

Arab Knowledge Report 2010/2011

Preparing Future Generations for the Knowledge Society





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Foreword by the Chairman of the Board, Mohammed bin Rashid Al Maktoum Foundation

“Undoubtedly, the Arab reality is thorny and problematic; this is our reality, and we know it well in detail. We have no way out but to work through this reality, with awareness and determination to overcome obstacles, and with recognition that human’s worthiness is not measured by the success to adapt with reality, whatever it may be, neither by the skills in managing the statuesque, but rather by the ability to develop this reality and change it for the better through serious, persistent, and well thought hard work that is driven by a spirit of optimism, selflessness, and devotion. By this, change will happen and development will be achieved”.

This is one of the fundamental basis in the vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, for achieving sustainable and fruitful Arab development through diagnosis of the status of knowledge in the Arab world, developing its infrastructure and improving its quality, in order to produce a reliable high-quality cognitive outputs that correspond with the requirements of the labour market.

The annual Arab Knowledge Report project; a joint initiative of the Mohammed bin Rashid Al Maktoum Foundation and the UNDP, provides an international Arab index for measuring the state of knowledge in the Arab countries. It is also considered a qualitative and accurate analysis and description, from several perspectives, that can assist officials in evaluating the performance and improving developmental plans for building knowledge societies that

are capable of confronting challenges and of contributing to comprehensive and sustainable development.

The first Arab Knowledge Report for 2009 expressed the structural relationship between the triad of community, knowledge, and development for establishing and supporting knowledge economy bases, and for achieving the welfare and pride of the Arab citizen. This involved a detailed analysis and description of the knowledge scene in the Arab world, and the formulation of a road map for achieving a “knowledge renaissance” along with identification of the relevant priorities.

The second Arab Knowledge Report sheds light on one of the most important recommendations of the previous Report by addressing the issue of preparing future generations for the knowledge society which is considered the cornerstone for building a sustainable human development. Relying on updated field surveys undertaken in various Arab countries, the Report provides practical solutions that can guide Arab countries in bridging the “cognitive gap” that was highlighted in the first report.

Using a detailed methodology, the report also reviews many pedagogic and educational theories that are related to preparing future generations for the knowledge society, as well as the associated problematic issues including those related to the political, economic, and social conditions and the impact of these challenges on building the desired knowledge society. Going beyond

theories and studies concerned with building knowledge societies, the scope of this Report extends to the investigation and collection of data and information from their original resources by going to the Arab streets to gather facts and conduct comprehensive field surveys using real and representative samples of the young Arabs, from north to south and from east to west. This Report, which is optimistic in nature, provides practical solutions derived from the Arab reality, that are based on theories and methodologies of sustainable human development, providing a guiding reference for the Arab decision-maker that can assist in building the knowledge society.

In this context, I would like to extend thanks and appreciation to the UNDP/Regional Office for the Arab States, especially the report team in Dubai, and to every person who contributed to the completion of the report, be they thinkers, authors, editors or technicians.

I am looking forward to continuing further fruitful cooperation between us in solidifying the pillars of the cognitive and intellectual structures in the region, and in consolidating the foundations of the aspired human development in the Arab world.

Sheikh Ahmed bin Mohammed bin Rashid Al Maktoum
Chairman of the Board
Mohammed bin Rashid Al Maktoum Foundation

Foreword by the Regional Director, UNDP Regional Bureau for Arab States

The partnership between the Mohammed bin Rashid Al Maktoum Foundation and the Regional Bureau for Arab States in UNDP to support the Arab and international efforts in building the knowledge society and economy, brings to fruition the Arab Knowledge Report for 2010/2011 which deals with one of the most important issues in the preparation of the future generations for the knowledge society.

The second Arab Knowledge Report for 2010/2011: “Preparing Future Generations for the Knowledge Society” builds on the main findings of the first Arab Knowledge Report launched in 2009, which showcased the deficits and gaps in the Arab knowledge scene and proposed ways to address these gaps, including political will and mobilization of required capabilities and resources. It relied on one of the most important recommendations calling for building “the necessary capacity” of qualified human capital to lead the processes of moving forward the knowledge society and economy.

Following these diagnoses, and based on the triad of “knowledge, development, and freedom” which was adopted in the previous Report, “the Arab Knowledge Report 2010/2011: Preparing Future Generations for the Knowledge Society” moves to the stage of “action”. This puts us at the core of building the knowledge society through preparing of the Arab society to actively participate in building the aspired knowledge society and to benefit from its fruits; and then utilize the gains in serving the objectives of sustainable human development.

