab countries are striving to access the knowledge society, certain disquieting reports and studies have emerged during the past two decades. The Knowledge Index (KI) and Knowledge Economy Index (KEI) prepared by the World Bank indicate a mediocre

Arab performance and an increasing gap between the Arab region and other regions of the world, in both KI and KEI throughout the period 2000 to 2012. And despite the progress achieved by some Arab countries in certain knowledge indices, the Arab World KEI for 2012 (which was calculated by the report team based on World Bank data for 17 Arab states) has a much lower value than most of the regions in the world.

The available data shows that the advancement of the Arab region towards the knowledge economies and in bridging the knowledge gap is still insignificant. This is particularly true when compared to the increase in the developmental requirements and challenges resulting from structural changes, including the increasing population, the change in living patterns and the rise of the youth.

The Evolution of the KI and the KEI for the Arab Region and Other Regions of the World between 2000 and 2012



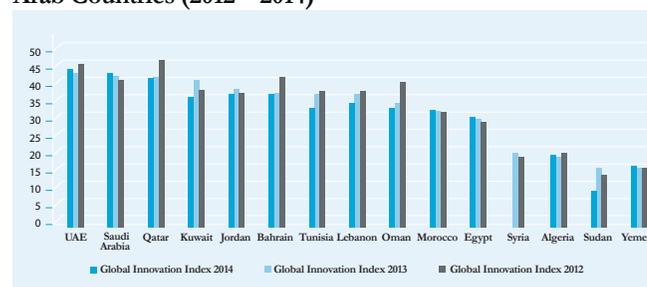
Source: World Bank data and statistics KAM, World Bank 2012. Note: The statistics for the Arab region were calculated based on the data for the Arab countries available in the World Bank Database (Samia Satti, background paper for the report).

The ranking of the Arab states in the Global Competitiveness Report 2013 – 2014 reflects the developmental economic and social conditions. And to a great extent, it reflects the knowledge conditions with all the gaps and discrepancies they entail, whether across each other or with other world countries. Among the 148 states that were listed in the

Global Competitiveness Report published by the World Economic Forum, the Gulf countries in general have occupied relatively advanced positions, reflecting their economic advancement, and their advancement in the knowledge axes

The Global Innovation Index GII 2014 indicates a major gap in the innovation indices and knowledge indices in the Arab region, reflected in the value, rank and progress of the “Global Innovation” indices for the region, in comparison to other regions of the world. The Index also shows the discrepancy in performance in some knowledge indices across Arab countries, with the Arab Gulf countries of oil-based economies being more advantaged.

The Evolution of the Global Innovation Index (GII) for Arab Countries (2012 – 2014)



Source: Cornell University, INSEAD & WIPO 2014

The Youth Bulge in the Arab Region

The Arab region is considered among the regions of the world with the highest population growth rates, estimated at approximately 2.4% annually between 1980 and 2010, and 2.06% in 2013. The total population in the Arab states in 2012 was estimated at approximately 370 million people. The available data indicate that the proportion of the population in the Arab region belonging to the economic activity age group (15 – 64) is approximately 63% of the total population according to 2013 estimates.

What raises concern in this demographic situation is that the estimates of the age group under 15 years for the year 2015 amount to 33%, and that more than half of the population in the Arab region is under 25 years of age. In addition, and according to some estimates, one in every five people in the Arab region is aged between 15-24 years. These percentages indicate that the Arab youth will, for the years or decades to come, put increasing pressure on resources in the Arab region to provide education, work and social services. If these needs are not fulfilled, this will lead to the spread of illiteracy and ignorance, with an increase in unemployment and poverty rates and what this entails later in terms of negative social effects, an increase in instability and escalation of radical movements. The youth movements since the end of 2010 and to now, must

be seen as a possible result of neglect by the Arab societies. Such results can include regression of personal, social and economic development, in addition to threatening the foundations of cultural cohesion and social stability in these communities.

The demographic status of the Arab youth oscillates between optimism and pessimism. On one hand, this status of the youth in the Arab world can create a favourable opportunity for the success of development; if the Arab countries succeed in integrating the youth effectively in the development process. However, the situation might change when job opportunities become scarcer. This youth could become a dangerous force that might threaten social stability and hinder development.

The Challenges Facing the Integration of the Youth in Knowledge and Development

The knowledge gap and the youth bulge are two major indicators that raise concern over the future of the knowledge society in the Arab region. They point out the necessity of economic and political reforms to expand the opportunities for growth and development and integrate the youth as a productive force in the process of the transfer and localisation of knowledge. This would pave the way for a move towards the knowledge economies and political and developmental systems capable of integrating into the global culture for the welfare of the Arab people.

The authors of the report believe that the Arab region is facing, in addition to the knowledge and youth integration gap, a series of challenges in moving towards the knowledge economy. These differ in their nature and intensity according to the diversity of the countries in the region, which vary between those that are rich in resources and/or labour; and others that are rich in resources or that import labour; and underdeveloped countries.

The first challenge to the processes of transfer and localisation of knowledge lies in the weakness of education, training and scientific research institutions, on which the preparation of the human capital capable to achieve this mission depends. This results in the spread of illiteracy and technological illiteracy, and the emergence of a knowledge and skills gap between education outputs and the needs of the labour market.

The second challenge is embodied in the expansion of the governmental public sector, and its ability to attract young job seekers. With employment being solely based on diplomas and not on merit and competency, the youth have lost the motivation to acquire new skills and knowledge

that prepare them for the knowledge economy; as long as the governmental sector is guaranteeing them a secure job they will accept it, even if it offers lower wages.

The third challenge is the weakness of the private sector, which in turn leads to the weakness of the manufacturing industries. The studies confirm that the absence of the private sector and the weakness of entrepreneurship were hindering the localisation of knowledge and technology.

The fourth challenge is related to the weakness of the private sector and the expansion of the public sector, and lies in the weakness of the entrepreneurship public policies in the countries of the region.

The fifth challenge lies in youth unemployment. As previously noted, the youth bulge in the Arab region is among the highest in the world, and features at the same time the highest unemployment rates. This marginalisation of young men and women in the labour market will lead to their marginalisation in all areas of public life. This makes the Arab region lose the force that can bring about the transfer and localisation of knowledge, and its transition to the knowledge society. In this context, a UNDP Report confirms that the Arab countries are in need of around 17 million new job opportunities until 2020, in order to maintain a constant level of unemployment. It is to be noted that this number would increase to about 28 million if the Arab region seeks full employment, and a more challenging 56 million jobs to achieve full employment with a high level of women participation in the labour force. Other estimates put much higher figures for jobs required at the regional level. One study shows that the employment to population ratio in the region is below 45%. Another study suggests that 80 million job opportunities are needed in the region to reach a 64% employment ratio in 2020. Meanwhile, if the ratio is to reach 70%, then the region will need 100 million job opportunities for the same period, which requires a steady growth at the rate of at least 4.4 yearly.

The sixth challenge is youth migration or the Arab brain drain. Among all regions in the world, the Arab region is one of the most affected by the emigration of highly skilled academics and researchers. Migration estimates show that between 10 to 15% of the Arab youth migrate, and that the migration rate is high among graduates of higher education institutions in Arab countries. The rate, for example, increases to reach 35% in Lebanon and 17% in Morocco.

The seventh challenge lies in the weakness of governance, especially with respect to the mobilisation of institutions,

and the lack of transparency. Economic researchers agree that transparency and integrity play a role in motivating the markets and incentivising the capitals. The absence of these factors weakens the economic mentality. In this respect, the Global Transparency Index points to a decrease or stagnation in the vast majority of the Arab states regarding the value of the Index between 2012 and 2013. Most of the Arab states occupied positions below the top 50, except UAE (rank 26 of 177) and Qatar (rank 28), while 6 Arab states recorded positions among the last ten.

The eighth challenge is that of the Arabic language. There is no doubt that language is a receptor that fosters, feeds and establishes the pillars of culture and knowledge. Within this scope, especially if we consider the pivotal role of language in fostering and feeding knowledge, the creation of the knowledge society calls for continuous care, development and reform of the language, in line with the changing and increasing requirements of the knowledge societies and economies. Furthermore, neglecting such a need can be very costly when it comes to the cognitive, cultural, social and economic aspects.

Thus, the report confirms that within the developmental context in the Arab region and the surrounding obstacles and difficulties faced by the region in building the knowledge economy and the knowledge society, the issue of the integration of the youth in the process of the transfer and localisation of knowledge requires addressing three dimensions: the first dimension is the challenges posed by the knowledge gap; the second dimension is the challenges associated with the youth bulge; and the third dimension is the challenges of the surrounding environments.

These are the most important dimensions that constitute the essence of the issue addressed in the present report, which aims at enriching the intellectual dialogue on the situation of Arab knowledge, and putting further pressure on the Arab region to find ways to address the challenge of the transfer and localisation of knowledge through reinforcing the role of the youth and increasing their readiness to effectively integrate into the process. This would set the foundations for a new Arab development based on the knowledge engine and achieve at the same time cognitive security, economic growth, social justice and progress in civilisation.

