

ARAB KNOWLEDGE REPORT 2010/2011

EVALUATING THE READINESS OF FUTURE GENERATIONS FOR INTEGRATING INTO THE KNOWLEDGE SOCIETY

MOROCCO CASE STUDY



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The aim of the second Arab Knowledge Report is to survey the knowledge capital of Arab youth in order to determine their readiness for active and positive engagement in the knowledge society. The knowledge society is a universal horizon that has caught the attention of all countries seeking to build a promising future. This can be achieved by removing the obstacles that can hinder progress and development.

Within this framework, Morocco was chosen to be one of the four selected Arab countries, together with Jordan, the United Arab Emirates and Yemen, to be case studies in assessing how prepared the youth in these countries are for integration into the knowledge society. Morocco is one Arab country which, during the last decade, has taken many initiatives in the field of human development to achieve prosperity and growth. Furthermore, as a country it holds a lot of potential and opportunities that should be further invested in for the benefit of the nation.

Through various studies and research that monitors human development in Morocco, and through field surveys on a sample of school students in their final year of secondary education, this report attempts to identify the basis and mechanisms for achieving the established goals of preparing future generations to build the knowledge society and to access its vast domains.

Through its theory and field work the report will establish the basic foundations required to direct and manage a development process that can build the capacity of the future generation. This foundation should also apply mechanisms that foster active and effective involvement in the new knowledge society that is powered by knowledge, with everything the concept holds from new power and authority, to expand human capabilities and broaden the horizon of their freedoms, managing change and achieving progress for the welfare and dignity of the Moroccan citizen.



GENERAL FRAMEWORKS OF THE STUDY

GENERAL INTRODUCTION

Over the past few decades, the world has undergone radical changes which have been a qualitative leap in the history of the development of human society. This has had a notable effect on several levels of the global economy and human culture in general. The features of this new universal social reality have not been clearly defined. However, its new features and varied future outlook indicate that profound changes have occurred in production methods, lifestyles and social relationship networks. This undoubtedly establishes new human and cultural principles that are founded primarily on knowledge factors.

The effect of the 'knowledge society', the term given to this new event, has been felt throughout the world. This society derives its existence and power from the knowledge technology revolution, which differs from previous technological transformations that accompanied the industrial revolution and were exclusively related to specific products or industrial sectors. In fact, this revolution cannot be confined to the knowledge technology revolution, as it also extends to include other aspects that form the concept of the knowledge society, namely technology, economy and knowledge. Thus, we find ourselves facing knowledge technology, a knowledge based economy, and a knowledge society'.¹

KNOWLEDGE AND THE KNOWLEDGE SOCIETY: CONCEPT AND CONTEXT

It is not easy to accurately define knowledge, however it can be referred to

as: a set of data, information, instructions and ideas, or a set of symbolic structures that are carried by individuals or acquired by society in a specific indicative and historical context. In addition, it is a tool for human behaviour on the individual and institutional levels in all fields of activity. Knowledge may be explicit or implicit, and its production is not limited to traditional forms of scientific research, but also includes myriad literary and artistic expressions and production belonging to national and international culture. Moreover, it should be emphasised that knowledge is a human state which means more than just obtaining information. Like wisdom, it requires a commitment to high moral values, such as freedom, justice and human dignity. Over the past two decades, the concept of knowledge has been linked to many other concepts which have become commonplace, especially that of 'society'. The meaning of the knowledge society is not completely clear, as it is still in an evolutionary phase. However, the ambiguity of such a concept does not prevent us from defining its basic features by saying: It is the society that those who took significant steps towards development and prosperity have already reached. Particularly, it is the society which depends on the dissemination, production and efficient investment of knowledge in all fields of social activity, including the economy, civil society, politics and private life, as knowledge plays an intensive role in the daily life of such a society's members and institutions, interacting with technology, the economy

Knowledge may be explicit or implicit, and its production is not limited to traditional forms of scientific research, but also includes myriad literary and artistic expressions and production belonging to national and international culture

and society. Such a society has enabling and encouraging environments which include legislations, institutions, openness, freedom, and global intercommunication via information technology and mass media. To sum up, the knowledge society should produce, share, and use knowledge to ensure the welfare and progress of its members.

THE TRIAD OF KNOWLEDGE, FREEDOM AND DEVELOPMENT

The Arab Knowledge Report 2009: 'Towards Productive Intercommunication for Knowledge' considers knowledge to be an uncontroversial human right that should be made more democratic and therefore available to all members of society. It further regards knowledge as both a tool and product of development.

In fact, knowledge acquisition is not an inherent right of human beings just because of their humanity, but it is also a method of human development across all its fields. Thus, knowledge is made by human beings who are its main target and core. However, acquiring knowledge is governed by the specificities of each society, namely history, culture and institutions, as well as the organisational context of its production and dissemination.

Development is associated, in all its aspects, with the human being. But, it is not achieved in circumstances that restrict human beings and their freedom in society and suppress creativity and innovation. This is because production will remain limited in a climate that hinders freedom of thought, work and production and one that discourages initiative. "Democracy in its broad sense cannot be separated from the democracy of knowledge which includes opportunities for involvement and communication in particular. The latter cannot be achieved independently from the former" (Arab Knowledge Report, 2009). Knowledge is considered a tool for expanding human beings' options

and abilities, achieving their freedom and welfare, as well as overcoming poverty and building prosperous societies. Moreover, it is the cornerstone for realising overall human development (Arab Human Development Report, 2003). The Arab Knowledge Report for the year 2009, points out that "knowledge means freedom and development, and no knowledge or development occurs without freedom, though such a link does not emphasise that they are mechanically interrelated." In this context, the same report indicates that "when we talk about the relation between human development and knowledge, we recall the teleological side that makes knowledge serve development. When we talk about freedom, we think of the social and political frameworks that help nurture knowledge and innovation, given the existing and creative interaction between expanding freedoms and building knowledge."

Based on these concepts, skilled human resources are required to achieve optimum exploitation of nature, capital management and mobility, and technological development for commodities production and commercial exchange all need skilful human resources in our world which is witnessing development in different fields. Integration into such a world requires development and progress, making it essential to acquire creative and innovative knowledge, which is the method of knowledge competition in a harmonious framework in all aspects of life. Knowledge cannot be separated from social development. Knowledge development in society cannot be isolated from achieving overall development as a whole.

Thus, preparing human resources equipped with knowledge and who can take creative initiatives should top the priorities of developmental policies and strategies. The human being is the most important factor for production which can contribute effectively to achieving economic, social and finally overall development.

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THE SITUATION OF KNOWLEDGE IN MOROCCO

The relation of knowledge to society's environment, culture and heritage is multidimensional and controversial. Knowledge is a strong lever for development and improvement in life, and so any positive development in cognitive performance will reflect on development and its causes. The progress and development of any society in the present world is measured by its exposure to an environment which fosters knowledge, contributes to its production, and develops a creative and innovative foundation for enriching scientific research and generating solutions for the various issues that pose challenges for the human being's existence and welfare. If this is the case, what is Morocco's share in that? To what extent can it possess knowledge that is unmatched in the world today by any other power? What is its position on the global knowledge map? What is the nature of the incentives and obstacles that hinder its pursuit in this global competition?

The research undertaken by the Institute of Economic Analysis and Prospective Studies-IEAPS, (Al Akhawayn University 2004), showed that Morocco recorded a strong deficit in the field of knowledge. This is mainly attributed to the lack of accessing, producing, transferring and spreading knowledge in all forms, including education and training, illiteracy elimination, cultural production and scientific research. The indicators of the World Bank's Knowledge Assessment Methodology (KAM) showed that the Moroccan knowledge economy index for 2007 amounted to 3.54, while the information technology index for the same year reached 4.37. Moreover, the education and human resources index for that year recorded 1.95 (without measuring the level of development and change in the education and human resources field in general while monitoring the implementation of the Emergency Education Programme). The educational system is still suffering from several issues, such as students leaving

school early, low schooling rate of girls and children in rural areas, limited linguistic ability, mismatch of graduates and the labour market, and the low quality of basic education necessary for the development of abilities and skills.

These modest results occurred in spite of efforts and resources allocated for education and training, which constituted nearly 27.1% of the state's budget during the period 2002 – 2005 (United Nations Development Programme, Mohammed bin Rashid Al Maktoum Foundation, 2009). Such resources improved the literacy rate among citizens 10 years old and above, raising it from 45.6% in 1994, to 60.3% in 2009. Furthermore, the net schooling rate among children aged 6 to 11 rose from 52.4% to 97.5% on the national level and increased nearly three times in rural communities, and four times among girls of the same communities. Thus, the ratio of females to males in primary education increased from 66% to 96% (The Ministry of National Education and Directorate of Strategy, Statistics and Planning, 2011).