According to the Report’s authors, the preparation of the future generations for the knowledge society requires providing them with a comprehensive set of skills

that are consistent with the requirements of the future era including cognitive, compassionate and social skills. The Report stresses that skills alone are not enough unless they are accompanied by a set of values that guide the youth in their work for the good of humanity and society. The vision of the Report emphasizes the importance of providing supportive and motivating enabling environments, including the provision and protection of freedoms in their broader sense, in order to nurture and maintain the value system, and embrace and develop the skills of the youth in order to optimize their investment in the processes of building the knowledge society.

The Report is characterized by its inclusion of field studies on the status of preparing future generations in four selected Arab countries; the United Arab Emirates, Jordan, Morocco, and Yemen, as well as addressing issues of preparing the future generations for the knowledge society in the Arab region as a whole. The first part of the Report highlights the most important concepts and practices in the preparation of the future generations for the knowledge society in the Arab region, including an in-depth investigation on the status of education systems as being among the most significant approaches to the preparation processes along with the overall family and societal conditions.

The Report also provides an objective analysis of the status of enabling environments for the future generation, stressing the urgent need for effective intervention for the establishment of proper enabling environments stimulating the youth and their preparation for the knowledge society.

After a consolidated presentation of

the outcomes of the empirical studies that were conducted as case studies in the four selected Arab countries, the first part of the Report concludes by presenting a proposed model for the future practices towards the preparation of the future generations. The second part of the Report contains a comprehensive in-depth assessment of the status of the preparation of the future generations in each case study country. The case studies are based on: the available research and information; outcomes of the surveys and field activities that were conducted by the Report team including the students' and teachers' questionnaires; workshops held with the participation of experts and stakeholders in each of these countries; and results of tests and innovative tools specifically designed to measure the skills and orientations of students which were applied for the first time on pioneering bases in the Arab region.

The field results on the conditions of the future generations and their readiness to access the knowledge society showed many gaps that must be dealt with if we really want to move forward towards building the knowledge society. The challenge is big and we have to face it. We hope that the empirical results of this Report will help the decision makers and stakeholders in the four case study countries, and in the Arab region in general, in identifying and adopting the required policies and solutions. We hope that this Report, like its predecessor, will stimulate constructive discussions on these issues. Again, we do not claim ownership or monopoly of the truth, but we aspire to stimulate an Arab dialogue about the

most efficient and effective way to build the knowledge society as a first step towards achieving the aspired Arab renaissance.

A selection of Arab intellectuals and experts in related fields participated in the preparation of this Report to be a platform for views and aspirations and to provide theoretical and practical bases for the establishment of the desired knowledge society. For this outstanding effort, I would like to extend sincere thanks to all those who participated in the completion of this work, including the teams of authors, writers, coordinators, editors, and the work teams in both the UNDP and Mohammed bin Rashid Al Maktoum Foundation. I would like also to thank all those who contributed and participated in building the tools of this Report, including the participants in the workshops held in the context of preparing the Report with a commendable participation by specialists and interested parties in the countries of the four case studies, as well as students and teachers who participated in the field study.

In conclusion, I have the honor to extend my deepest gratitude and appreciation to His Highness Sheikh Mohammed bin Rashid Al Maktoum for his support to the knowledge initiatives in the Arab world, which would not have continued without His Highness's ongoing sponsorship and patronage. We, at UNDP, are proud of the partnership with Mohammed bin Rashid Al Maktoum Foundation, and we are keen to maintain it in the best benefit of the knowledge society in the region and in enhancing the prospects for sustainable human development in Arab countries and in the world at large.

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ARAB KNOWLEDGE REPORT 2010/2011

Part I: The General Report

FUTURE GENERATIONS AND THE ARAB KNOWLEDGE SOCIETY: ANALYTICAL VIEW AND CASE STUDIES SUMMARY



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METHODOLOGY, CONCEPTS AND STRUCTURE OF THE REPORT

INTRODUCTION

The Arab citizen lies at the heart of the process of building the desired knowledge society. The Arab Knowledge Report 2010/2011, is a step towards laying the foundations for the knowledge society by developing principles to deal with methodologies and mechanisms of preparing future generations to actively participate in building the knowledge society and access its vast domains. This task puts us right in the midst of the processes of preparing and rehabilitating Arab citizens to enhance their skills; instilling values which control and direct their decisions and activities. We can also identify and make use of methods and mechanisms that empower them in a way that maximises their chances for active participation in building the knowledge society and reaping its benefits. These gains will be employed within the broader context of the ultimate goal to achieve sustainable human development to support and retain the pride and dignity of the Arab people.