The mission of the active integration of the youth in the processes of transfer and localisation of knowledge shall assist Arab governments in assuming their historic responsibilities and adopting national policies that can effectively achieve the aspired-for quantum leap in Arab development and move from rentier economies and traditional economic activities with low knowledge added-value, to a new development structure aimed at building a knowledge society with the active integration of the youth in the global competition arena. This would result in greater advancement and welfare for the generations to come; a decent living, justice and freedom for the people in the Arab region. This is what makes the integration of the youth in the processes of knowledge transfer and localisation a multi-dimensional and challenging issue.

The Conceptual Framework of Integrating the Youth in the Transfer and Localisation of Knowledge

Summary 2

Knowledge lies at the centre of the elements of production in modern economies. It is a tool of economic growth, job creation and development in a modern economy, or knowledge economy. Knowledge has become increasingly salient, as a result of globalisation and scientific and technological developments in recent decades, notably information and communication technology (ICT). The transfer, production, localisation and usage of knowledge, in all economic and daily activities has become the key to growth and development. It is only when knowledge is employed, institutions assume its management and people can assimilate it, that creativity, innovation and renovation expand, and knowledge is actively and genuinely localised, to achieve further economic and social development

The Tetrad of Knowledge, Globalisation, Youth and Development: A Complex Relation

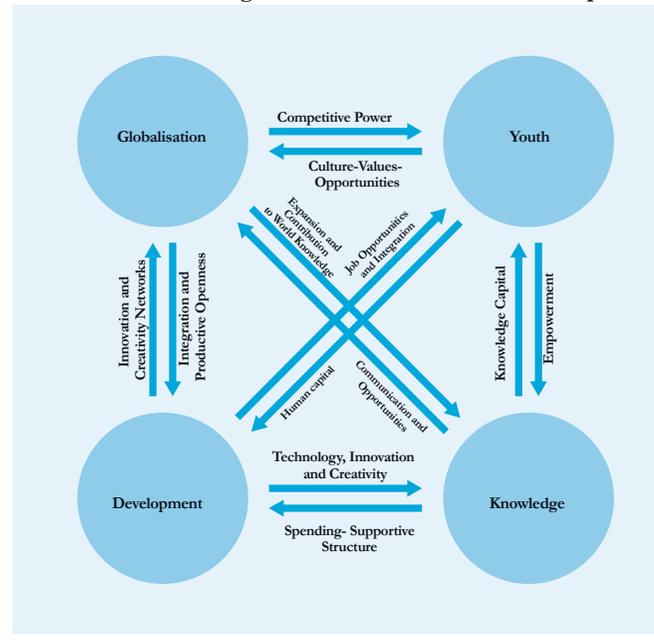
The authors of the report consider that the relationship included in “the integration of the Arab youth in the transfer and localisation of knowledge” is not a simple linear one. It is rather a dialectical complex relation that involves profound challenges. There are multiple parties in this case and each with its own problems, opportunities and challenges, centred around four elements: the first is knowledge, with regards to its transfer and localisation and the global and local contexts that surround it. The second is the youth, with the report taking specifically the age group 19-29 for study purposes, as this age category finds itself amid a demographic composition that is inherently problematic, not only in terms of its diversity and its different geographical and social characteristics, but also in terms of the need to equip it with values, skills and knowledge that qualify and enable efficient integration into the knowledge localisation process. The third element is globalisation, its relation to knowledge, technology, economy and development, and the great contentious debates revolving around the opportunities and challenges of development. But, regardless of the nature of the disagreement over this phenomenon, globalisation has become an essential part of our civilisation and is something we must address. The fourth element is the structure of Arab development in its social, cultural and political contexts, through which young people interact with knowledge transfer and localisation processes. This also includes the extent of opportunities, capabilities and choices available to the youth in this reality; and the challenges they entail.

Knowledge: Between Transfer and Localisation and the Knowledge Society and Economy

The knowledge society was established as a result of multiple and successive historical revolutions in science and ICT. These revolutions upheld the value of the scientific thought, freedom, social justice, equality and

democracy. The human being and its skills, values and creativities became the axis and basis in the formation of the knowledge society.

The Tetrad of Knowledge, Globalisation, Youth and Development



There is concurrence among many knowledge sociologists and researchers that what we are experiencing today is an aggregate state for a community that interacts by influencing and being influenced in all aspects by the revolution of science and technology. In this framework, we can distinguish at least three interacting factors. The first factor is that progress is a result of the intense growth and increased investments in ICT and their interaction with the various scientific fields. The second factor is the growth of international relations as a result of this revolution and globalisation that put the world economy in a dynamic market hegemony that is beyond traditional concepts of space and time. The third factor includes the emergence of a qualitative new human capital with personal characteristics, values, knowledge, skills and new patterns based on training, education and culture, constituting the

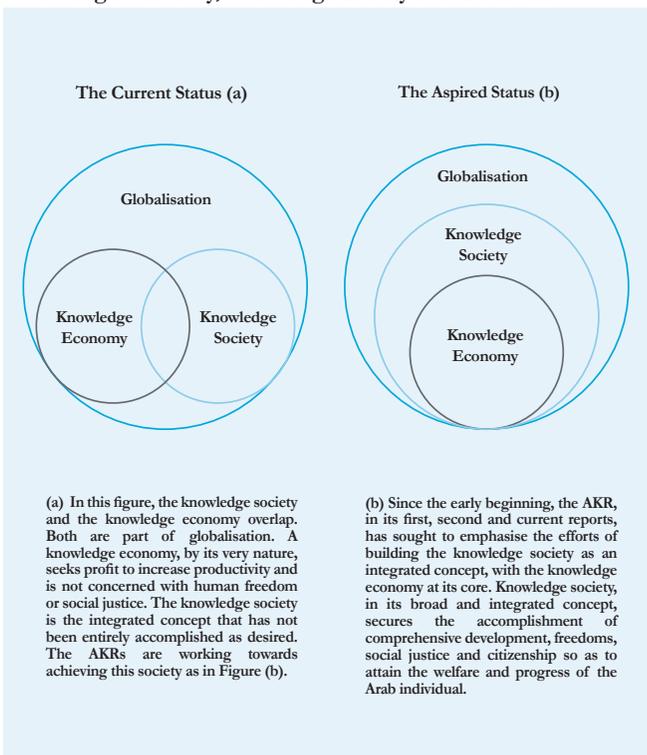
driving force for all the dynamics of change in the family, society and the world.

Knowledge Economy, Knowledge Society and Globalisation This report establishes the concept of “knowledge society” as including the concept of the “knowledge economy”. It also asserts that the concept of “knowledge society” is broader than economy and more comprehensive than economic progress. A knowledge society includes these influential developments and rapid changes in economy, as well as all associated cultural and sociological consequences, including the characteristics and capabilities of the human being. According to the concept of the knowledge society, investment in education plays a pivotal role in the development of human resources and the expansion of youth opportunities and abilities to contribute to the historical quantum leap. In this context, knowledge workers become the basis for the development of economic wealth, while the main activities producing wealth no longer reside in the use of raw materials, capital or labour, but rather in the added value “being produced through innovation, creativity and the application of knowledge at work”.

and innovation. Knowledge economies are those that are based on the intensive production, dissemination and use of knowledge. They are essentially described as economic structures that arise in the context of the global knowledge society, where the success of economic development depends on the possibility or the extent of the available balance of knowledge, skills and creative capabilities in development and modernisation

Eight key attributes were defined for the knowledge economies, namely: the volume of knowledge in terms of production and availability; the intensity of ICT use; the emergence of knowledge as an economic product; the increase in the proportion of knowledge workers; the increase in knowledge impact across economic sectors; the emergence of knowledge management as increasingly important systems and practices; the emergence of systems of innovation and modernisation; and the ability of knowledge to be transferred and developed. It is worth mentioning that the main obstacles to the processes of knowledge advancement and transfer in the Arab region are related to the weak mechanisms and skills within knowledge management sectors, which are supposed to enable the localisation, production and employment of available and transferred knowledge.