However, other channels of generating and transferring knowledge, such as scientific research and cultural production, have not formed a real priority for the state. Although the government authorities declare they are convinced that scientific research is the best method for overcoming the challenges of development, the budget allocated for it has not yet reached the level set forth in the National Charter for Education and Training, which is 1%. However, it increased from 0.3% in 1993 to 0.8% in 2005. Efforts were also made in structuring scientific research in universities, within 982 approved units that include research laboratories and research centres. 36% of research units are dedicated to the humanities and social sciences, 28% to the exact sciences, 29% to life and natural sciences and 10% to engineering sciences.² With all what has been mentioned, scientific research suffers from many shortcomings. Most of its projects are of an individual nature,

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and its output is not evaluated. A study submitted during the National Meeting for studying and evaluating the results of research in the field of the humanities revealed shocking results regarding the status of researchers. This will certainly have an effect on revising the scientific research policy in Moroccan universities, thus helping academics dedicate their efforts to scientific research as one of the most significant bases for development (Ministry of National Education, Higher Education, Professional Training and Scientific Research, in French, the National Meeting for correcting the findings of the assessment study for research in the field of humanities and social sciences in Morocco, 2009).

There are many scientific research institutions in Morocco, but they are not linked. Such institutions belong to different sectors, thereby exceeding university research institutions

The Ministry of National Education, High Education, Professional Training and Scientific Research in Morocco conducted a two-phased national research project. The first phase addressed scientific research and production assessment in the field of sciences exactes, biology, geology and engineering. Its results were submitted in 2003; the second phase was related to scientific research and production assessment in the field of humanities and social sciences under the scientific supervision of the Moroccan Sociologist, Mohamed El-Sharqawy, it began in 2005 and ended in April 2009 in the overall assessment framework of the national research system approved by the Permenant Ministerial Committee for Scientific Research and Technological Development in its meeting on 16 July 2003. The above mentioned research provides an accurate vision about the scientific production since the independance of Morocco. It also addresses its general trends and subjective and objective institutional impediments as well as the characteristics of the university research and teaching staff through two approaches, the first is quantitative (bibliometric study for scientific production; national field research) and the second is qualitative (thematic meetings; and a national meeting for reviewing results).

In its final report, the Higher Council of Education recommended expanding the researchers' base to include Moroccan researchers in Morocco and abroad, participating in national projects, as well as encouraging creative initiatives in vital fields (biotechnology, energy, electronics, food industries and health). It further recommended establishing channels with international scientific research centres. In order to encourage scientific research, the state decided to grant tax exemptions of 18% to companies participating in scientific research. Such exemptions will reach 1% of the net domestic product at the end of the ten years in relation to the current rate of 0.8%. It is also expected to set up a national fund to support research and creativity. The fund will be financed by state donations, as well as by contributions from public and private contracting companies. It should issue an assessment report every two years under the auspices of the government authority concerned with scientific research and technological innovation.

There are many scientific research institutions in Morocco, but they are not linked. Such institutions belong to different sectors, exceeding university research institutions; which, and in according to Law 01-00 relating to university independence, which formulated an ambitious project for scientific research for each university over many years. This recorded a notable rise in the research projects conducted via partnerships (Higher Council of Education, 2008d). However, despite the efforts exerted in scientific production, Moroccan scientific research is still low on the international level, recorded as

BOX 3-1-1

The World Summit on the Information Society: Declaration of Principles, Geneva 2005

"We, representatives of the peoples of the world... declare our common desire and commitment to building a people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilise and share information and knowledge, enabling individuals, communities and peoples to achieve

their full potential in promoting their sustainable development and improving their quality of life, premised on the purposes and principles of the Charter of the United Nations and respecting fully and upholding the Universal Declaration of Human Rights."

Source: <http://www.itu.int/wsis/docs/geneva/official/dop.html>.

0.87% in 2004, compared to South Africa which recorded 3.49%, and Chile and Thailand which reached 2.07% and 1.65% respectively for the same year.³

Regarding integration into the world of information and communication technology (ICT), or what is known as 'the network society' - the most significant phenomenon of the knowledge society - Morocco has realised the importance of such facilities and the necessity to interact with other facilities and factors that constitute the knowledge society. This is intended to effect development and rapid growth with the purpose of achieving quality accomplishments and improving performance in administrative services. Thus, we find that Morocco seeks to enable younger generations to understand and master the use of such facilities at an early age; according to Article 10 of the National Charter of Education and Training (Mohammed Abu Tag El Din, in Arabic, 2007).

"We should realise that the use of the most advanced technologies is not a sign of prosperity for the world's poorest countries. However, it is such countries that should take great steps in this field."

Mahdi El Mandjra quotes Mohammed Abu Tag El Din, 2007.

In order to disseminate the benefits of using digital technology in different fields of life, Morocco is establishing a 'Digital Morocco' strategy for the digital economy and information society which extends from 2009 to 2013. This strategy is aimed at making digital communication technology one of the principal underpinnings of the economy and general management. Further, it intends to help citizens access the internet, encourage knowledge exchange, and facilitate access to management requirements. At the same time, the strategy aims to make such technologies an effective tool for socio-economic development, as well as a means of communication for some remote rural areas. It also intends them to be a means of communication

for commercial and industrial contracting companies inside and outside the country.⁴ Therefore, Morocco has allocated funds of MAD 5 billion and 200 million (USD 24,390,243).

Morocco is also preparing to launch services for government ministries, including e-government, which is expected to start operating as of 2013, with a budget of around MAD 2.2 billion. In this respect, the government will provide citizens with 89 projects and services remotely. These will include 15 model projects, which include updating civil status, online contracting and online invoice payment, in addition to other electronic services which help people's daily lives by improving administrative dealings and making them more transparent.⁵

Undoubtedly, the lack of knowledge in any society reflects negatively on human development, hinders economic modernisation and reduces the country's productivity, competitiveness and confrontation of globalisation challenges. Moreover, knowledge inadequacy stands as an obstacle to the spread of the values of modernisation, citizenship, openness and progress, as it reduces the citizens' involvement in basic public affairs.

Today's useful and efficient knowledge is not just a tool for reflection and interpretation of the world, but also a tool for changing the welfare of human beings. Thus, it relates and interacts with the political, social, economic and cultural aspects of life in society as well as its climate of freedom. Moreover, knowledge at present differs according to the nature of advanced technological equipment and channels that circulate it across the globe.

The new dynamic in Morocco in the first ten years of this millennium seeks to create an appropriate climate for achieving human development. This is done through providing a new definition of power, nationalism and citizenship, liberalising the national economy, and reforming the education and training system, in addition to establishing a new family code, fighting

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illiteracy, rehabilitating political parties, and focusing on human rights. These are all basic mechanisms for realising human development and accessing the knowledge society, modernisation and democracy, that aims to prepare the youth in the best way possible.

THE REALITY OF HUMAN DEVELOPMENT IN THE MOROCCAN SOCIETY AND ITS IMPACT ON PREPARING THE FUTURE GENERATION FOR THE KNOWLEDGE SOCIETY

HUMAN DEVELOPMENT: BROADER FRAMEWORK OF THE KNOWLEDGE SOCIETY

The concept of human development is regarded as rich and distinguished, as it comprises theoretical and practical dimensions and components. For this, it has gained the attention of researchers

from many fields since its introduction in 1990. The concept was used by the economist and Nobel Laureate Amartya Sen in his studies related to human welfare.

The Arab Human Development Report for 2002 defines 'human development' as "the process of increasing options. Every day, people exercise many options, some of which are economic, while others are social, political and cultural. Since the human being is at the core of human development activities, such activities should be directed to broaden the scope of choices for human beings in all human fields to the benefit of all." The Human Development Report for 2010 defines human development as "expanding the true freedoms of the human being for him or her to live his or her desired life".⁶ The human development guide arising out of these concepts is made up of knowledge and health indicators, in addition to income indicators, which together form the determinants of human development.

The concept of human development is regarded as rich and distinguished, as it comprises theoretical and practical dimensions and components

TABLE 3-1-1

Human development indicators in Morocco

Indices	Value	Reference year	
Life expectancy at birth (year)	67.9	1994	
	72.9	2009	
Infant mortality rate (per 1,000 live births)	57	1987-1991	
	32.2 (+)	2008-2009	
Maternal mortality rate (per 100,000 live births)	332	1985-1991	
	132	2004-2009	
Number of people per physician	2,933	1994	
	1,611	2008	
Fertility indicator (number of children per woman)	3.28	1994	
	2.36	2008	
Literacy rate among the population 10 years and above (%)	45.0	1994	
	60.3	2009	
Net schooling rate of children aged 6-11 years (%)	60.2	1994	
	90.5	2009	
Activity rate of the population aged 15 years and above (%)	51.3	2001	
	49.9	2009	
Unemployment rate (%)	12.5	2001	
	9.1	2009	
Percentage of households connected to an electricity network			
	National (%)	92.4	2009
	Urban (%)	97.4	2009
Rural (%)	83.9	2009	
Urbanisation rate (%)	51.5	1994	
	57.3	2009	

Source: Ministry of Health and HCP, 2009 - 2010

Based on that, table 3-1-1 shows some of the most important indicators of human development in Morocco, as this is the broader framework of the knowledge society and one of the most significant approaches to forming the needed human capital. The table reveals the significant developments of these indicators during the last ten years, which are intended to develop the society and serve future generations.