The Arab Knowledge Report 2010/2011, 'Preparing Future Generations for the Knowledge Society,' is built on the main findings of the Arab Knowledge Report, 2009, which highlighted a knowledge gap and low levels of cognitive performance among Arabs in knowledge-related arenas. Considering knowledge is key to achieving sustainable human development, the report illustrated that it would be possible to deal with and bridge this gap in the Arab region, provided the existence of political will and the mobilisation of resources and capabilities to build the desired knowledge society.

The axes of action towards building the knowledge society were identified as the transfer and acquisition of knowledge

and technologies, the provision of enabling environments and employing them in the service of human development. Emphasis is put on the principles of this movement which include freedom, integration with the development needs of the society, and openness and intercommunication in all areas including scientific technology and humanities.

The Arab Knowledge Report 2009, also stressed that the 'building' of the Arab citizen was a cornerstone of creating the desired knowledge society. The status of the Arab knowledge capital created through education in the Arab region was also discussed. Moreover, innovation issues were addressed, through identifying both the relevant limiting and stimulating factors.

The report expressed the need to build 'a critical mass' of qualified human capital that was intellectually able to move the processes of building the knowledge society and economy forward. It explained that the opportunities to form the required mass are greatest for the future generations.

Based on these fundamental results, the Arab Knowledge Report 2010/2011, moves on to deal in detail with the issue of preparing the coming Arab generations to integrate into the knowledge society. This issue, which focuses on caring for the young, represents the central question in the report according to a set of elements which, in turn, help frame the topic and identify its basic features.

In order to bridge the complex knowledge gap, we need to take care of future generations; to start from the ground up, by developing a plan aimed at building a new base of knowledge for children and

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The Arab Knowledge Report 2010/2011, is based on a broad conception of the knowledge society that adopts the triad of skills, values and enabling environments

the youth, and laying foundations that can renew society's knowledge base, enabling it to respond in a positive and creative way to the rapidly accumulating knowledge in our time and to the expanded options it offers to humans. It is also necessary to develop opportunities to satisfy the 'hunger' for knowledge among the youth without prejudice to their values, cultural identity, and intellectual and moral references, and move them from a state of reception of culture and knowledge to transmission. This is done by preparing them for fair competition with other nations to create civilisational achievements (Kaltham Al Ghanim, Member of the Readers Committee). Furthermore, educating and preparing young generations calls for a joint effort, such as the involvement of other age groups within society, so that this preparation does not occur at the expense of other groups. It also requires implementation plans for the inclusion of these generations (Kamal Abdul-Latif, background paper of the report).

The Arab Knowledge Report 2010/2011, is based on a broad conception of the knowledge society that adopts the triad of skills, values and enabling environments. The report, in its six chapters and four case studies, highlights the inability of Arab enabling environments to provide the necessary conditions to equip new generations with the intellectual characteristics required to access the knowledge society. The report clearly illustrates the shortcomings of these environments in most Arab countries which are represented by weak corporate governance, high rates of corruption, weak indicators of freedom, an absence of democracy, increasing rates of poverty and unemployment, restrictions on women's freedom, and the failure of economic reform policies to achieve social justice and provide employment opportunities for the youth. The report, through its analyses and studies, shows what the Arab Youth suffers from with respect to existing political and social conditions.

What adds to the importance of the description mentioned in the report

concerning the economical, social and political conditions exposed by the Arab youth in general, is that after the completion of field studies and during the writing of the report particularly in late 2010 and early 2011, witnessed the eruption of a wave of popular protests in most parts of the Arab region in which the youth was the main element, calling for change and political reform, democracy and social justice and the fight against corruption.

Despite the differences among Arab countries in terms of social and political conditions the initial observations of these revolutions and popular protests shows they share a common element. On the one hand, the motivating factor behind these revolutions and protests is the youth entity of the middle -class and some of the upper-class who have used information and communication technology effectively to mobilise energies and they have been subsequently joined by groups from other classes, thus turning these movements into popular revolutions and protests. These movements benefited from modern information and communications technology, especially the social media sites on the internet, such as Facebook, Twitter and others. These technological means and tools have contributed to the creation of political momentum and socio- political approaches among various youth groups in more than one Arab country, noting that most of them have similarities with respect to the principles, convictions and concerns about social and political problems in their local reality. On the other hand, the means and mechanisms of the modern age, including information and communication technology, have been largely used by the youth to live the events going on in the larger world surrounding them, where globalism has played a role in spreading the revolution of democracy and human rights in the whole world. There is another important factor represented in the globalization of the principles of participation, citizenship and civil society. This factor is considered a strong active element either hypothetically,

through the transfer of the principles and culture of human rights. Or as a social reality. That is, the spread of these principles has resulted in the appearance of political and social activists in human rights, women and the environment acting as strong arms in social and political movements before and during the outbreak of protests in many Arab countries.