Knowledge Economy, Knowledge Society and Globalisation



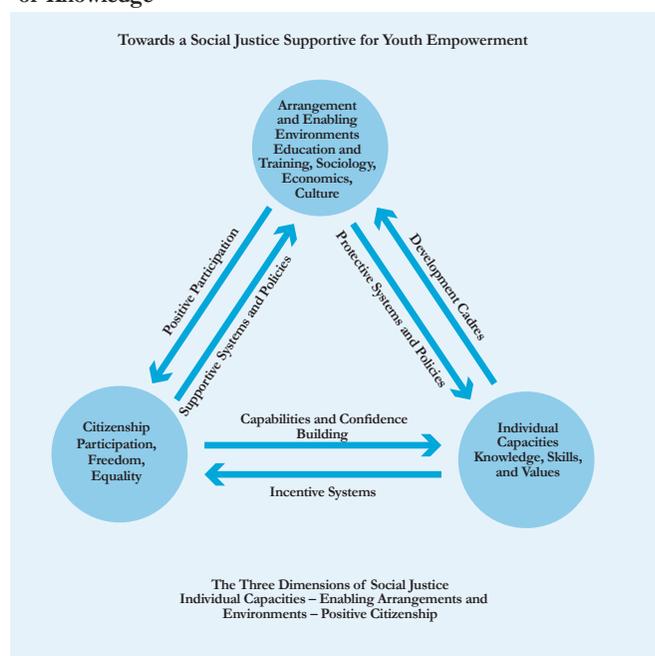
The report also distinguishes between the transfer of knowledge, the localisation of knowledge and the absorptive capacity for the localisation of knowledge. Localisation requires the internal production and employment of knowledge, unlike transfer, which might be limited to importing knowledge products from abroad. Therefore, the transfer of knowledge is considered a necessary means for its localisation, albeit insufficient. The transfer of knowledge and technology becomes useful when strategies of knowledge transfer integrate in and merge with the policies and strategies of knowledge localisation and production. The report emphasises formation and apprenticeship, as well as technologies, are the right path to transfer knowledge, especially implicit knowledge. It also implies that employment and collective practice are the path towards knowledge localisation. The importance of cognitive abilities among individuals within the organisation concerned with the transfer and localisation of knowledge is of specific emphasis, as well as that of the cultural environment, the organisational structure of the enterprise fostering the transfer process and the rational governance it entails, and the cognitive ability to manage the processes of knowledge transfer and localisation.

The authors of the report thus affirm that knowledge economies are at the heart of the knowledge society, which forms and is formed in the context of a new and ever-expanding global civilisation; one with the human being at its essence: creativity, knowledge, technology

Globalisation: Problems, Opportunities and Risks

The report considers that globalisation is a historical process that has included profound and tangible transformations in social and political relations that have crossed the borders of continents, regions and nations. In this sense, globalisation has become strength, and this strength has increased based on influential networks of global institutions, on the World Wide Web, and increased by the quick and safe movement of capital across countries and the heated global competition to the greatest extent. Globalisation is seen by many to carry promising opportunities for humankind, especially in the developing world. Yet, there are many other voices warning of its great dangers.

The Integration and Enabling of Youth in the Localisation of Knowledge



The report confirms that the development in this framework represents an interaction between two bases, first of which is development in all its dimensions, including economic and cognitive, second of which is social justice.

Social justice, from this perspective, is an overall concept based on the triad of active human capacities, arrangements and enabling environments and positive citizenship

Development and progress should not be limited to narrow economic perspectives of traditional or capital goods and services but should be observed through their ability to expand opportunities for young people and develop the core capabilities that give individuals the freedom to set the conditions favourable for their active

participation in building a decent life. Real development enables societies to transform their physical potentials and natural resources through knowledge, innovation and creativity into a developmental base that lays the foundation for enabling environments that respect human rights, reduce poverty, create decent jobs and ensure that social spending is a real investment for the future and an expansion of the opportunities for youth empowerment.

Youth

The authors of the report confirm that if knowledge is the engine of progress and the source of peoples' wealth in the era of the knowledge society in contemporary global civilisation, then young people are the power entrusted with the transfer, dissemination, localisation and employment of knowledge in new development initiatives.

The historical psychology of young people plays a major role, in the sense that the individual interacts throughout the period of his or her formation with the surrounding environment, impacting it and getting influenced by it. The emphasis on the individual's psychological or social history, or both combined, implies the realisation of the diversity of the characteristics of the youth. Regardless of the approach adopted in defining the youth and their upbringing experience, there is a general nature or common features that characterise them particularly reflected in the energy, the tendency for leadership, the ability to acquire knowledge and skills, a vision towards the future, the desire to accomplish valuable actions in life, vitality and risk-taking.

The current Third Arab Knowledge Report identifies the category of young people – which it aims to study in four Arab countries– as those aged between 19 and 29 years. This is adopted for practical reasons, given that this group includes young people receiving undergraduate and graduate studies, in addition to those supposed to be well-prepared to contribute to the transfer, dissemination, employment, production and localisation of knowledge. The selection is also justified by the fact that the field study in this report is considered a continuation of the field studies of earlier reports, where the second Arab Knowledge Report 2010/2011 dealt in its field study with the age group under 18 years.

From Concepts to an Analytical Model for the Situation of the Youth in the Transfer and Localisation of Knowledge

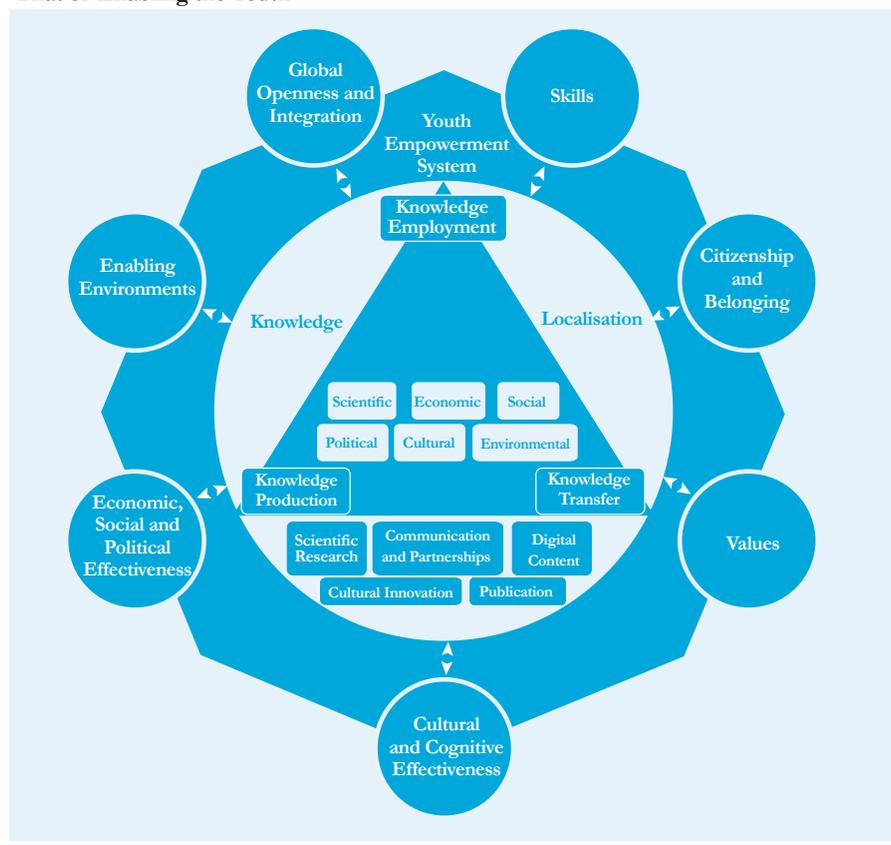
The report confirms that the Arab region, with the youth wealth it enjoys, is at a historic international crossroads where knowledge is emerging as a fast-growing force

that forms the world around it with rapidly advancing technology and sciences erupting in all aspects of social life, economy, services, education and health.

The financial and youth capital that characterise the Arab region, as well as the knowledge and technology revolution sweeping through the developed world around us, calls for further emphasis on the availability of a potential opportunity to achieve an Arab breakthrough towards

the effective integration in the world civilisation and the achievement of progress and welfare for the Arab people. In light of the above, the process of preparing the human capital to effectively integrate in the process of the transfer and localisation of knowledge in the Arab region is not a simple one, but rather a complex process with interlocking elements that can be portrayed through the following illustrative diagram:

The Conceptual Framework for the System of Knowledge Localisation and That of Enabling the Youth



The ability of Arab countries to compete culturally on a global level remains dependent on the ability of Arab countries to rehabilitate their young people and transform the youth bulge from a problem and a challenge into a human capital and a cognitive asset in building knowledge economies, fostering participation in global civilisation, and contributing in steering the course of development towards a human society blessed with prosperity, justice and peace.

The Effectiveness of the Arab Youth in the Localisation of Knowledge: Building the Human Capital

Summary 3

The situation of youth effectiveness in the Arab region reveals many deficiencies which confirm the volume of the knowledge, social, economic and cultural gap separating them from their counterparts in the developed world. Yet, with differences of varying degrees of importance from one Arab country to another and from one area of effectiveness to the other on the path of progress, we see that a majority of the youth has not yet possessed the requirements of the knowledge society era. Although the available data indicated some progress in some areas – education, youth employment and empowerment of women – the situation remains a cause for concern with regards to the effectiveness of the youth and their readiness for integration into the process of the transfer and localisation of knowledge in the Arab region. If we do not accelerate the drafting of effective policies and strategies to equip young people as a force for advancement in the community, the Arab countries will lose a historic opportunity to turn its “youth bulge” into a real human wealth and a human capital capable of carrying the torch of development in the region and realising its hopes in accessing the knowledge society on an equal basis with other nations.