PREPARING FUTURE GENERATIONS: THE BASIC APPROACH TO BUILDING AND EFFECTIVELY INTEGRATING INTO THE KNOWLEDGE SOCIETY

Effective knowledge is founded by preparing future generations and providing them with intellectual insight to enable them to participate effectively in building the knowledge society in terms of production and application. The knowledge society requires people who are capable of making clear-cut decisions and effectively penetrating new environments, which can only be done by preparing them appropriately. Future generations who are prepared for the knowledge society should be able to anticipate the future through rapid and successive changes. This requires enhancing their adaptive ability to enable them to plan for the future and respond to its requirements.

Neither the knowledge of the past helps in understanding the present, nor does today's knowledge help in anticipating the future. The present rapidly disappears, and so we have to prepare future generations in a way that enables them to calculate and anticipate the rate of change. We should further help them create successive images of the future, i.e. enable them to anticipate the types of professions and skills which will be needed in society in the next twenty or fifty years.

Ahmed Auzi, 2005

In the Arab Knowledge Report for 2010/2011, the building of the next

generation is regarded as the cornerstone of establishing the desired knowledge society. The report seeks to serve as a 'compass' which directs individuals and society with its different institutions to invest in the coming generations starting from an early age. The aim of this is to establish a strong base of human capital required by knowledge for technological, economic and social development, according to the developmental requirements of the country. This can be achieved by providing them with their various health, education, housing and social needs, in addition to the appropriate enabling environments. This will help them become productive citizens who are capable of adapting to innovations, especially as the learning capabilities of younger generations are greater than those of older ones; every child is regarded as an expected genius. It is to be noted that childhood in general opens a world of knowledge that should be accessed early by high quality education. Building the future generations' capacity is considered the true foundation of establishing and integrating into the knowledge society, especially as young people represent the majority in Arab societies.

THE TRIAD OF SKILLS, VALUES AND ENABLING

Today, the system of preparing future generations faces great challenges. Young people need to be equipped with skills and abilities, as well as personal and behavioural values, which enable them to make and generate ideas. This can only be done by freeing their thinking and developing it in a way that helps them to overcome new global challenges.

'The International Commission on Education for the Twenty-first Century,' report for 1996, highlighted four pillars that underlie the education requirements of the new millennium: 'learning to know,' 'learning to do,' 'learning to live' together and 'learning to be.' The commission further considered life-long education the

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key to the twenty-first century, because it reflects on the learning community which is the knowledge society (Jacques Delors, 1996, *Learning: The Treasure Within*, in French). The education and training system is considered a means of developing and changing society, but it also reflects, in many cases, the society's structures and institutions that can positively or negatively contribute to the formation of the system. This requires active and effective enabling environments that support the goals of growth and the societal development desired by the education and training system.

If such components of skills, values and environments are all essential to act in order to catch-up with progress and development, and step with confidence into the knowledge society, how far are such components available for our future generations? To what extent does the education and training system contribute to forming the knowledge capital of younger generations? What kind of knowledge has been acquired by secondary school graduates at the end of their education? To what extent do they develop the abilities and values necessary to facilitate their integration into the knowledge society? The following chapters from the Morocco case study will attempt to answer these questions. Chapter 2 provides an analysis of the education situation in Morocco, which is the cornerstone for preparing future

generations for the knowledge societies, while Chapter 3 tackles the general social situations and their role. Chapter 4 expands on the enabling environments which embrace all processes of forming the future generations. Chapter 5 includes a field study to learn more about the skills and values of the future generation in Morocco and how appropriate they are for the integration into the knowledge society. To that end, methodological tools were used to study a sample of students in the final year of secondary education from different scientific and academic specialties available in our educational institutions, whether public or private.⁷ Tests and questionnaires were administered to the students to assess the availability of their skills and values. Furthermore, a survey was conducted among the teachers working with the sample of students in order to understand their perception of themselves and their profession, as well as the available capabilities in the enabling environments provided to them and their students. Chapter 6 of the report presents a proposed vision of four mechanisms that pertain to the basic axis of action, including 'the ability to act', knowing 'how to act', dealing with the 'willingness to act' and securing 'the necessary requirements to act.' This is intended to prepare the future generation in Morocco for the desired knowledge society.



THE SYSTEM FOR PREPARING FUTURE GENERATIONS IN MOROCCAN SOCIETY

For the young generation to face the future and its various requirements they must be prepared in the best way possible. This can be done by exposing them to a set of upbringing and training systems which consider the educational and learning systems tackled in this chapter as one of its basic pillars.

PREVAILING EDUCATIONAL SYSTEMS

The attention given to education and training is a national strategic option from which stems the major directions for the educational system in Morocco. The National Charter of Education and Training is a reform document which aims at “making the educated person in general, and the child in particular, the core of thinking, interest and action during the education and training process. This is done by meeting the requirements and opening the way for Moroccan children to enhance their abilities in order to be open-minded, qualified and capable of life-long education.”

Achieving such goals requires dealing with many concepts and issues, including awareness of the children’s aspirations and their physical, emotional, psychological, cognitive and social needs. It further entails an educational behaviour in harmony with such awareness, in the family, daily life and school. The education and training system should perform its full duties towards individuals and society in order to offer individuals the opportunity to acquire the values, knowledge and skills which qualify them to integrate into the realities

of practical daily life, along with resuming their education if they meet the required conditions and skills. It should further give them the opportunity to demonstrate their excellence and gift whenever their skills and capabilities qualifies them to do so, to provide the society with qualified and efficient groups who can contribute to the sustainable building of their country at all levels. Moreover, society expects the educational system to provide it with the best scientists capable of achieving development via scientific, technological, economic and cultural progress.

These are some of the objectives defined by the National Charter of Education and Training which for preparing future generations for effective integration into the knowledge society. To what extent did authorities manage to achieve such objectives? Reviewing the different aspects of the education situation in Morocco through its accomplishments and deficiencies reveals an existing knowledge gap between the reality and the aspiration. This gap will be monitored by assessing the knowledge capital produced by the education and training system as well as the knowledge, skills and values given to future generations (see chapter 5 of Morocco case study).

THE MOROCCAN EDUCATION SYSTEM AND ITS OBJECTIVES

Following the country’s independence in 1956, the educational system in Morocco was deteriorating in terms of basic equipment, the number of students at school, educational and administrative groups and

For the young generation to face the future and its various requirements they must be prepared in the best way possible

The 'Committee of Education and Training' was formed, comprising of scientific, economic, social, union and political activities, with the purpose of studying the reform of the educational system across all levels, starting from pre-school education to higher education

funding. This made the system unable to respond to the increasing requirements of education with the rising developmental needs of the country. However, the country was able to achieve substantial progress during the early years after independence, when the enrolment rate in the primary stage rose from 17% in 1956-1957, to 46.7% in 1963-1964. Moreover, Morocco witnessed a series of multi-goal and multi-mechanism educational reforms. However, immediately after independence these efforts followed a sectarian movement with the slogan 'Moroccanisation, Generalisation, Unification and Arabisation'. Moreover, instability was a feature of all those who successively headed the Ministry of National Education. This post witnessed 38 consecutive ministers, state secretaries or deputy state secretaries from 1955 until 2005. The approach to education during this time was not always homogeneous (The Possible Morocco, Fiftieth Anniversary Report, 2006).

Due to the exacerbating defects of the educational system, there were intensive calls for urgent rescue for the school, and demands to address the "crisis" of education (whether on the level of syndicates, politics, academics, and the international organisations reports). Though the critical conditions of education were risky, they contributed to launching a dynamic reform programme that made good advances in the late 1990s. The peak of these efforts was drafting reference documents that define the coordinates guiding reform initiatives. Amid these movements, a movement was launched for a legal system update, institution development, pedagogy system reform, curricula review, and rationalisation of financial and human resources.

Source: Ahmed Edali, background paper of the report

EDUCATIONAL REFORM EFFORTS

THE NATIONAL CHARTER OF EDUCATION AND TRAINING (CNEF)

The problematic situation of the educational system, in the late 1990s, produced a unified

discourse in total across different political and academic establishments, together with some international institutions, which unanimously described it as a 'crisis'. This gave rise to radical reform in the late 1990s. The 'Committee of Education and Training' was formed, comprising of scientific, economic, social, union and political activities, with the purpose of studying the reform of the educational system across all levels, starting from pre-school education to higher education. The work of the commission resulted in the drafting of the 'National Charter of Education and Training' which aims at comprehensive reform based on a new philosophy to fill the gaps of previous reforms. The project started its activity gradually from the beginning of the academic year 2000/2001.