In light of the rapid changes giving birth to the Arab revolutions that have adopted the demands for urgent change in business management and government to achieve justice, prosperity, freedom and progress and confirmation of their existence in front of other nations, a better tomorrow has become possible and within reach. However, achieving the goals of progress only begins with adopting policies targeting the Arab citizen and preparing the youth according to the triad of knowledge, freedom and development in all their comprehensive political, social, and economic dimensions.

GENERATION PREPARATION AND THE KNOWLEDGE-FREEDOM-DEVELOPMENT TRIAD

In addressing the issue of building future generations, we consider the process a step on the way towards possessing knowledge, which requires an atmosphere of freedom for supporting development options and strengthening the status of people in society. This concept, summarised in these three elements, highlights the connection between them in the context of the targets of this report. Building new Arab generations for the knowledge society is inseparable from the demands for expanding freedom, strengthening the foundations of knowledge and realising comprehensive development. This means that action faces several challenges in which the political, economic and cognitive aspects along with the mechanisms of building new generations, overlap with each other, reflecting in turn on education, rehabilitation and formation (Kamal Abdul-

Latif, background paper for the report).

Preparing young generations to build the knowledge society is difficult and easy at the same time. It is difficult because it needs, by and large, a cognitively-ready society at the economic (infrastructure and material resources), political (freedoms and legislation) and communal (customs and prevailing culture in the upbringing of the young) levels. However, we find that the preparation of the youth for the knowledge society may be easier if we look at their characteristics. They have many characteristics that are compatible with possessing knowledge, such as curiosity, enthusiasm and free thinking. They are more able to accept new concepts, which could help change some of the crippling cultural and social legacies, in order to move towards the knowledge society. In this regard, there may be a number of challenges and responsibilities closely related to values and rights, especially the rights of future generations and our duties towards them.

Dealing with this issue involves great responsibility and a number of philosophical polemics, such as those relating to the rights of future generations to acquire knowledge and skills and the values required to actively contribute to building knowledge societies and benefiting from them. This means securing what is needed and preparing for the productive involvement of the future generations in building the knowledge society.

VISION: BUILDING GENERATIONS AND THE TRIAD OF SKILLS, VALUES AND ENABLING

The compound concept 'building generations' is considered the cornerstone of the Arab Knowledge Report 2010/2011. It involves multiple areas of knowledge, due to its significance in the report, which includes sociology, psychology, and education and training. This concept is not only a meeting point but also has

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positive significance enabling it to generate and create other concepts. This, in turn, expands the circles of communication and involvement of our community with respect to the knowledge gains in our time (Kamal Abdul-Latif, background paper for the report).

The concept of 'building generations' includes the age-related significance of the concept of 'generation', which enables us to identify some aspects of building and training. In addition, attention is given to the issue of reconstruction and rehabilitation in light of the rapid changes and revolutions in the cognitive domain as well as in the technologies associated with media. Hence, the phrase 'future generations' or 'young' has been defined to cover those aged under 18. By targeting this age group, the report covers all stages of schooling and preparation from pre-primary to primary and then to secondary education; the stages of childhood, adolescence and early youth. All these stages can be influenced through general rehabilitation, education and learning programmes. Childhood, from 0-18 years, is divided into early childhood, 0-8 years old, children, 9-14 years old and teenagers, 15-18 years old. This age framework is consistent with international classifications as in UNESCO (15 years and above - adults, and 15-24 years - youth), UNICEF (5-14 years - children, and 15 years and above - adults), and the International Labour Organisation (5-14 years - children, and 15-18 years - teenagers).

By virtue of the previous definition, this age group does not include the youth at university education. That is, young people during university education have their own special psychological and social characteristics and conditions. Because this category consists of those engaging in the labour market or who are in the final stages leading up to it, this group of productive youth acquires particular importance in the building of a knowledge society. This group needs a specialised study which we

hope to conduct in the next reports.

THE TRIAD OF SKILLS, VALUES AND ENABLING

The vision proposed for preparing future generations to build a knowledge society is based on the tight correlation between the triad of skills, values and enabling; the overall process of upbringing which is a fundamental step in reconstructing communities without which a society cannot visualise the goals and objectives it sets for itself.