Cognitive Effectiveness of the Arab Youth: Skills and Qualifications

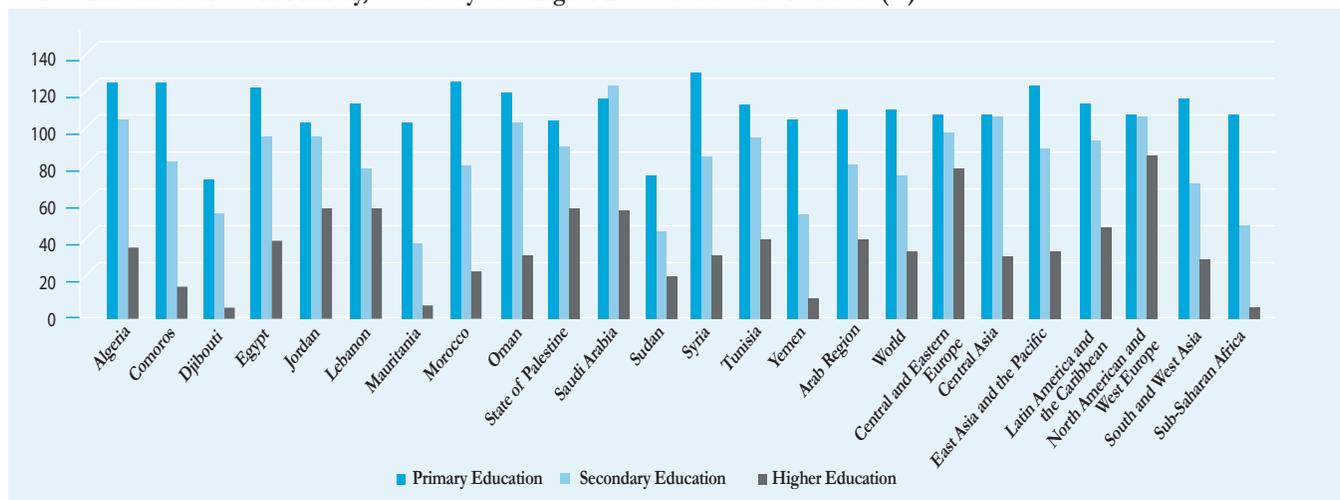
The authors of the report confirm that the youth constitute one of the most important groups concerned with the issues of knowledge acquisition and production, as well as those of empowerment and integration in the economic and social development processes. They also represent the social group with the highest ability for learning, training, work and production, and constitute the driving force for development within the society. Youth empowerment requires equipping young people with skills and qualifications, which enables them to assimilate the technology and transfer it from the developed world centres to their home countries so as to employ and localise it.

Knowledge Acquisition, Training and Formation of the Knowledge Capital

The authors of the report believe that knowledge acquisition through the systems of education and teaching is the cornerstone in preparing citizens for the transfer and production of knowledge. Consequently, efficient participation in the processes of knowledge acquisition and regular attendance at schools and universities that constitute the fostering environments for the cognitive capital, from which emanate active forces in the cognitive production and innovation processes, represent the basic foundations to enable young people to transfer and produce knowledge. The enrolment of young people aged between 19-29 years in various stages of education is determined by indicators and practices that are traced back to the years preceding this age bracket.

Despite progressing in illiteracy eradication, the number of people who are illiterate in the Arab region remains high. According to the latest UNESCO data, in 2012, it was estimated that there were around 51.8 million illiterate people (age 15 years and above), out of which 66% were females. According to the latest UNESCO estimates, the literacy rate among adults in the Arab region (aged 15 years and above) is around 77.5%, compared to 95% in East Asia and the Pacific and 98.7% in Central and Eastern Europe, and to a global average of 84.3%. These percentages put the Arab region ahead of Southeast Asia (62.6%) and sub-Saharan Africa (58.7%). In 2012, the number of illiterates among young Arabs (age group 15-24) reached 6.9 million, 64% of whom are females. These statistics also indicate that the literacy rate among the youth (age group 15-24) reached 89.7% in 2012, and this percentage increases among males (92.8%) and decreases among females (86.4%). Regardless of this seemingly increasing percentage among young people, it remains a cause for concern when compared to the rates in similar countries undertaking a “transition period,” where the literacy rate among young people exceeds 99.7%. The same is true when comparing the rates of the region of Central and Eastern Europe (99.5%), while the rate is at 98.9% for Eastern Asia and the Pacific. In elementary education, despite the progress achieved in primary education enrolment and registration rates, and the narrowing of the gap in most of the Arab countries, the region is still very far from meeting the educational needs of younger generations. As shown in UNESCO’s most recent data, the number of children not enrolled in school in the Arab countries was around 4.5 million children (4.467) at the end of the school year 2012, noting that females constitute around 57.8% of this number. Regarding the rate of enrolment in secondary education in the Arab region, the UNESCO statistics indicated it was 74.2% in 2012, which is less than the rates of East Asia and the Pacific (84.5%), Central and Eastern Europe (93%), Central Asia (98.6%) despite being close to the global average (72.9%).

Gross Enrolment Rates in Primary, Secondary and Higher Education for the Year 2010 (%)



Source: UNESCO 2014a.

The latest UNESCO data estimated the average number of schooling years for the population in the Arab countries to be at 11.8 years for 2011 and 2012. This rate varies among Arab countries; where it constitutes 13.5 years in Egypt and Jordan (2012); 15.6 years in Saudi Arabia (2012); 14.6 years in Tunisia (2011); and 9.2 years in Yemen (2011).⁸ Upon comparison, we find that the world average for the years of schooling is 12 years; 13 years in East Asia and the Pacific; 14.7 years in Central and Eastern Europe; 12.5 years in Central Asia and 16.4 years in the United States.

The authors of the report confirm that if the prevalence levels of primary education have risen in recent decades because of their interconnectedness to the demographic status, the prevalence levels of intermediate, secondary and university education did not record similar growth levels. Educational opportunities in these stages remained limited compared to the demographic status, particularly for the age group 15-24 years. This has led to diminished opportunities for further education for a large number of young people and to the emergence of the first weak spot in the educational systems in the Arab countries, i.e. their inability to provide educational and training opportunities for the young population.

Opportunities for the Acquisition of Knowledge for the Youth Remain Limited

The report indicates an expansion in education as a result of the pursuit of modernisation and an increase in the number of young people within the population pyramid, as well as the expansion of secondary education and the increased participation of women in higher education.

Despite this, university education attracted only around 9 million students in 2012. The average enrolment rate

in higher education in 2012 in the Arab countries was 26.1%; compared to the global average of 32%; 30.6% in East Asia and the Pacific region; 70.9% in Central and Eastern Europe; and 24.5% in Central Asia. The percentage of enrolment in higher education (as a general average) for developed countries was 76%, with 94.3% in the United States. In South Korea, the percentage of the total enrolment was 98.4%.

The report deduces that the achievements of the Arab countries are restricted to quantitative ones, particularly reflected in the increasing enrolment and registration levels in the various stages of education, although to varying degrees, compared to the accomplishments of countries with medium development. According to the indicators of the Millennium Development Goals, the Arab countries are still below the desired level, with the exception of a few of them. In fact, they remain far from achieving the requirements of the cognitive capital for young people to begin building the knowledge economy.

Education and Training Systems in the Arab Countries Are Characterised by Weak Productivity

Based on many reports and studies, the report shows that education and training systems in the Arab countries have been characterised by weak productivity, which is a well-known phenomenon to the Arab region. The growth of education does not explain any of the aspects of the increase of the development outputs. Also, the education curricula in the Arab region do not give great importance to the development of the human personality as much as they focus on memorisation and teaching. They focus on the knowledge that can be measured in traditional examinations and not on social skills, despite employers' growing demand for such skills. Education systems at different levels have ignored creative and life skills and arts.

They have weakened the creative potential of successive generations in the Arab region. These generations did not gain the experience of skills and knowledge in the broad sense; thinking, language and communication skills and general cognitive skills which support cognitive effectiveness, creativity and productivity

The report indicates an imbalance in the distribution of young people enrolling at universities in scientific majors which are needed in the labour market. The report indicates a surplus of graduates from different theoretical faculties and sections with no real prospects for work, while internal labour markets lack graduates from majors that young people avoid. As a consequence, a structural imbalance emerges in the relationship between graduates and the labour market, leading to an aggravated unemployment rate among graduates. The reluctance of young people to join these scientific majors is related to the absence of social and economic supporting factors due to the nature of development and the current economic structure.

In contrast, the report shows that, despite the disparities between countries of the Arab region, the youth in all Arab countries have generally succeeded in catching up with the wave of information technology and using it; although its usage remains at levels lower than the global level. The most recent World Bank 2014 data show the rate of internet access in some Arab countries is less than 10 per one hundred people (Comoros, Djibouti, Iraq, Mauritania, and Somalia), while other countries (Qatar, Bahrain, and the UAE) marked 85% usage; the latter being an appropriate usage rate close to those recorded in developed countries.

General Frameworks of the Youth Culture in the Arab Region: Between the Gap between Generations, the Cultural Hybridity, Heritage and the Contemporary Culture

Based on the available studies, the report touches on a set of general features that characterised the culture, identity and system of values among young people in the Arab region. The first of these features is the presence of a cultural gap between generations (parents and children). The second is young people's socialisation of different identities and the existence of the so-called "cultural hybridity" that is varied among generations, due to the historical, cultural and political reality. The third feature is that regardless of the multiple variations of the Arab youth due to geographical differences, economic levels and cultural affiliations, a strong cultural line runs through them all. It stems from the region's cultural heritage; a line that we call the Arab Patriarchal

Phenomenon and that is based on religion, family, race or sect. It is a trend that maintains traditional Arab values and is the strongest trend, particularly in the absence of development cultural policies that renovate culture and values and form a mind-set linked to science and modernity among young people. The fourth feature is the emergence of new cultural ideas stemming from global movements, especially with regards to women's rights, human rights, the environment, sexual freedom, citizenship and the globalisation of trade. These are ideas that are being emphasised with the growing influence of satellite television, mobile phones and online social networking sites, and with that of international organised forces and efficient institutions.