Thus, we find that for the first time the education and training sector has gained national accord and has become a societal project which requires true reform with contribution from many aspects of society. It has turned out to be an initiative of paramount importance, in terms of planning, accomplishment and assessment. The sector has gained the greatest attention of the state and local groups, along with educational and training institutions and all concerned partners. Thus, 2000/2009 was declared the national decade for education and training during which full attention would be given to public education, as well as overcoming the challenge of the rapid generalisation of education. In addition, special efforts would be made to encourage girls in rural communities to enrol in school, and improve the quality of education and its appropriateness for the requirements of the labour market, the reality of daily life and the new millennium. The important reform mechanisms for achieving high quality in the educational system include:

- Restructuring pre-primary, primary, secondary and higher education in a way that allows the latter to integrate general, or academic and professional structures and build bridges among

- specialties;⁸
- Reviewing school programmes, curricula and school books, and setting up a permanent committee for programmes. Since the beginning of September 2003, higher education has undergone a thorough review of its curricula and goals in a way that achieves a high quality of content;
- Modifying the school timeline so that the academic year in primary, secondary and tertiary school includes at least 34 full weeks, or approximately 1,000 to 1,200 hours. This can be modified to match the characteristics of the educational institutions' region;
- Teaching the Arabic and Amazigh languages as well as mastering foreign languages. The status of the Amazigh language changed in the new constitution (2011), as it became an official language for the country, given that it is known by all Moroccan without any exception. A regulatory law determines the stages of effecting the official feature of the Amazigh language, and methods of integrating them in education as well as public life fields of priority, so as to be able to perform its future function as an official language (Chapter 5 of the Moroccan constitution, 2011).
- Using new information and communication technology (ICT);
- Encouraging excellence by setting up a comprehensive scheme which monitors high achieving students to reward and motivate them.⁹ The nurturing of distinguished and talented students is also evident in the establishment of new model institutions for secondary education. Despite the measures that accompanied effecting the National Charter For Education and Training, they have not in general gained their due attention in terms of coping with necessary quality infrastructures, so that the country can benefit from the human capital able to face current and future problems of the society. Along with approving the urgent programme

for accelerating the pace of the system, necessary resources were allocated for establishing an integrated project to encourage talent and excellency. In this context:

- Conducting a new accurate scientific study about the map of skilled students throughout the country, beginning from the primary education, with the aim of receiving them and coping with them through special structures;
- Establishing excellence secondary schools and reference secondary schools for receiving students with high qualifications to continue study in the qualifying secondary schools.
- Supporting and expanding the infrastructure for preparatory sections in high schools, as well as providing all conditions that provide people who attend these centres with the proper conditions for achievement and preparation for passing competitions for accessing the best high schools in Morocco and France.
- Establishing incentive dynamics that encourage excellence based on rewarding distinguished students in school exams and various competitions prepared by the Ministry in different cultural, artistic, and sport fields.
- Encouraging scientific and technological research and increasing public funds allocated for it to 1% of the gross domestic product at the end of 2009. A national fund is expected to be set up to support research and innovation. The fund will be financed by state aid, contributions from public and private contracting companies, donations from prominent people, and grants from international cooperation.

Undoubtedly, these new directions will reflect greatly on the educational reality, affecting the preparation of future generations for integration into the knowledge society. These reforms have covered several educational system levels and have been accompanied by other achievements in schools. Attention has

The nurturing of distinguished and talented students is also evident in the establishment of new model institutions for secondary education

Besides public efforts, there was also a national mobilisation to generalise schooling and overcome problems posed by it

been given to rural communities which have an extremely low enrolment rate, especially for girls. The school food network has been expanded to cover 46% of community schools with 1,135,107 students 556,527 of them females. Moreover, dry foodstuffs have been distributed to the families of students in order to encourage them to educate their girls. This comes within the ‘Tayseer’ programme whose beneficiaries rose from 74,000 families to 162,000 families in 2010. Also, school books and 4.04 millions bags have been recently given to the children of poor families across the kingdom. In addition, the school transport rate increased to more than 600% in terms of the number of students benefiting from it (Summary of education statistics, 2010/2011).

Besides public efforts, there was also a national mobilisation to generalise schooling and overcome problems posed by it. Different local authorities and groups, as well as a number of contracting companies contributed to the project’s success (Abdullah Saef, 2005). Moreover, the number of scholarships granted to students by the Ministry of National Education, Higher Education, Professional Training and Scientific Research increased to 144,350 scholarships during the 2009/2010 academic year.¹⁰

Thanks to such reforms, the schooling rate of the category (6-11 years) in 2011, according to authorised statistics was 97.5% The importance attached by the state to the training and education sector is evident from the increasing funds allocated to it (table 3-2-1).

In order to support and structure educational reform efforts, a group of new institutions supporting the education

and training field were established. Below are considered the most important:

Mohammed VI Foundation for the Promotion of Social Works for Education and Training:

This is an establishment which seeks to set up programmes and take measures to correct the accumulative social deficiency for males and females in education.¹²

Mohammed V Foundation for Solidarity:

Among its activities, this institution encourages training and qualification as a means for the social integration of youth.

National Initiative for Human Development (NIHD):

This ambitious initiative aims to bridge social gaps and alleviate poverty and marginalisation, particularly in rural and Urban communities.

Higher Council of Education:

It was founded as part of efforts to foster and accelerate reform. It provides its opinion on education and training related issues. The council has also issued an assessment report on the education and training system. Furthermore, it has conducted several studies to evaluate students’ education.

The Children’s Parliament:

It was established to enhance citizenship and democratic practices, as well as create an appropriate climate for training future generations on positive citizenship and concern for public issues.

We have referred to the different reforms set up to renew the Moroccan school system and establish its foundation based on the ‘National Charter of Education and Training’, but what are the objectives of the education and training system regarding new curricula? What types of efficiencies, skills and human values does it seek to cultivate in the future generation? The first section of

TABLE 3-2-1

Budget allocated for the education and training sector.¹¹

Years	Allocated budget
2008	MAD 37.43 billions
2009	46 MAD billions
2010	Around MAD 49.5 billions

the 'National Charter for Education and Training' refers to the foundations of education and training, which are Islamic doctrine, constitutional monarchy, cultural diversity, devotion to originality and integration into the modern culture. The second section emphasises the major goals of reform, which include equipping future generations with the knowledge, skills and values that secure their integration into daily life. Such goals further include forming groups of the best scientists and improving efficiencies through supporting the ability for self-learning, communication, enhancing openness, encouraging creativity and disseminating its culture.

However, many questions remain unanswered. To what extent did these reforms help in achieving quality education matching the requirements of teachers and the labour market? How far did the educational and training system manage to equip students with the abilities, skills and values to prepare them for active integration and engagement in the knowledge society?

The current situation in the education and training system shows that it is still suffering from the effects of issues resulting from the problem of illiteracy among people aged 15 years and older, and the focus of efforts on providing educated people with a solid skills base. Deficiencies also resulted from the sustained problem of early school leavers, the limited knowledge and skill level of graduates and the mismatch of training for the requirements of the labour market. This paradox refers to a large gap in the nature of the knowledge capital. It further suggests the complex nature of the challenges faced by the Moroccan education system. In this case, the system has to overcome past challenges which have accumulated over decades, and the current challenges of meeting the requirements to move to the knowledge society. This makes the proposed tasks more complex and difficult (Abdullah Al Khiary, background paper for the report).

BOX 3-2-1

Training on human rights and citizenship in the educational and training system

“Responding to the transformations witnessed by Moroccan society and desiring to help future generations adapt to those transformations, it was necessary to review school programmes, curricula and books from the perspective of being open to critical understanding of the self, the other, as well as national and international changes, and preparing the citizen to possess the following values (school education sector, 2007):

- Defending human and citizen's rights;

- Accepting cultural differences;
- Exercising critical and systematic thinking;
- Training on cooperation and responsibility;
- Solving and approaching issues from an international perspective;
- Mediation and amicable settlement of disputes;
- Active participation in political life;
- Changing lifestyles to protect the environment.

Source: Abdullah Al Khiary, background paper for the report

Despite opportunities provided by developments and radical transformations experienced by the world, Higher education also faces many pressures and challenges, on the quantitative or qualitative level.

THE EMERGENCY PROGRAMME AND REFORMING THE EDUCATION AND TRAINING SYSTEM

The Emergency Programme is based on the National Charter of Education and Training and aims at reviving reform and accelerating its pace. To this end, the Ministry of National Education, Higher Education, Professional Training and Scientific Research formulated this ambitious programme for a period of four years (2009-2012). Supported by senior decision-makers, the Ministry formulated the programme using multiple resources, including the “Fiftieth Anniversary Report” issued in 2006, and the first ‘National Report on the Status of the School and its Prospects’ issued by the Higher Council of Education in 2008. It also capitalised on the reports of the board of directors’ meetings held annually by academies and the assessment reports of ministries and academies.

According to ministerial documents, the Emergency Programme is founded on a fundamental principle: **“Making**

Despite opportunities provided by developments and radical transformations experienced by the world, Higher education also faces many pressures and challenges, on the quantitative or qualitative level

The National Charter of Education and Training has achieved many gains which aim at improving the education and training system, whether at the quantitative or qualitative level

the educated person at the core of the education and training system” by providing supporting elements through:

- Education that is based on the principle of knowledge and skills which allow the student opportunities for openness;
- Teachers working in convenient conditions and acquainted with the pedagogical methodology needed for performing their duties;
- The preparation of good quality educational institutions.