Upbringing is considered a continuous building process based on the rules of cognitive enabling, which includes securing freedoms, strengthening the regulatory and responsible institutions and providing the necessary resources. Moreover, thinking about upbringing may lead to addressing the means of preparing and developing to acquire and implant knowledge; all in order to accomplish effective and creative cognitive upbringing. This should be done without losing sight of the links between existing and possible upbringing and enabling influences.

SKILLS AND COMPETENCIES

The upbringing process involves equipping the young generation with the skills required to build the desired knowledge society and keep up with cognitive, technological and scientific developments and thinking patterns internationally. In this regard educational and psychological glossaries and various literatures differentiate between the terms 'abilities', 'skills' and 'competencies'. This helps to induce that 'ability' is a potent force and a hypothetical formation enabling an individual to perform a physical or mental action which can be observed as an outward behaviour, thus allowing its existence to be deduced and quantified, such as the ability to learn, perceive, induce, innovate.

In fact, abilities are important in our

educational, social and professional lives, and they receive attention from specialists. We seek to discover abilities in order to provide the appropriate environmental and educational atmosphere required to develop them to manage with scientific and technological changes and with the demands of the knowledge society.

The 'skills' refer to performing actions quickly, easily, accurately and proficiently with minimal effort. They develop as a result of learning and teaching. We can distinguish cognitive skills, such as reading comprehension, expressive writing, information processing, analytical/critical thinking, crisis management, problem solving and decision-making, and self-education and continuous learning; conative/personal skills, such as self-awareness, self-appreciation and learning motivation; social skills, such as team work and communication skills; and others.

Some skills are clear. These include critical and analytical thinking, building a culture of learning and seeking information instead of simple reception which is prevalent in the traditional dictated education system, and the skills of conflict resolution and crisis management. However, there are some questions still open about the details of this process: What are the skills that we need to build in particular? What are the skills that may be required by the labour markets in the future, taking into account that we are working with young generations that will engage in the labour markets after 5-20 years? What are the specific skills required for establishing a knowledge society and economy? Perhaps this will necessitate working on a number of topics that may involve theoretical and field extrapolations concerning present and future labour markets, within the general framework and overall objective of building the desired knowledge society. In order to train and prepare the Arab youth to deal with an ever-changing society in which competition revolves around how to cope with such change and influence it in a productive

way, there is a need to build special skills. These skills should be identified or there should at least be established methods to help identify them in a dynamic way to interact with variables in our societies.

'Competencies' represent a relatively recent concept which refers to the sum of knowledge, abilities and skills as well as integrated and interrelated attitudes acquired by the individual through training or teaching. Some view 'competency' as an invisible inner potential or readiness. Others would argue that 'competency' does not differ much from some of the other concepts, such as experience, skill, good performance or ability. But aside from theoretical differences or the numerous usages of competencies or skills, this report will use the term 'skills' in its broadest and most comprehensive sense which includes a number of cognitive, conative and social dimensions.

VALUES SYSTEM

It should be noted that skills alone cannot yield the desired results unless they are accompanied by a precise system of values that govern and shape the convictions, and thus the practices, that harness and direct skills along the desired paths. Today we are experiencing major cognitive shifts, triggered by new technologies in communication and information, and we recognise the importance of rebuilding the systems of education, formation, and social and cultural upbringing in order to keep up with these changes and take advantage of their gains. In this regard, the values primarily relate to the general and relative criteria associated with these areas, given that values are the basis of thinking in the means embraced by the processes of education, formation and rehabilitation.

The concept of values puts us before a system of principles and standards which correspond with Arab aspirations to catch up with the knowledge society and to create pathways to sustainable development. The reforms anticipated

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in this section consider building the new generations as society's main concern with its various components, which include decision-makers, families, schools, women, men, children, the youth, adults, and entrepreneurs.

The identification of these values and the methods of instilling them in young children and the youth, and the suitable conditions for this, represent another major goal of the current report. There are many fundamental values such as communal commitment and civic participation, the values of openness and communication with, and respect for others and attempting to implement cooperation for progress. Other values relate to learning methodologies such as perseverance, respect for time, diligence, self-esteem, as well as other general human values. We can also use this issue to explore prevailing values and cultures which inhibit efforts to build a knowledge society, such as the culture of shame and preference for administrative and office work over productive vocational work, values glorifying knowledge and learning and which encourage implanting knowledge rather than importing its products; as well as the consumer values that prevail in a number of Arab countries.