There is no doubt that religion and family are two important factors in the lives of humans. But it is necessary to differentiate between two prominent trends in this area: there are religious extremist trends that limit life, isolate it from the outside world and only deal with the knowledge society by using its advanced technologies and social networking sites to broadcast fatwas and ideologies that inhibit progress and encourage obsolete practices in a society that seeks development through knowledge. However, there are trends that represent the tolerant Islamic religion, which offers work values, optimism and interaction with life and other people with love and human values that exalt science and seek scientific knowledge as a basis for development and progress. The same goes for the family. There is a difference between the male patriarchal family that is authoritarian and associated with tribal values that dominate the individual and eliminate personal identity, and the family that fosters its children and exalts them, providing them with an education that embraces the world and knowledge data. This is a family that upholds the value of the individual, considering him or her to be the first unit in the community, and develops rationality, thinking and creativity. These issues necessitate further research and are more important today than ever in the Arab history and in this era of hyper-political activity in more than one Arab country.

Economic Effectiveness of the Youth and Youth Unemployment

The report indicates, according to the Joint Arab Economic Report 2012, that the size of the workforce in 2010 was at about 122 million people, which was approximately 34.5% of the total population in the Arab countries in the same year. According to the report, the reason behind the low percentage was the growing number of people under 15 years of age, in addition to the limited contribution of women in the labour market. The annual growth rate of the workforce in Arab countries reached 3.1% in the period between 1995 and 2010. This is considered a high rate and it varies among the Arab countries. The rate of

employment growth is expected to increase, as is the rate of the economically active population, for several decades to come and as a result of rapid population growth over the past three decades. This poses a challenge in the face of development in the Arab region. The report shows the average unemployment rate in the region, according to the latest data available, is estimated at about 16%, and it remains the highest among the other regions of the world. According to the estimates of ILO (2011) and the European Centre for Census (2012), the proportion of youth unemployment is 27% in the Arab region, and 12.6% worldwide. According to the UNDP's reports, despite the decline in the youth unemployment rate from 30% in the 1990s to 24% as an average for the years 2005 to 2011, it still represents more than twice the global average of 11.9%. The proportion of young people among the unemployed population is more than 50% in most Arab countries.

It should be noted that education in the Arab region does not provide a guarantee against unemployment. Unemployment is almost 15% among those with university qualifications when compared to others (Egypt, Jordan and Tunisia). The proportions of unemployed graduates of higher education is 43% in Saudi Arabia, about 32% in Bahrain, 24% in the state of Palestine, 22% in Morocco and the UAE, 14% in Tunisia, 79 and more than 11% in Algeria. According to one report, the proportion of young university graduates with high qualifications who are unemployed in the year 2010 reached 21.9% in Tunisia, 24.8% in Egypt, 17.8% in Morocco, and 15.5% in Jordan, compared to an average of 3.5% in the European Union and 3.3% in the OECD countries.

The authors of the report confirm that the structure of employment in the Arab countries is not conducive to the knowledge society. It greatly contributes to the marginalisation and exclusion of young people and women, who are victims of the lack of development policies that are effective in this regard. Regardless of the various estimates about youth unemployment, they all refer to the growing challenge facing Arab policymakers and planners to provide opportunities for decent and productive work for the growing number of young Arabs hoping to enter the labour and production market.

Social Effectiveness: Participation, Voluntary Work and Belonging

The report shows that participation in public life and voluntary work are not only associated to citizenship but are indicators of the experience of active citizenship among young people. The concept of participation

extends to political, social and economic participation and is connected with volunteer work that achieves the individual's sense of belonging and establishes a culture of tolerance and mutual respect, creating the basic condition for youth effectiveness in the transfer and localisation of knowledge.

The report also emphasises that the gaps in the cultural structure that affect the identity and the concept of citizenship in the Arab region have a negative impact on stimulating progress towards the knowledge society and the economic, social and political requirements associated with it.

The authors of the report believe that participation and volunteer work are the foundations for the formation of a sense of belonging and citizenship. This integrated system is referred to as active citizenship.

Women between Marginalisation and Empowerment

The authors of the report confirm that the issues of women empowerment are related to development, from the integration of freedoms to the provision of human rights, such as the right to freedom and a decent life and impartiality towards marginalised groups in Arab societies.

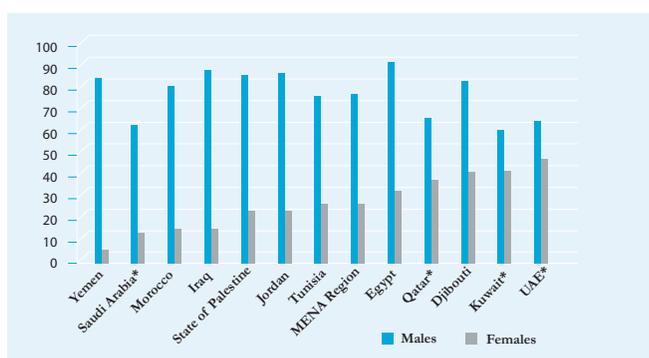
The Basic Pillars of Active Citizenship and Effective Participation



The most embodied form of inequality in the Arab region is that of gender. It manifests itself in discrimination that grants men opportunities at the expense of women in all domains of life. This is illustrated mostly in education and employment without dismissing the historical achievements that have brought about progress for Arab women particularly in education.

However, the improved status of women in education has not had the desired effect on social, political and economic participation. The low rate of women's participation in the labour market is considered one of the important phenomena associated with the marginalisation of Arab women, their weak empowerment, social limitations, and the lack of rights to full citizenship in Arab societies. Thus, Arab countries lose half of society's youth and deprive themselves of key players in the development and localisation of knowledge and the performance of comprehensive development and progress.

Male and Female Participation in the Labour Force in a Number of Arab Countries and the Rates for the MENA Region 15-64 years (%)



Report on development in the Middle East and North Africa: Opening doors, gender equality and... (2013) Source: World Bank development in the Middle East and North Africa

Openness and Intercommunication: An Organising and Guiding Line of the Arab Knowledge Reports

Openness and cognitive intercommunication are approaches adopted by the Arab Knowledge Reports as an organising and guiding line and a rooted principle in the establishment of the knowledge society. It is a comprehensive concept that enjoys its own cultural, social and political aspects, in addition to technological and cognitive mechanisms.

The report calls for action and policies to enable the youth to genuinely open up to the global culture, benefit from it and contribute to it, so they become a player in it and not just a recipient.

The report shows that the regional and international mobility of Arab students represents a key channel of openness. It contributes to communicating with others in the areas of study, research and training and interacting with other people's implicit knowledge. Data indicates an increase in the movement of students in the last twenty years around the world. According to the UNESCO 2014 data, there were more than 314,000 Arab students studying abroad in 2012. Arab countries host about 253,000 international students.

The Enabling Environments and their Effectiveness in the Transfer and Localisation of Knowledge

Summary 4

The knowledge, creativity and innovation of developed countries are all results achieved through the knowledgeable and highly skilled human capital they have. This human capital is formed and developed through training and educational environments and research centres in the fields of science, technology, creativity and innovation. Such environments are nurtured by active social, political and economic circles that are created through long periods of social development and change. There is another important factor supported by previous knowledge reports related to the empowering environments through which the human capital is prepared and trained to transfer and produce knowledge. These environments, with their many characteristics, can either enhance development or slow it down.

The Required Role of Higher Education in the Arab Region to Stimulate the Integration of the Youth in Knowledge Transfer and Localisation

The report emphasises the major role that higher education plays in development. Higher education institutions are the main actors in the transfer, diffusion and production of knowledge processes, through training and research activities. It also assumes a unique social responsibility in developing values, citizenship, engagement in the labour and production market and participation in civil society activities. These institutions produce the human capital required for comprehensive development and the labour market, which is regarded as a crucial and essential factor for economic and social progress in any society. The authors of the report note that when institutions of higher education succeed in achieving high quality and meet the needs of a society, the opportunities for youth integration into the labour market, life and society as a whole increase with respect to the transfer and localisation of knowledge. They also help achieve integration between economic institutions and the forces that organise labour as well as the institutions that are active in civil society. These institutions become an essential mechanism in inducing community change to achieve the objectives necessary for establishing the knowledge society. Higher education institutions are also considered among the most important that can draw together various parties, including students, researchers and instructors, with various backgrounds to work together towards achieving future aspirations for the entire nation.

Higher education has witnessed diversity with regard to the types of universities, specialisations and student distribution over the public and private institutions. The UNESCO data (2010) indicate that the percentage of public universities and higher institutes amounts to 63.8% compared to 36.2% private, and that the percentage of public universities is almost equal to that of private

universities (51.5% compared to 48.5%). As for the distribution of students, the public sector still prevails in the region.