Conforming to the trends specified by the Higher Council of Education for 2008, the Emergency Programme for reforming education and training systems seeks to focus on four principal areas:

- Implementation of compulsory education until the age of 15;
- Encouraging initiatives and excellence in secondary schools and universities. This requires developing and encouraging performance in the qualifying secondary school, strengthening performance in higher education and preparing its graduates for the labour market, as well as enhancing the value of scientific research.
- Overcoming the problems of the educational system (supporting the qualification of its participants, rehabilitating the reputation of the teaching profession, resuming decentralisation and defining responsibilities, mastering languages and educational guidance);
- Providing the resources necessary for the programme's success.

The National Charter of Education and Training has achieved many gains which aim at improving the education and training system, whether at the quantitative or qualitative level. However, the positive results which it has achieved over the past ten years since its implementation, have not shielded it from criticism. These criticisms tackle the slow pace of action on the charter's different clauses, thereby precluding the achievement of its declared goals and intentions. In fact, if the reform

initiatives over the past decades have not influenced the authors of economic and social development plans to respond to orientations of the plans, then the reform plans face, in light of the Charter of Education and Training, some problems; the effect of some of its clauses is poor, other clauses have not activated, and its quantitative gains have not translated into qualitative achievements. Perhaps this is evident in the failures witnessed by the Emergency Programme and the many defects of its 6 projects. What it called 'a deep change of measure methods' and the adoption of a 'management system' to allow the rapid diagnosis of problems and reaction clearly reflects the volume of obstacles and difficulties. Therefore, the Emergency Programme is neither a new reform nor an indirect declaration of the death of the National Charter of Education and Training. However, it is a new attempt to achieve and activate the content of the latter.

Furthermore, it contributes to establishing the "project culture" i.e. approving definite goals and time frameworks, and active mechanisms for monitoring and assessment.

The Emergency Programme includes many projects, and the 'School of Success' is one it seeks to achieve. This effort was supervised by the Ministry of National Education in the 2009/2010 academic year which provided the school with all the resources needed to achieve productivity. It is a national school that keeps up with international innovations in science, technology, literature and art. It seeks to develop the education system and achieve a national Moroccan school that is capable of severing relations with the previous deteriorating status of primary education which does not provide students with the education specified in the curriculum. It also seeks to become a school based on activity, self-learning and dialogue, in addition to involvement, teamwork and cultivating positive values in the minds of students. Moreover, it intends to foster training on citizenship, as well as positive and effective

communication with oneself and others.

The ‘Second Chance School’, on the other hand, is a programme launched during the 1997/1998 academic year in order to give a second chance to children who have received little or no education or who left school early. It intends to eradicate illiteracy and secure the right to education, stipulated in the constitution of the Kingdom of Morocco, and is supported by the National Charter of Education and Training which considers illiteracy elimination and non-formal education its second pillar.

The number of pupils out of school in addition to not generalizing schooling, is approximately two million children aged 8-16 years in Morocco. Statistics show that 22% aged 8-16 years are not currently attending educational institutions. In addition, around 200,000 students leave school annually before completing their primary education (HCP, 2004). However, the dropout rate decreased significantly in recent years as it decreased from 5.7% in 2005/2006 to 3.1% in the year 2009/2010 in the primary schools, and from 13.6% to 10.8% in secondary and elementary schools.¹³ This worrying situation has given rise to non-formal education initiatives for such children who are not school students. They aim to integrate them into normal education or professional training, as well as enhance their involvement and mobilisation in civil society associations to realise the goal of education for all. The efforts and initiatives of non-formal

education according to this policy and strategy have achieved the results shown in table 3-2-2 on the quantitative level¹⁴ and in terms of the beneficiaries of non-formal education, it is noted that the difference was in favour of girls, who represent 51% of beneficiaries, and rural communities which constitute 56% of beneficiaries.¹⁵ The reason for this is because these two sectors of society are the most at risk in terms of leaving school early or not going altogether.

CARING FOR CHILDREN WITH SPECIAL NEEDS

Caring for children with special needs and promoting their rights is a multi-dimensional issue which should not be limited to a specific social sector. The issue concerns the health, education, training and recruitment sectors, as well as the transport and means which help them move and communicate with others. It is necessary to unite the efforts of the state and various other social components, especially local groups which can contribute greatly to mobilising society to take care of this special category of people. Disabled children with special needs in Moroccan society constitute 5.2% of the total population. On 11 March, 2010, draft law 62.09 was submitted to the government council. It contained legislation that upholds the human rights of people with special needs through accommodating most of them in specialised centres, and incorporating some in formal schools.

Caring for children with special needs and promoting their rights is a multi-dimensional issue which should not be limited to a specific social sector

TABLE 3-2-2

Results since the introduction of non-formal education (number of benefiting students)

Years	2008/ 2009	2007/ 2008	2006/ 2007	2005/ 2006	/2004 2005	/2003 2004	/2002 2003	/2001 2002	/2000 2001	/1999 2000	1998/ 1999	Total
Second school	33,177	32,419	36,518	34,294	34,950	23,822	26,229	46,754	29,676	34,859	35,855	368,553
Reducing dropouts rate	166,901	142,420	154,423	133,000	-	-	-	-	-	-	-	596,744

Source: Ministry of National Education, Higher Education, Professional Training & Scientific Research

The use of modern teaching methodologies in Morocco has created a lot of experiences which are worth reflecting on, especially in relation to building knowledge capital

For the advancement of disabled children and ensuring basic conditions for achieving the same on 1 April, 2006, a quadripartite agreement was signed by the Ministry of National Education, Higher Education, Professional Training and Scientific Research, Mohammed V foundation for solidarity, The Ministry of Health and the Department of family, childhood and disabled people. All these parties work in the framework of this agreement to provide appropriate educational conditions for ensuring integrated or specialised education for disabled children, the four parties also seek enhancing social and health services provided for them, through employing available material, human and institutional capabilities. Such trends were interpreted to 10 real procedures with the aim of facilitating the education of children with special needs in private and public schools.

Furthermore, the Urgent Programme 2009/2012 developed only for the Ministry of National Education, Higher Education, Professional Training and Scientific Research, was a special project for justifying children and groups with special needs to ensure equal access to the educational system. Among basic procedures taken for this project is conducting a study for counting types of disabilities and determining the special needs of each category.

The new constitution (2011) indicates clearly the importance of qualifying and re-qualifying this social category. Authorities develop and effectuate policies for these persons and categories with special needs. For this reason, it works hard for:

- Requalifying who suffer physical, kinetic or mental disability, and integrating them in the social and civil life as well as facilitating their enjoyment of recognised rights and liberties for all (The Moroccan Kingdom, 2011 constitution).

Moreover, the Ministry earmarked a sum of MAD 578,461,200 (about USD 68,054,258) to improve the requirements of disabled children's access to regular departments.¹⁶

TEACHING METHODOLOGY AND BUILDING STUDENTS' KNOWLEDGE CAPITAL

The use of modern teaching methodologies in Morocco has created a lot of experiences which are worth reflecting on, especially in relation to building knowledge capital. Regarding the teaching methodology and building the knowledge capital of students, the Genie 1 and Genie 2 programmes allowed the use of ICT in some basic subjects of the curriculum. The establishment of CITI (Centre for Innovation in Communication Technology) for human development in Al Akhawayn University was designed to contribute to strategies to integrate information and communication technology in education.¹⁷ The results of the field study conducted for this report showed that 88.6% of the respondent teachers possess the methods and means of using technology for educational and other purposes. Despite their recent generalisation to educational institutions, teachers manage to use these new technologies as a result of their training in this vital field (see table m3-1 in the appendix).

The time specified for teaching subjects helps us form an idea of the pedagogical distribution of the subjects which are most important for students, and other subjects which are complementary and less important for the knowledge, scientific and social formation of future generations. We see from the charts of the distribution of data for time allocated to teaching subjects for basic education in 2006, that Arabic language classes occupied 25% of the total time (compared with the Arab rate of 28.8% and international rate of 32% allocated for mother tongue languages in primary school), foreign languages occupied 19%, maths 18%, Islamic education 10%, science and technology 10%, arts 9%, social studies 5% and physical education 5% (Abdullah Al Khiary, background paper for the report). The educational criteria must be taken into consideration when formulating a timetable of subjects

which play to students' differences, and their strengths and weaknesses.

To sum up, the above information shows that there are many subjects and intensive educational contents which focus only on the quantitative side. The time allocated for science and technology is not sufficient; it is below the international rate and does not allow students to possess the principal scientific qualifications that help them continue with scientific subjects at university. We need also to point out that languages (national and foreign) occupy 44% of the total classes. This is a good rate, but the paradox is that this was not reflected in the students' command level of languages, which remained low and points to one of the basic problems of the education and training system (Abdullah Al Khiary, background paper for the report).

Regarding whether or not the educational system assists in developing the abilities and skills which help build the knowledge capital of students, the reality reflects an extremely low level of the quality of educational and acquired skills. Excluding some excellent institutions, the Moroccan school does not provide education which meets the required quality criteria. This results in approximately two hundred thousand early school leavers annually because of academic failure, with 17% repeated cases occurring in the first year of primary education. It is difficult to attribute this to personal factors that pertain to the child's mental abilities or the familial or social status (Higher Council of Education, 2008b). However, this does not mean that there are no exceptional cases of some excellent students. Such cases are not statistically indicative and are limited to certain sectors, such as private education, and certain specialties, such as mathematics (Abdullah Al Khiary, background paper for the report).