ENABLING ENVIRONMENTS

The concept of enabling has a compound significance. This report focuses on enabling environments, which are represented in different forms of fostering and supportive conditions and in various structures, which aim to create an environment that raises the youth in a way that facilitates their involvement in the knowledge society. This cannot be achieved without actions that prepare a foundation for localisation of knowledge. On the one hand, enabling refers to the process by and through which the individual acquires the potential to do something more efficiently, in terms of abilities, skills and knowledge. On the other hand, it refers to the environments fostering the process of building these abilities and

skills in the various political, social and economic areas. Therefore, enabling is the key to the processes of preparing future generations for the knowledge society. In other words, it represents the framework that allows the coming Arab generations to obtain the skills to enable them to embody new values and build the abilities to overcome the internal and external challenges they face today. As for the conditions of enabling, they include freedoms, understanding the exigencies of the present time, and building institutions and networks. Enabling is a condition of establishment. Whereas building skills requires a perspective of a value, for example a general criteria-oriented vision, it requires at the same time an appropriate environment.

The required enabling processes can vary between those directly related to future generations to engage in the knowledge society, and those related to the reality of Arab societies themselves, enabling them to embrace the building and preparation processes of the young and supporting them to establish the desired society. Within this perspective, the evaluation of enabling environments may involve several issues related to policy, development, education and rehabilitation plans; freedoms and political reform; the provision of infrastructure for information networks and facilitation to access them; the provision of a type of education which enables the youth to participate in the knowledge society and not only be fulfilled with realising quantitative achievements; and the provision of an enabling economic environment by fighting poverty, providing access to finance for SMEs, and providing health care and comfortable housing for the young. This takes us back to the close link between knowledge and development. A discussion on enabling environments would include dealing with relevant regulatory and supportive legislation, laws and rules, and building institutions which support and shape the process of preparing the young to access the desired knowledge society and contribute to its building and development.

COGNITIVE, CONATIVE AND SOCIAL DIMENSIONS

The report maintains that the required skills, values and enabling environments cover three main dimensions: 'cognitive,' 'conative' and 'social', which control the processes of preparing and equipping the young for the knowledge society. Through identifying the required skills, values and enabling and the interactive relations among them, the main elements of our vision are now complete with respect to the nature of the younger generation we aspire to prepare and qualify for active contribution to building the desired knowledge society.

THE GENERAL METHODOLOGY OF THE REPORT

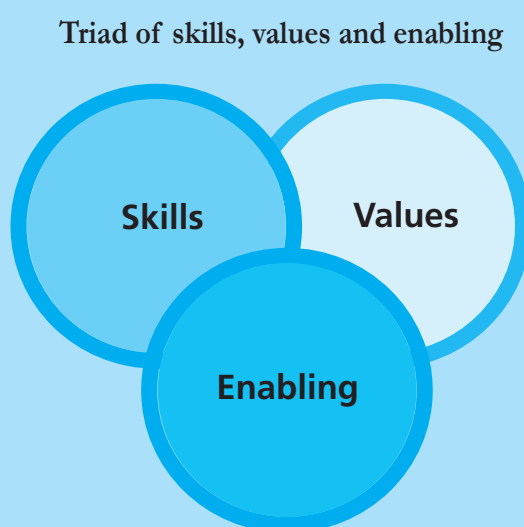
The Arab Knowledge Report for the year 2010/2011 tackles the issue of building future generations in the Arab region by depending on two main elements: The first element involves the methodological studies that are based on the information available on the subject matter and on global experiences and ideas in this area. The second element involves conducting 'case studies' for a number of selected

Arab countries to investigate the situation and readiness as well as the opportunities, gaps and requirements required to facilitate the access of future generations to the knowledge society.

The action methodology related to the case studies depends on two key points: The first relates to the studies and research, including educational, social and developmental theories and frameworks as well as the global experiences and ideas in this field. The second relates to the information and field data obtained from specialised field surveys targeted at the related segments. In this round of the series of Arab Knowledge Reports, field research was conducted only in the major cities of four Arab countries that were the subjects of the case studies, Jordan, the UAE, Morocco and Yemen, to represent the different areas in the Arab region; the Arab Mashreq region (Jordan) the Arab Maghreb region (Morocco), the Gulf (the UAE) and countries demanding more growth (Yemen). For logistical limitations, field surveys were completed on pilot principles in the major cities of these four countries (Amman, Rabat, Sana'a, Dubai and Abu Dhabi). This was achieved by adopting various assessment and investigative tools developed specifically for this purpose.