As confirmed by the report, there is no doubt that efforts in expanding higher education in the Arab region are a necessity imposed by the requirements of the knowledge-based society in need of highly-skilled labour forces. However, these efforts will remain futile unless backed up by similar efforts to advance the quality of education services and outputs. The report also highlights a number of important issues, which include the lower rates of youth enrolment in higher education institutes, in comparison to developed countries, and the genuine concern surrounding the adequacy and effectiveness of these systems in equipping the youth with the opportunities and capabilities that enable them to participate in economic development. Arab universities, especially the reputed public universities accommodating most of the Arab students, have inadequate teaching methods, extreme shortage of research policies, in addition to obsolete academic decisions. Furthermore, they are not coping with the requirements of the knowledge society. The report raises questions over the extended presence of western universities, particularly in the Gulf countries, which would help in introducing new methods, decisions and specialisations that cope with the requirements of the knowledge society. However, this might create certain social and political controversies. These universities will remain isolated in a cultural space in the host country they were established, unless major economic progress occurs in these and the controversies are absorbed so that the whole community benefits. If this does not occur, the problem could worsen and jeopardise the future of foreign institutions. The authors of the report note that the controversies are the result of the growing impact of globalisation reflected in the Arab states in what is called the commodification of knowledge, as opposed to its localisation.

The Weak Quality of Higher Education in the Arab Countries

The report finds that although many of the Arab states sought to create a quality assurance organizations, these government-affiliated organisations, which lack independence most of the time, seem to have limited capabilities, and have not directed their efforts in a serious manner towards the modification of higher education institutions, or in their vision of basic reform. The report emphasizes the gap between the higher education outputs and the requirements of the labour market. It shows that the decrease in productivity, increase in unemployment rates among the educated and weak competitiveness of the Arab labour force compared to foreign labour are in large part due to the gap between the educational formation and the requirements of the labour market, as well as the weakness of educational programmes and vocational and technical training. It focuses as well on the weakness in skills and its relation to the weak connection between universities and the public and private sectors showing that dissatisfaction of employers with the skills of university graduates is considered among the main obstacles to recruitment. Higher education institutions do not bear the responsibility of this issue alone; they share it with the weakness of the participation of the public and private sectors.

The report also addresses the issue of higher education and brain drain in the Arab region showing that according to the World Bank, the biggest portion of Arab immigrants are graduates of higher education (35%). The report presents the view that regards the brain drain phenomenon as a reverse aid from less developed countries to developed ones. It makes the region lose an important source of education, knowledge and technology, as well as intellectual elements and historical experiences. Emigration does have its positive aspects; it opens doors to new experiences before the youth, helping the formation of cognitive and social capitals and the achievement of financial returns that constitute between 5% and 20% of the GDP in some labour-exporting countries. However, this does not overshadow its negative aspects that are represented in the brain drain phenomenon and the decrease of production at the national level.

Weakness of the Research and Development Systems in the Arab Region

In harmony with most researchers, the report agrees that the status of scientific research in the Arab region is still one of the major obstacles standing in the way of knowledge, hindering the efforts towards real achievements in building

the knowledge society. The efforts in building an effective research system face several obstacles, most importantly the absence of a culture that supports research and creativity, the weakness of research institutions governance, the absence of comprehensive policies for building integrated systems of R&D and the weakness of funding and human resources.

The report emphasizes statistics showing that the rates of spending on R&D in the Arab countries as a percentage of GDP during the past four decades do not meet the requirements of this sector. In recent years, the Arab countries only allocated modest amounts of their GDP to research and development, at a rate ranging between 0.03 and 0.73%. Also, the Arab states' allocations for R&D, as a percentage of the GDP, are far below the global average reaching about 2.13%. The gap is evident if we compare the Arab region to countries of the European Union, whose percentage of R&D expenditure reaches 1.98%, or Japan, whose percentage is about 3.39% of the GDP. Meanwhile, the combined share of the Arab countries from the global spending on scientific research did not exceed 0.5% of the total global expenditure in 2009, even though they count more than 5% of the world population. In terms of the Arab countries' production of published research papers, studies indicate that it is modest in comparison with that of other countries in the world.

It seems that innovation does not represent a major component of Arab projects in science and technology, as noted by the authors of the report. This may be attributed to the weakness of the overall links between research and development in the public and private sectors, as evidenced by the weakness of the output of registered patents. Statistics show that the number of registered patents by the Arab countries remains low compared to the production of other countries, except for Saudi Arabia (which surpassed Turkey and Greece in the total number of patents registered since 1963). The total number of registered patents in 18 Arab countries since 1963 till 2013 reached 1,821, which was less than that of Malaysia. However, the report does not negate progress in these areas. The analysis shows that some Arab countries have made progress in the transition to economies that are relatively characterised, to a greater degree, by knowledge, innovation and economic diversification, particularly the UAE, Bahrain, Oman, Saudi Arabia and Kuwait, as well as Jordan, Tunisia and Lebanon.

The Youth's Readiness to Transfer and Localise Knowledge is Primarily a Development Issue

The report stresses that the problematic side of the

relationship between the youth and knowledge localisation “lies in the question of development in the region and the extent to which it succeeds in expanding youth opportunities and developing their abilities”. Young people’s readiness to transfer and localise knowledge is primarily a development issue. Moreover, the transfer and localisation of knowledge is inseparable from development in its economic, political and social aspects. Hence, Arab development is required to adopt a “broad new sense of development”, one that is based on knowledge, freedom and requirements of social justice that enables young people to effectively integrate in the transfer and localisation of knowledge and drive development forward.

The report shows the disparities in performance between the Arab countries in human development terms. According to the Human Development Report 2014, the average human development index of Arab countries was about 0.682, which is higher than that of countries with medium human development (0.614) and of countries with low human development (0.493). It is also lower than the global index (0.702) and that of countries with high human development (0.735). Moreover, it is much lower than the index of countries with very high human development (0.890). Data show that the distribution of natural resources and geographical factors has caused a gap in the national income of the Arab countries. The report points out that the Arab region has failed to build effective mechanisms and policies of social protection systems that are capable of protecting wide segments of the society from poverty. The report confirms that the most important challenges facing the localisation of knowledge in the Arab region is the lack of adequate infrastructure and the weakness of public economic structures. The rentier economic pattern prevailing in the region is characterised by these economic structures and it neither motivates the processes of the transfer and localisation of knowledge nor the effective integration of the youth in these processes.

With regards to addressing issues of knowledge and development, the report shows that the main factors behind poor exports do not lie in overprotection itself, but in the weakness of export industries in terms of competitiveness; the focus of exports on low value-added products and the lack of labour force skills that could advance export industries.

The importance of the growth of high value-added products, and the resulting revenue that reflects on the rates of export, lies in the belief that it is a central process in the transfer, production and localisation of knowledge. Concerning the status of the enabling environments, the report confirms that the regulatory structure, the rule of law for protecting intellectual property, guaranteeing

political stability and fighting corruption form an efficient mechanism that guarantees the transfer of knowledge and supports its localisation.

The report finds that foreign direct investment is an effective tool in the transfer and localisation of knowledge and technology. It also supports sustainable development in the Arab region and helps improve the economic situation of the youth. The Arab region witnessed a small FDI impact due to its centralization in the sectors of real estate and petrochemicals, which are considered fertile lands for the rapid growth of job opportunities. However, this is not the case for the transfer and localisation of knowledge that these countries need in their quest to build a knowledge society and develop science and innovation.

Information Technology Infrastructure: Readiness and Employment

Use of ICT in Public Services				
Country	Internet Access in Schools		Use of New Technologies in Businesses	
	Rank (out of 148 Countries)	Value*	Rank (out of 148 Countries)	Value*
Algeria	147	3.2	-	-
Bahrain	30	5.5	45	5.0
Egypt	110	4.2	125	2.7
Jordan	27	5.6	44	5.0
Kuwait	57	4.9	66	4.4
Lebanon	86	4.5	107	3.4
Mauritania	109	4.2	141	2.0
Morocco	95	4.4	113	3.1
Oman	53	5.0	47	4.9
Qatar	10	5.9	15	6.0
Saudi Arabia	15	5.8	49	4.8
Tunisia	70	4.7	-	-
UAE	4	6.1	21	5.8
Yemen	119	4.1	146	1.7

Note: On a scale of 1 to 7 (7 being the highest) according to surveys of users and stakeholders
Source: World Economic Forum 2013.

The report confirms that the ICT infrastructure is a main component in the knowledge economy. It is the key determinant of the infrastructure and level of competitiveness of a macro economy based on knowledge, creativity and innovation. The efficiency of the technological structure constitutes a main factor in achieving transparency and flow of information, improving the climate of economy management and attracting investments, especially FDI. This supports the process of the transfer and localisation of knowledge and youth integration. In this area, the report shows that the penetration of computers in the Arab World remains

much lower than the developed countries, except for Gulf countries, notably Bahrain, Qatar and the UAE, whose rates draw close to those of most developed countries in the number of computers per 100 inhabitants. Bahrain ranked first in the Arab world, with 92.7% of its households owning a computer, followed by Qatar (91.51%), and the UAE (85.2%). On the other hand, the level of mobile coverage is not considered a challenge in many areas in the Arab region, with 13 Arab countries exceeding the proportion of mobile subscribers of 100% in 2013. It is worth noting that there are many low-income Arab countries that have achieved good mobile charges per minute, as is the case in Egypt.