Thus, despite notable development, pedagogical methodology and tools suffer from severe shortcomings that affect the quality of education. This is evident in recent results in the international tests of

reading (PIRLS)¹⁸ and science and maths (TIMSS),¹⁹ (the Ministry of National Education, Higher Education, Professional Training and Scientific Research, 2008).

The low educational output can be attributed to the lack of a clear vision of the teaching methodology that is appropriate to the requirements of the knowledge society and difficulty of applying them. This is emphasised by the findings of the field study of the Arab Knowledge Report for 2010-2011 which includes a teacher survey. The survey showed that there is no definite trend towards teaching and its methodology among the respondent Moroccan teachers. It further indicated that teaching practices combine both traditional and modern methods. Traditional teaching methodology, such as depending on the explanation of theoretical concepts, is still widely practiced (55% in all classes, 21.7% in most classes). This is also the case with writing the lesson on the board (45.3% in all classes and 22.7% in most classes). However, this does not negate the use of modern pedagogical methodology, such as training students on problem solving (37.1% in all classes and 39.4% in most classes) and concept discussion with students (65.7% in all classes and 27% in most classes), (see table m3-2 in the appendix). However, the combination of traditional and modern methodologies may not be a negative practice if the teacher manages to employ them well to serve the aspired goal.

The educational system approved new pedagogical methodologies that were proved to be effective in developed educational systems and other systems similar to the Moroccan Education and Training System. In the framework of completing the approach, the integrating pedagogy was approved as a methodological framework for founding efficient approaches which contributed to instilling real dynamics and pedagogical dialogue inside educational institutions should be, and which encouraged and framed for explaining choices, although

The time allocated for science and technology is not sufficient; it is below the international rate and does not allow students to possess the principal scientific qualifications that help them continue with scientific subjects at university

such educational new methodologies in general almost cause a state of confusion for practitioners.

However, what leads to optimism is that a considerable number of the respondent teachers in the survey stated in all their answers that it was essential to equip students with the abilities, skills and learning methods necessary to integrate into the knowledge society. These include training students on critical thinking (79.3% say it is very necessary while 16.4% say it is 'somewhat' necessary). Regarding teaching social principles (83.2% see it is very necessary and 16.1% consider it 'somewhat' necessary) and also motivating students to interact with the teacher (87.1% see it is very necessary and 10.1% see it is 'somewhat' necessary), (see table m3-3 in the appendix). Furthermore, most teachers adopt the prevalent ideas of society, such as cultivating a passion for knowledge in the minds of the future generation (78.9% completely agree and 19.5% somewhat agree). They further realise the characteristics of this society as 91.6% stated that knowledge is the key to human development. However, 54.8% of the respondent teachers still focus on the technological features of society at the expense of human sciences (see tables m3-4 and m3-5 in the appendix).

Since the effectiveness of education and training is linked with the assessment conducted by teachers, most of them said that they combine both traditional and modern methods. 90.9% of them indicated that regular attendance is extremely important, and at the same time 88.4% stressed the great importance of active involvement in the classroom (see table m3-6 in the appendix). The limited efficiency levels of students can be interpreted as teachers not having enough time to develop their knowledge and upgrade their professional performance. 42.2% of teachers said that all their time is dedicated to activities pertaining to their daily work, such as correcting students' homework, while only 15.2% stated that

enough time (more than 5 hours weekly) is devoted to activities that raise their performance, such as reading specialised articles (see table m3-7 in the appendix).

PREPARING AND TRAINING TEACHERS IN THE EDUCATION AND TRAINING SYSTEM

Efficient teachers are considered the true key to developing and modernising education. There is no doubt that highly qualified teachers possess effective pedagogical methods that enable them to influence their students and help them develop the abilities which provides them with a good education. From this end, the issue requires professionalising teaching to the level of other respected professions in society. It entails making the profession attractive for highly skilled and efficient young people who can modernise the teaching methodology, realise the developing and changing needs of society and keep up with international innovations with creative, analytical and critical thinking which make the students more capable individuals.

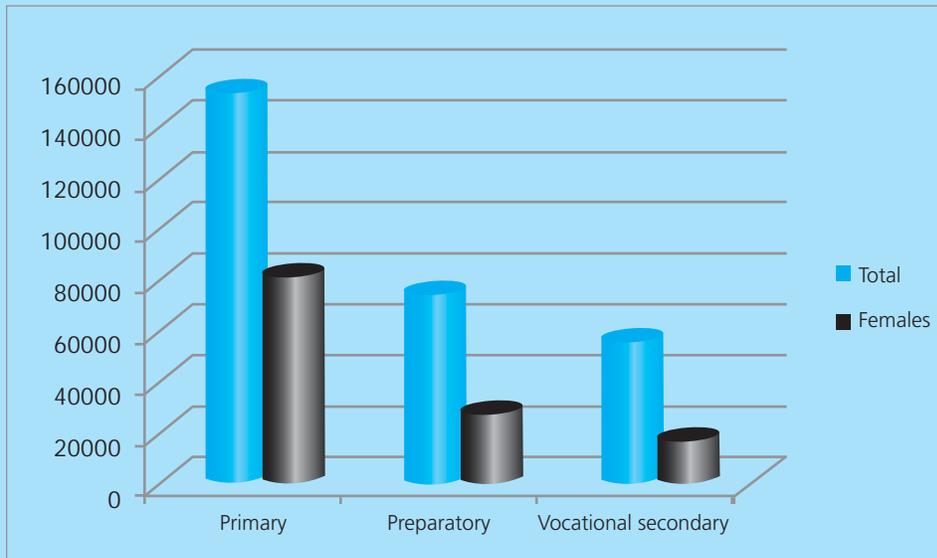
Teachers constitute the majority of the education sector's employees. The total number of teachers in the different stages of school education in 2011 was around 279,933 male teachers of which 120,724 female teachers (73,343 of which 26,966 female teachers in the preparatory and secondary stage, and 55,113 of them 16,483 female teachers in secondary vocational education, and 151,477 of which 77,275 female teachers in the primary stage (Summary of education statistics, 2010/2011). As for the number of higher education professors, this number reached approximately 9,867 in 2007, distributed between 15 Moroccan universities.

Regarding the educational and administrative framework,²⁰ it witnessed a kind of stability, as the number of students per teacher was between 20 students in the secondary vocational education, 25

Since the effectiveness of education and training is linked with the assessment conducted by teachers, most of them said that they combine both traditional and modern methods

FIGURE 3-2-1

Number of teachers in the profession



Source: Education statistics overview 2010/2011

students in the secondary and preparatory education, and 27 students in the primary education in the year 2010/2011. However, the administrative framework inside the educational institutions is not at the required level, as the number of students per each administrative employee was 260 students in the primary education, 104 students in the secondary and preparatory education, and 65 students in the secondary vocational education.

The teaching profession in Morocco faces many problems such as a low interest in the profession and teachers' preference for bright students, in addition to the insufficient criteria to allow detailed assessment of the pedagogical and communicative skills of candidates to help them integrate into training and teaching. Such problems further involve the lack of tools that help explore personal motives and incentives. Moreover, joining the teaching profession for different social sectors and generations is not based on the same qualifications, certificates and specialties. The concerned authorities made getting a licence is a requirement for accessing these centres, in the new conception of regional training centre.

However the lack of attraction is not attributed to what has been said, but to low wages compared to those professions that require the same level of training.

BASIC TRAINING FOR TEACHERS

The total number of educational training centres is 55, of which 34 are for training primary education teachers, and 13 for preparatory education teachers, in addition to 8 high schools for training secondary vocational education teachers. These centres have managed to train a total of 273,237 teachers since the founding of the first training centre in Morocco in 1957 (Ministry of National Education, Higher Education, Professional Training and Scientific Research, in French 2008/2009). However, the teachers' basic training suffers from several imbalances and shortcomings, including the vague conditions of joining these educational training centres. These shortcomings further involve the lack of frames of reference for efficient training in the institutions, and the absence of clear and accurate professional references for the

The teaching profession in Morocco faces many problems such as a low interest in the profession and teachers' preference for bright students, in addition to the insufficient criteria to allow detailed assessment of the pedagogical and communicative skills of candidates to help them integrate into training and teaching

Despite the ambitious reform efforts, it can be said that the educators who lead the education process have not been given their due rights, whether on a financial or social level

teachers' specifications, tasks and functions to serve as a foundation of basic training. Furthermore, the training curricula are irrelevant to the professional reality and do not meet the teaching requirements. There are no tools or indicators to assess the skills acquired during training. The conditions of the teaching profession do not encourage teachers to fulfil their duties to the quality level required. The infrastructures are old and maintenance is not available. There are no educational tools or methods, or information or audio visual facilities. Moreover, several schools have overcrowded classrooms creating tense educational relationships as a result of tough working conditions, and the students' low level of determination and discipline. There is a lack of training of teachers to face these situations and these factors have caused a high rate of absence among teachers, especially since 2005, with a high percentage mainly in the preparatory stage. Table 3-2-3 shows the rates of unexplained absence for the period 2004-2007 by the number of days.