The report maintains that the required skills, values and enabling environments cover three main dimensions: 'cognitive,' 'conative' and 'social', which control the processes of preparing and equipping the young for the knowledge society

FIGURE 1-1



The study comes in light of the pressing need in the Arab region for accurate and standardised tools and methodologies which allow measuring the learning outcomes and the pace of their development scientifically and objectively

The findings of these surveys can be built on to conduct similar studies in other Arab areas and cities in later stages.

This exploratory study aims to identify the status of the triad of skills, values and enabling among a sample of young Arabs in the four countries. Due to the importance of the teacher's role in shaping the minds and consciences of the young, and since the quality of any educational system cannot, in general, exceed the quality of its teachers, it was necessary to survey the opinions of a sample of teachers on the educational process they practice, the environments surrounding them, and how these environments help or hinder them from performing the role assigned to them. Moreover, consultative meetings were organised through workshops held during the second half of 2010 in all case countries, where participants included about two hundred specialists and concerned parties from different areas of the public sector (education, planning and development), private sector (investors), concerned civil society organisations, religious figures, specialists and experts in areas related to knowledge and social and economic development, as well as representatives of the youth. These workshops aimed to deliberate on the important issues related to the rehabilitation and preparation of the Arab youth for the knowledge society in order to collate the various views and attitudes, including the most significant deficiencies that they see and the ways they propose to deal with them. As such, the methodology of preparing the case studies achieves the principle of participation. The Arab Knowledge Report 2010/2011 has been prepared by Arab societies and for them.

The study comes in light of the pressing need in the Arab region for accurate and standardised tools and methodologies which allow measuring the learning outcomes and the pace of their development scientifically and objectively. Remarkably, the methodology and tools used in the preparation of this report

simultaneously measured, for the first time in the Arab region, the skills, values and enabling environments for the youth. Hopefully, this will make it possible in the future to develop standardised tools and methodologies to measure the readiness of the young to access the knowledge society, which can be used extensively in future studies both in the Arab region and in other countries worldwide.

STRUCTURE OF THE REPORT

The Arab Knowledge Report for the year 2010/2011 consists of two main parts. The first part is the 'General report' which focuses on preparing the young for the knowledge society in the Arab region as a whole according to the triad of skills, values and political, economic and social enabling environments. This section also includes a synthesis of the results of field research conducted in the four Arab countries on the status of preparing young people for the knowledge society. The second part of the report contains the four case studies (Jordan, the UAE, Morocco and Yemen), which were featured in five major cities in these countries. These studies included a comprehensive assessment of the enabling environments in light of the requirements of the knowledge society, in addition to a detailed presentation of the results of the field surveys in each of them.

The General report consists of six main chapters in addition to the introductory chapter, as well as a list of references and basic statistics on development and knowledge in the Arab region.

In a conceptual/substantive analysis, the first chapter, **'The knowledge society: concept and problematics'**, tackles the issues of defining the concept and meaning of the knowledge society, attempting to evoke its connotations that must be identified in the Arab region and linking them with the topic of preparing the young. The knowledge society is holistic and comprehensive and involves

a quantum leap in the paradigm of knowledge, culture, politics and sociology. It is associated with a global culture of human rights, citizenship and governance systems. The report's vision focuses on humankind as a central pillar and goal for building a knowledge society. This chapter also addresses four problematic issues: Cultural development in the Arab region, the inherent contradiction in the knowledge society and knowledge economies, the burning of stages and the change in education systems.

The second chapter, **'Education and preparation of future generations for the knowledge society'**, tackles education as the main natural key for preparing young Arabs and equipping them with the knowledge, skills and values that would enable these future generations to contribute in building the knowledge society and global competitiveness. The essence of the knowledge society is creativity, innovation and invention, hence new Arab generations must possess these qualities through the provision of enabling as well as conducive and supportive environments. This chapter also highlights the problem of illiteracy of around one-third of the Arab population, most of which are women. It also addresses the vulnerability of care and education in early childhood. The chapter stresses the importance of primary education and the expansion of preparatory and secondary technical education, expressing the need to make a quantum leap in education.

Moreover, the chapter shows that efforts at educational reform in the Arab region have focused on the quantitative element and improvement of buildings, facilities and curricula. However, such efforts have ignored the preparation of the youth for the knowledge society, as they have not taken into consideration three main elements: (a) material, moral and career incentive systems for teachers, and the emphasis on productivity, achievements and outcomes of education and learning, (b) accountability systems including the

expansion of collective participation and development of follow-up and evaluation systems, and (c) the link to the labour market and the preparation of the young for global competition. The chapter ends with a comprehensive proposal for making a quantum leap in education that provides young Arabs with the skills and values needed to acquire the properties of the knowledge society members.