The report, however, shows that E-government is still a concept that is not entrenched in the Arab region. The majority of countries did not score higher than 50% in the e-government services indicator. Some countries, however, consider ICT among the government's top priorities, as is the case in the UAE, Bahrain and Qatar, which achieved high ranks globally. The GCC and Tunisia achieved advanced ranks worldwide in terms of the use of ICT in public services, such as hospitals.

Problematic and Challenges of the Arabic Language and Translation

The authors of the report stress that when considering that language is an incubator of knowledge and culture; it must be then protected and developed so that it can absorb new and growing content of the knowledge economy and society. The report finds that translation is considered an important channel that helps develop the Arabic language, being a process of interaction that reinforces communication and the sharing of knowledge gains. It contributes to the development of the local intellectual product, and opens it up to other possibilities by looking at other phenomena from a different perspective. Despite few commendable attempts, no new and real initiatives have been put forth to open the door for dialogue and constructive criticism, in order to review

the Arabic language and socio alternative rules and new linguistic formats that go in line with the requirements of innovation and knowledge production, and the transfer and localisation of knowledge. The authors of the report stress that the reform of the language and subsequently of the Arabic education system, and the capitalisation on information technology should be done according to a vision that aims at building a knowledge society and achieving sustainable human development.

The report presents data showing that the translation of work from Arabic into other languages in the region is still weak, though the translation industry has witnessed an increase. Statistics show that the percentage of books translated from Arabic in EU countries does not exceed 1/1,000 of the total translated books. In terms of translations into Arabic, estimates show that around 1,500-2,000 books were translated per year, while the share of Arabic publications from translated texts is 6% globally.

Arabic Digital Content

As for the electronic diffusion of the Arabic language, the report shows that the Arabic language ranks 4th among the top ten international languages used online. In 2011, people using the Arabic language online reached 135.6 million compared to 60 million users in 2008. The Arabic language reached the highest growth rate from 2000-2013 where it grew by an average of about 5,296%. On the other hand, the production and publishing of Arabic digital content face many obstacles, further complicated by the need to overcome the obstacle of internet access. Posting Arabic content on the internet requires adjusting some available technologies to suit the Arabic language. It also requires developing technology solutions to issues that can be sorted under two categories. The first relates to the Arabic language itself, and the second to preparing Arabic content to be processed in-depth. The various obstacles preventing the Arabic language from merging into the internet and the digitisation era represent additional threats towards the fragmentation of this language and its isolation from the

According to the data and analyses related to the various topics discussed earlier (higher education systems, scientific research systems, development pattern in the Arab region), Arab states still need, despite their numerous achievements, to effectively promote enabling environments. They also need to actively motivate and develop such environments in order to support the transfer and localisation of knowledge and effectively engage the youth in such processes. Establishing these environments is the first basic step towards achieving aspired goals.

Readiness of Arab Youth to Effectively Engage in Localisation of Knowledge

Summary 5

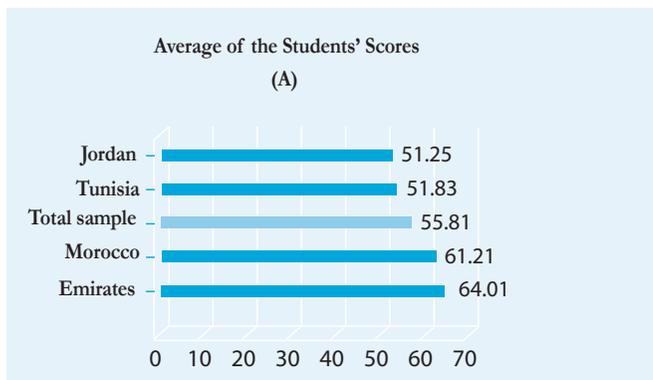
Field surveys were conducted on indicative samples of the Arab youth in their final stages of university education in four Arab countries (UAE, Jordan, Tunisia and Morocco). More than 3,800 young Arabs participated. These surveys come in accordance with the field study methodology that the Arab Knowledge Report adopted for direct communication in the report issues through the exploration of opinions and statuses of the primary stakeholders, namely the youth. 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 in constituting a major part of the labour and productive force, in addition to enjoying the most important requirements for establishing the knowledge society, represented in creativity along with the energy and ability to incur progress.

Innovative tools were designed and used for the first time in the preparation of this report. The main goal of these tools was to 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 opinions of the youth regarding the most important relevant topics, including values and practices, as well as their perceptions of the surrounding enabling environment. 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.

Status of the Youth in Terms of Knowledge Capital

Cognitive Skills: Based on the results of the field research, the report finds that the Arab youth’s ownership level of cognitive skills is in the limits of the average. A number of required skills were measured, 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 skills was prepared. The five targeted skills were: problem-solving skills, information processing skill, use of technology skill, written communication skills, use of foreign language skill. Analysis revealed that the arithmetic mean (average) of grades scored by participating youth in the four countries was 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. 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.

Countries’ Results in Cognitive Skills Combined

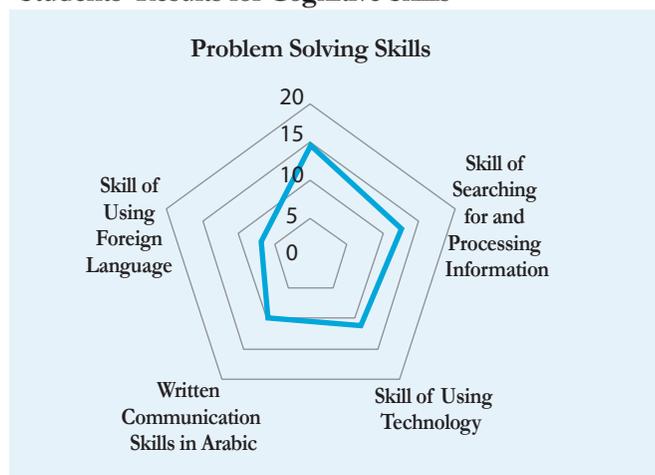


The detailed analysis of the results of cognitive skills shows a large variation in the levels of cognitive skills' ownership with the emergence of a weakness in the written communication, in both Arabic and the foreign language. As for the skill of technology use for research and knowledge purposes, participants scored average rates.

The authors of the report believe that 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.

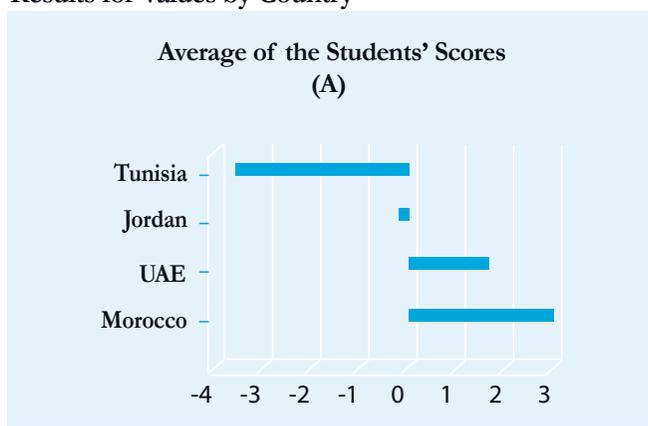
Students' Results for Cognitive Skills



A Good Level of Values

The report shows that 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 diligence), social values (modesty and cooperation) and universal values (respect of freedoms and religious tolerance). 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 studied values.

Results for Values by Country



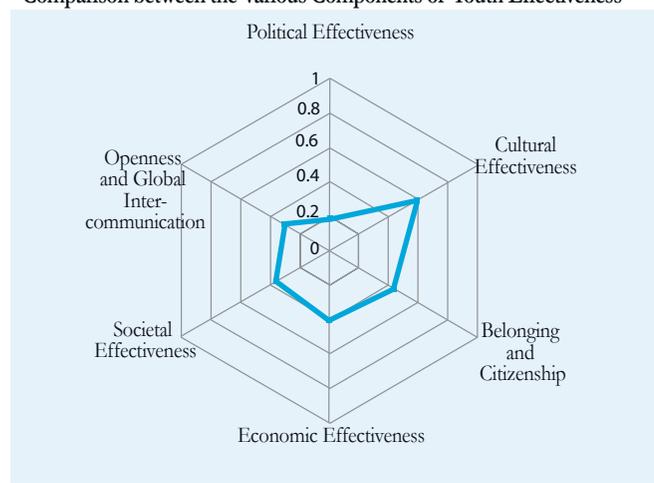
However, it is important to look at these results in all countries with much caution, because we are talking here about what the students stated, and this may not necessarily match the values they really possess or practice. In all cases, the report finds that this attachment to high values, if it is 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 of the Youth

The report clarifies that the intended meaning of "effectiveness" is the actual and prolonged participation of respondents in one of the relevant investigated fields. 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.