Working conditions in rural and remote areas are even more difficult. This creates a state of instability for teachers, thereby recording a considerable rate of absence as well as relocation requests. The reason for this is the fragile infrastructures of schools in rural areas as well as the lack of accommodation for teachers there; in addition to transportation difficulties and the absence of support needed to help teachers feel settled. These reasons in addition to others have discouraged

teachers from performing their required role in society which has resulted in a low regard for the profession. More than half of the teachers who participated in the field study conducted for this report said that they are no longer respected or held in high esteem (58.5% 'completely agree' and 33.8% 'somewhat agree'), and that today's students do not respect their teachers (56.3% 'completely agree' and 35.9% 'somewhat agree'), and that students continued to suffer from low interest in learning (see tables m3-8 and m3-9 in the appendix). Most of the teachers surveyed indicated that the teaching profession makes them feel that they have a social and human mission to achieve (86.5% 'completely agree' and 12.1% 'somewhat agree'). However, the field study results showed that nearly half of the sample teachers are ready to leave the teaching profession if they find other jobs which generate a higher income (26% 'agree completely' and 23.6% 'somewhat agree'), (see table m3-10 in the appendix).

These results reflect the disorder in the education and training system. Moroccan society has held a negative image of teachers who represent the cornerstone of the educational system, and whose image is partly associated with the deteriorating status of schools. Despite the ambitious reform efforts, it can be said that the educators who lead the education process have not been given their due rights, whether on a financial or social level. This has not helped improve their image in society or keep pace with the desired change. The

TABLE 3-2-3

Teachers' unexplained absence rate by number of days

Year	Primary	Preparatory	Secondary (vocational)	Total
2004	15,357	8,720	3,525	27,602
2005	21,344	11,326	5,776	38,446
2006	45,721	80,221	23,647	149,589
2007	12,921	85,224	27,517	125,662
Total	95,343	185,491	60,465	341,299

Source: Higher Council of Education, 2008 E

Emergency Education Programme seeks to correct this deficiency by enhancing the status and abilities of those involved in the education profession, and especially teachers, through the process of reform.

CONTINUOUS TRAINING

The year 2010 witnessed the highest rate of continuous training days that reached around 2.6²¹ million continuous training day for the benefit of teachers, headmasters, headmistresses and supervisors with the aim of effecting the projects of the urgent programme. However, there are some shortages in determining basic needs for beneficiaries in a way that the continuous training can achieve aspired goals.

The results of the teachers' survey stressed this shortage. Teachers stated that opportunities for them to resume their education and develop their academic skills and knowledge during their service were unavailable (14.3% 'completely agree' and 42.9% 'somewhat agree'). In addition, private training centres were rarely located close enough for them to attend them or make use of them as necessary. Although the respondents' answers were not identical, we can deduce that continued training and development of teachers in order to live up to students' expectations was not available as required (see table m3-11 in the appendix). This undoubtedly weakens the educational system.

The inability to improve the life of teachers renders them unable to enhance the level of their students. We should not be surprised then, by the low marks scored by students in the international assessments of some academic subjects as shown below.

INTERNATIONAL ASSESSMENT RESULTS

The results of the assessments in which Morocco participated, especially TIMSS (2007) and PIRLS (2006), reflected the limited cognitive performance of

Moroccan students in the assessed fields (the Higher Council of Education, 2008C). The most important results were as follows:

RESULTS OF MATHEMATICS AND SCIENCE ASSESSMENT (2007):

In primary education: The results of the fourth primary grade in the international TIMSS, 2007, placed Morocco 31 in mathematics and 34 in science out of 36 countries participating in the assessment. The average national performance was 159 points lower than the international average.

Comparing the results of Morocco with those of the other six participating Arab countries at this level shows that Moroccan students in the fourth primary grade ranked second after Algeria in mathematics and fourth in science.

Regarding performance development between the 2003 TIMSS and the 2007 TIMSS for the fourth grade students, we notice that Morocco's score decreased 6 points that is by 1.7%.

In secondary and preparatory education: The performance of eighth grade Moroccan students in mathematics was 119 points below the international average. Morocco was ranked eighth out of 13 Arab countries with an average performance lower than the Arab average.²²

READING AND COMPREHENSION ASSESSMENT (PIRLS 2006):

Moroccan students scored 323 points, lower than the international average (500 points). Moreover, 74% of Moroccan students did not achieve the PIRLS defined performance rate. The students' scores also differed according to their community. 363 points were recorded for urban communities, 334 points for semi-urban communities, and 296 points for rural communities.

These results placed Morocco 40th out

The inability to improve the life of teachers renders them unable to enhance the level of their students

of 45 countries in TIMSS, 2003, and 44th out of 45 countries in PIRLS of 2006. The students' results were below not only the international averages but also the Arab average (which are also lower than the international averages), (Abdullah Al Khiary, background paper for the report).

RESULTS OF THE EVALUATION STUDY OF THE NATIONAL PROGRAMME FOR ACADEMIC ACHIEVEMENT ASSESSMENT (2008)

The low scores of the international assessments raised questions about the output of the Moroccan education system, thereby creating discord among official, professional and media circles.

However, Morocco didn't hesitate to participate in international assessments and interact positively with these results and getting benefit from them.

In this context and as a response to the need for regular examination of students, as well as the adequacy of the acquired knowledge and skills for economic, social and professional needs, a national assessment study was conducted to measure the academic achievement of Moroccan students at the end of the 2007/2008 academic year.

The results of the academic achievement shown in Table 3-2-4 show that the programme's objectives are not achieved, [and] by a percentage of a third

or less than half at best. The data further indicates that the results are not clustered, especially in maths and science, as their results were slightly higher in the fourth and sixth primary grades but declined in the second and third preparatory grades. Regarding Arabic and French, their results revealed slight improvement in the two preparatory grades and decline in the primary grades. This may not reflect the true status of languages in Morocco.

One obstacle facing the Moroccan school is its inability to build high level competencies and enhance them in academic subjects through cross-curricular knowledge and contents (compétences transversales), and allowing the possibility of transferring them from one field to another. Moroccan education is still biased to the end of 'learn to know' at the expense of the other three ends: 'learn to do', 'learn to be' and 'learn to share with others'. Therefore, the challenge will be in the educational system's ability to adopt alternative pedagogical options which produce higher knowledge competencies. This is because such competencies are the tools of forming human resources capable of producing innovative information and knowledge used for overall development and the knowledge economy as well as international competition around governing knowledge production (Abdullah Al Khiary, background paper for the report).

In terms of the qualitative knowledge capital of age groups who can understand most of the requirements of the

The challenge will be in the educational system's ability to adopt alternative pedagogical options which produce higher knowledge competencies

TABLE 3-2-4

Total percentage of academic achievement by subject and school grade²³

Subjects	School grades			
	Fourth primary	Sixth primary	Second preparatory	Third preparatory
Arabic	27%	36%	42%	43%
French	35%	28%	31%	33%
Maths	34%	44%	25%	29%
Sciences	39%	46%	23%	29%
Physics and chemistry	-	-	34%	35%

Source: Higher Council of Education, 2008d

TABLE 3-2-5

Assessment of qualitative knowledge capital by age groups (2005)

Expected knowledge capital of children %	Knowledge capital of youth %	Knowledge capital of adults %	General average %
73	39	43	52

Source: United Nations Development Programme (UNDP) and Mohammed bin Rashid Al Maktoum Foundation, 2009.

knowledge society and are qualified to integrate into it in the short or medium term, we notice that the category of children is the most prepared. The reason for this is that children go through the education cycles which prepare them to gain basic knowledge after no less than nine years of schooling. Since this age group is nearing saturation level, they will have more opportunity to access the knowledge society than other age groups in Morocco, if we take into account the qualitative criterion (see table 3-2-5). As for the youth category upon which society usually depends on as an effective source for change related to innovation and modernity, their qualitative capital does not exceed 39% (UNDP and Mohammed bin Rashid Al Maktoum Foundation, 2009).

SYSTEMS FOR INSTILLING VALUES IN MOROCCAN SCHOOLS

Accessing the knowledge society does not only require gaining information, knowledge, competencies and applied skills, but also forming the future generation's personality and providing them with values that complement knowledge.

Values can be approached from angles related to learning, personality, social life and good manners. This requires monitoring the presence or absence of such values in their three forms in educational programmes and curricula. It also entails investigating the efforts made by the education and training system with the aim of consolidating such values in the minds of future generations. To that end, we will show the most significant activities and efforts in this field.

A. Reviewing school books: Responding to the changes witnessed by Moroccan society and desiring to help future generations adapt to such changes, school books were revised to meet the directives of the National Charter of Education and Training. The revision also takes into account that books should contain new ideas in the fields of human rights, citizenship and civil behaviour values. Thus, the new books stated the necessity of the critical understanding of the self and the other, as well as national and international changes which intend to produce a citizen equipped with the values of defending human rights, accepting differences, exercising critical thinking, solving problems, cooperating with others and settling disputes, as well as participating in political life and environmental protection (School Education Sector, 2007).

B. Establishing Values Committee within the Permanent Programme Committee: This committee was entrusted with examining curricula in terms of internationally recognised human rights values as well as national and cultural values (School Education Sector, 2007).