The third chapter, **'Social upbringing and the preparation for the knowledge society'**, emphasises that despite the importance of family as the primary institution of upbringing, it is no longer the only source of transferring values and raising new generations. It is difficult to talk about the family as the only means of enabling for the knowledge society, as the media occupies an important place in the era of knowledge in which it has expanded its concepts and diversified its tools, mechanisms and work methodologies. Moreover, the issue of the cultural environment in society comes under a broader framework of upbringing. In this respect, the chapter stresses several important issues. First, it calls for an enlightened religious discourse. That is, religion plays a key role in preparing new generations to work, persevere and gain moral characteristics, to reach what they aspire to be in the world of scientific and technological advancement which represents the main feature of the knowledge society. The second issue is the call to promote the Arabic language as the main tool to achieve social integration and communication among the young. The third issue is about citizenship and identity with emphasis on human rights in freedom, justice, equality and belonging. The development of identity among the young is the product of work, progress and participation among the people of one nation within the framework of communication with the national culture as well as openness to a global culture.

The fourth chapter, **'Enabling environments and preparation of the young for the knowledge society'**, focuses on identifying the enabling environments in

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the Arab world which can prepare, empower and stimulate the new Arab generations to access the knowledge society. No matter what success we achieve in building the institutions of preparation and formation (e.g. in education, family, media and cultural environment), there is still a need for fostering and enabling environments that stimulate the march of progress, support the preparation of the youth and enable them to achieve their goals in founding the knowledge society. Therefore, the fourth chapter deals with governance, freedoms, political and social development governing people's lives, women's enabling, economic and social environments and the underlying problems of poverty and unemployment, as well as the cognitive enabling environments which foster culture as one of the important factors in building the knowledge society. These enabling environments have been addressed in the context of their suitability to empower the youth with respect to transferring, indigenising and employing knowledge under the triad of skills, values and enabling.

The fifth chapter, **'Field research on the readiness of future generations to access the knowledge society'**, presents the aggregate results of the survey conducted in the selected four Arab countries. The first part of the chapter begins by presenting clarifications related to building the tools and the relevant experimentation process. These clarifications show the basic principles on which the process of designing tools depends, and the methodological and technical conditions taken into account in the formulation and organisation of items and paragraphs. They also describe the reliability and credibility indicators of tools in the experimentation process. Moreover, these methodological clarifications include the definition of samples and methods of selection. The first part concludes by mentioning the theoretical, methodological and contextual limits of the study.

The second part of the chapter focuses on presenting the various statistical indicators revealed by the survey and analysing them in

light of the report and its mission represented in 'providing the young with the skills and values and providing enabling environments to prepare them to access the knowledge society and actively participate in its building and development.'

The findings revealed low scores in a surveyed sample of pupils in terms of cognitive skills (e.g. information seeking and processing, written communication, problem solving, and the use of technology) compared to social skills (e.g. communication with others, teamwork and participation in public life) and conative skills (e.g. self-esteem, motivation to learn, and planning for the future). For values, the results indicated that students possess the values that qualify them for the knowledge society. Also, the comparison by gender showed that in general females surpassed males. With regard to the enabling environments, as depicted by students and their teachers, they seemed to lack a number of basic components required to prepare the young for the knowledge society. The analysis of results shows a positive impact of some components of the enabling environments, particularly the role of the family, on preparing the young. The chapter concludes with a set of recommendations concerning the development of curricula quality, school lifestyle and teachers to interact to achieve the objective of preparing the young for the desired knowledge society.

The general report concludes, in the sixth chapter, by presenting a **vision of a dynamic action system proposed to prepare the future generations for the knowledge society**. This system includes four main elements intersecting with each other to address the key issues in the preparation of the young: **'The willingness to act'**, the **'ability to act'** through identifying the barriers and determinants, **'how to act'**, which covers methods of building skills, and **'securing action requirements.'** The cycle of this system is completed by identifying the means of securing the requirements of action and guaranteeing its continuity. Thus,

the Arab Knowledge Report for the year 2010/2011 provides a detailed analysis of the processes of preparing young Arabs for the knowledge society by building on the global theories and field studies of Arab countries in order to suggest a model for action which we hope to be a milestone in preparing the youth to access the knowledge society.