Comparison between the Various Components of Youth Effectiveness



The report shows that, 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, participation and involvement in associations) is one of the fundamentals of establishing the desired knowledge society.

As for citizenship, results showed that the notion of citizenship was still not mature among the majority of

participating students, expect in the 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.

As for global openness, the report indicates that the results of the current research revealed a low level of openness among students. The authors of the report confirm that efforts to transfer and localise knowledge must necessarily pass through openness to 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.

The report highlights the issue of Quality as one of the most important issues that require immediate attention. This issue is closely related to the shortcomings mentioned already.

Youth's Opinion on the Transfer and Localisation of Knowledge and the Necessary 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 support and the contribution of the private sector and economic institutions in funding and advancing scientific research.

The report shows that 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. The report calls for these results to 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 at the utmost levels of effectiveness.

Students' Opinions on the Evaluation Methods in Universities

	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

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

	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 that would make the economy in its various aspects depend on modern and reliable knowledge, and on the other hand, it provides graduates in required fields, but lacking the minimum necessary skills of the major they are studying.

With regards to the interaction with information technology and the internet in particular, 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%. Additionally, with regards to the use of the internet and the share of cognitive aspects in this use, the report shows that the results of the field research showed that knowledge-related topics did not exceed 19.4% of discussed topics on social networks, while social topics ranked first with 29.4%, personal relationships second with 26.3%, while political topics ranked fifth with 6.3%.

Youth's Opinions on the Effectiveness of Some Enabling Environments in the Transfer and Localisation of Knowledge

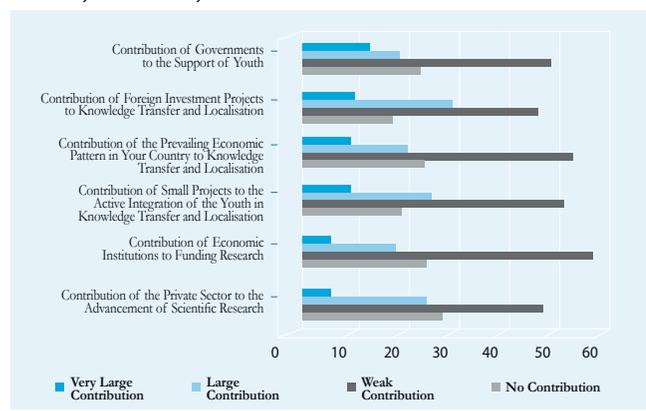
The report shows different levels of trust that were expressed by students regarding the ability of bodies and organisations to contribute to youth integration in the transfer and localisation of knowledge processes. These levels varied from one country to another and from one authority to another. In 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.

The report also shows that, 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 degree of variation in percentages, and the highest percentages were scored by Emirati students.

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



The report shows that, the youth's 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 possibility 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.

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.

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 the 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.

These tools (the questionnaire and tests) that we have introduced in this report, in addition to the tools that were introduced in the previous report (the Arab Knowledge Report 2010/2011), represent a powerful qualitative and quantitative addition to what the Arab world needs and misses in terms of measures of the readiness of the youth to access the knowledge society in terms of skills, values and knowledge. Performing such studies by introducing such tools and using them, perhaps for the first time, in the Arab region is an attempt at filling the gap and addressing the urge to measure the readiness of Arab adolescents and youth to identify 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.

Moving towards Integrating the Youth in the Transfer and Localisation of Knowledge

Summary 6

The Arab Knowledge Report for the year 2014 exemplifies a proposed vision for an action plan required for integrating the youth into the transfer and localisation of knowledge in the Arab region. 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 as it has been 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 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

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", followed by 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 the 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 that the Arab region indicates the absence of the main driver required to access the knowledge economy and the knowledge society to achieve genuine development. The report confirms that 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 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.

The challenges of 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 the 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 manufacturing industries, the entrepreneurship sector; youth unemployment and 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 authors of the report believe that 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.

Likewise, the report confirms that 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 the 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.

The authors also believe that 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.

The authors of the report 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 their 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 tolerant religious principles and values, the culture of human rights, ideals and morality based on moderation, mutual respect and the acceptance of diversity and difference.

The Historic Opportunity to Establish the Knowledge Society in the Arab Region: The Triad of Financial Wealth, Human-Youth Wealth and Global Knowledge Revolution

The authors of the report confirm that 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 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 human in a new world- one that enjoys freedom, dignity and well-being.

On the other hand, the report reveals the existence of problems and dilemmas that are hindering progress, place enormous responsibility on policy and strategy-makers. Therefore, addressing these challenges and controversies before they worsen and threaten stability and growth is necessary. 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. 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: The report shows that 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. 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 report reveals that 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 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.

Encouraging and Supporting Foreign Investment: The report confirms 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 technological industries that encourage youth employment and the dissemination of the technology of innovation, scientific research and development.

Encouraging and Supporting the Private Sector:

The authors of the report believe that it is necessary to encourage the private sector, support 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 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 advanced needs.

Supporting Training Programmes and Capacity Building:

The report finds that 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..

Building Arab Qualification Frameworks:

The authors of the report believe that 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 processes 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 authors of the report confirm that 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 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 to 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 individuals' 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 report finds that 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 the 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.

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. 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 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:

The reform of the use of the language and its role in the knowledge society is a must. It is an opportunity for the prosperity of another aspect of regional cooperation and integration and for the strengthening of cooperation between the institutions involved 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 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.

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

The authors confirm that 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.

Cultural Development:

The report confirms that countries should emphasise the need to bring about an enlightened cultural development that supports critical scientific thinking, a spirit scientific research spirit 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.

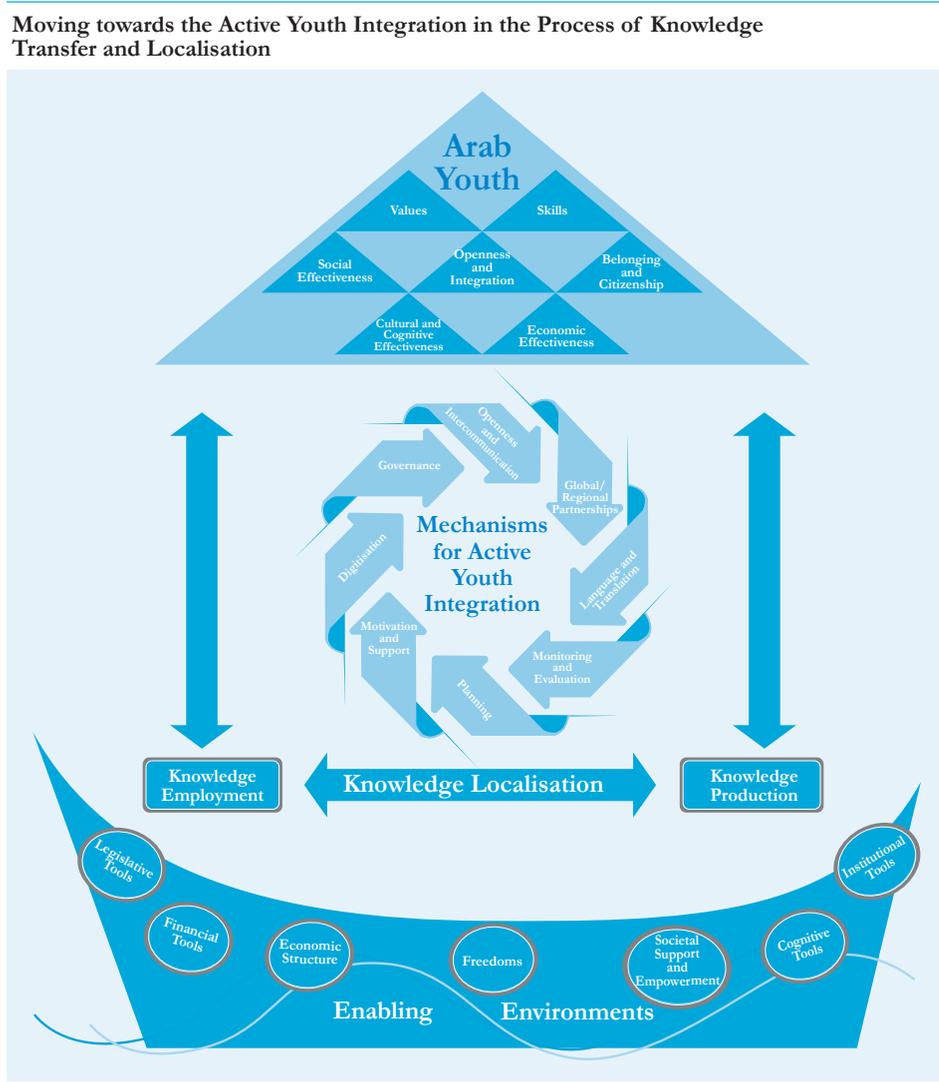
Achieving Economic Integration in the Arab Region:

The report believes that 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 authors of the report find that 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:

The report concludes by confirming that the 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 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.



The figure 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.

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. 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.