C. Intersection Committee: This was set up within the Textbook Evaluation and Certification Committee. This committee is responsible for checking all initially certified school books to see how far the specifications and standards of human rights values are met.

D. Introducing the subject of citizenship: The general objective of citizenship is building a conscious citizen who is able to

Responding to the changes witnessed by Moroccan society and desiring to help future generations adapt to such changes, school books were revised to meet the directives of the National Charter of Education and Training

exercise his or her rights and duties to him or herself and the group which he or she belongs to.

E. Integrating the values and principles of a new family code: The school education sector deliberately incorporated into school books the values of change, justice, equality and restoring the respect of the Moroccan family which were included in the new family code. This code is helping Moroccan women achieve their ambitions in the field of gender equality in terms of family care, restricting the right of divorce, polygamy and the regulation of guardianship and spouse finances, in addition to other principles needed for the regulation of personal affairs. The education sector incorporated these values into school books and programmes which have a philosophical, religious and social dimension, with the aim of familiarising the future generation with the changes in social and legal status in Morocco.

F. Including principles of International Humanitarian Law: Morocco initiated a pioneering experience of publishing and disseminating the principles of humanitarian law. It has prepared documents for this purpose entitled 'Exploring International Humanitarian Law' in a number of academies.

G. Values monitor: Its general objectives include enhancing the values of Islamic doctrine, promoting Moroccan cultural identity, strengthening the values of modernity, and integrating values into the educational institution. Its objectives also involve establishing values as the base of the educational system across all levels, and monitoring the educational institution in the course of its incorporation of values in its educational practices. The monitor will also watch and evaluate value related behaviours in school (School Education Sector, 2007).

H. Creating the Children's Parliament: The parliament was founded to realise the

objectives of educating children about democratic practices. It further seeks to provide the conditions to train the future generation on positive citizenship and concern for public issues.

I. Education Equality Cells: These cells aim to support and promote a culture of human rights. In the context of the dynamism witnessed by Morocco in the late 1990s within the framework of the National Action Plan for Integrating Women in Development, cells for equality and justice education emerged to serve as a foundation for gender equality and development.

The previous achievements highlight the attention given to integrating a culture of values into curricula as well as the daily practices of students. The curriculum contents are varied and comprehensive and therefore help to build the students' personality with different intellectual dimensions. The field study conducted for the Morocco case study showed that the future generation possesses satisfactory levels of values, in terms of their readiness to integrate into the knowledge society. The survey showed that 47.2% of respondent students are 'ready' in respect of the required aggregate values. Additionally, 51.5% of the students are nearly 'ready' and no student is 'not ready' (see chapter 5 of Morocco case study).

TEACHING METHODOLOGY: BETWEEN REALITY AND EXPECTATIONS

There is no doubt that effective pedagogical methodology establishes a bridge of constructive communication with students. This methodology also enables them to build their competencies and abilities in a way that helps form their personalities and satisfies their needs to prepare them to integrate effectively into the desired knowledge society. Nevertheless, the education and training system is currently suffering from many gaps. The report of

The field study conducted for the Morocco case study showed that the future generation possesses satisfactory levels of values, in terms of their readiness to integrate into the knowledge society

the Higher Council of Education stated that, “as for pedagogical methodology, concrete procedures have been taken to establish the competency-based approach. However, such an option has not turned into a reality due to the lack of application measures and mechanisms on the level of defining and designing curricula as well as reviewing the assessment methodology. Moreover, teachers were not trained and prepared as required in order to effect such large-scale changes.” Thus, teaching methodologies are scattered and disparate, far from the concept of a competency-based approach as defined by the charter, (the Ministry of National Education, Higher Education, Professional Planning and Scientific Research, 2008).

The structural report of the Emergency Programme (2009-2012) emphasises the determination and resolution of official authorities to work towards developing the learning system as well as achieving scientific and technological development, and developing handicraft. The report also proposes adopting new pedagogical methodologies which focus on selecting the knowledge acquired by students as well as their scientific analysis and thinking methods, in addition to their adoption of critical scientific methods in analysing phenomena. This new approach will give them more opportunity to help develop their sense of experimentation, accountability and proof.

Most of the respondent teachers in the field study stressed the importance of teaching methodology in preparing future generations. They expressed, some emphatically, their relative satisfaction with the reality of dealing with this. The surveyed teachers considered the curriculum a tool that helps students acquire necessary skills (34.6% ‘completely agree’ and 51.5% ‘somewhat agree’). They also indicated that the curriculum prepares students to overcome future challenges (44.2% ‘completely agree’ and 38% ‘somewhat agree’). Moreover, they said that the educational programmes and curricula take

into account students’ training in terms of different sides of their personality, namely, their cognitive, conative and social sides (25.4% ‘completely agree’ and 53.1% ‘somewhat agree’), (See table m3-12 in the appendix).

ENABLING SYSTEMS AVAILABLE FOR FUTURE GENERATIONS THROUGH EDUCATION

Some students stated in a recent field study that the buildings of several public schools, “look like a prison.” They pointed out that such buildings should be harmonious, with beautiful structure which attract students and contain large areas including an information hall and green spaces. They should also be open to the community and institutions, and be provided with facilities and equipment that meet the requirements of the time, creating an atmosphere of comfort for students and motivating them to learn (Rashida Barada, in Arabic, 2009).

Regarding teachers, the study indicated that schools should have, “teachers who receive training, making them different from older, more rigid teachers who cannot be developed.” It also indicated that teachers, “should be close to their students, support them and provide them with knowledge and kindness.” According to the study, teachers “should also be highly competent and especially familiar with the field of education and guidance.”

As for the curricula, the study concluded that it does not satisfy the future generation’s needs or prepare them for the labour market as required. One student said: “Curricula neither meet the youth’s interests nor answer their queries or explain the phenomena which surround their society”. Today’s students require the developing of educational institutions including their buildings, curricula and human resources, in addition to architectural space and pedagogical facilities. Furthermore, they

Most of the respondent teachers in the field study stressed the importance of teaching methodology in preparing future generations

Today's schools must go beyond their traditional roles and duties to enliven their curricula and programmes. This requires drastic change in their activities to be able to adapt to the new situations of the modern era

express their need for curricula which enhance their intellectual faculties and enable their openness to the modern age (Rashida Barada, in Arabic, 2009).

Today's schools must go beyond their traditional roles and duties to enliven their curricula and programmes. This requires drastic change in their activities to be able to adapt to the new situations of the modern era. Hence, we find that the Ministry made efforts in developing curricula including:

- Re-division of the secondary education;
- Approving six input agreed upon on the national lever, which are education based on values, communication competencies, cultural competencies, self-development competencies, methodological competencies, technological competencies,
- Bridging similar divisions;
- Expanding schooling in technological, scientific and professional divisions;
- Organizing classes and educational pace in the vocational education;
- Founding the common roots
- Re-organizing educational assessment;
- Adopting new technologies for modernization of education.

One of the important procedures within the framework of equipping educational institutions and generalising ICT is the kick-start of "GENIE". This program is an embodiment to the national strategy for generalisation of ICT in

In fact, the fast-paced changes which the world has witnessed recently make the educational content acquired by students useless in solving recent problems in real life. This has led the American psychologist Carl Rogers to say that it is ridiculous to ask what should be taught to future generations due to the fast pace of change taking place all over the world. He said that educational content does not benefit future generations after their school graduation. According to him, there remains only one useful thing – that is developing the creative thinking that equips the future generation with the skills and competencies which enable them to overcome new or existing problems they encounter in real life.

Ahmed Auzi, 2000

the field of training and education in all Moroccan schools, they are based in the heart of the reform of the educational system in the framework of the urgent programme under the name E1P10 (Integrating ICT and Renewal of the Educational Field). It has been already launched in 2006; However, for ensuring a good offer for the educational system, the strategy approved at the end of 2008 was updated and the programme was rescheduled for a period of 5 years (2009-2013). In this regard, focus was given to the preparation model and training, as well as priorities in acquiring digital resources for ensuring achieving 2 important goals:

- Improving the quality of education and professional development of teachers;
- Developing ICT-related skills among learners.

It is worth mentioning that the programmes 'Injaz' & 'Nateza' enabled approximately 15,000 students and 150,000 men and women working in the education field to benefit from the subsidy offered by the Telecommunication Infrastructure fund to cover parts of the costs of computer acquisition. The number of 'Injaz' programme beneficiaries is expected to reach 50,700 students by the end of 2014.²⁴

THE EFFORTS OF THE PRIVATE EDUCATION SECTOR IN DEVELOPING EDUCATION AND TRAINING SYSTEMS ACROSS DIFFERENT LEVELS

The contribution of the private education sector increased from 4.2% in 2000, to 7.1% in 2007, at a percentage of 8.4% in primary education and 4% and 6.3% in preparatory secondary and vocational secondary education respectively. But, the target contribution of 20% remains unattainable. It is also noted that this sector has no contribution in rural or unstable economic areas. This explains why Casablanca and Rabat represent 20% of the

primary education level. “It seems that the private education contribution decreases as we move to a higher educational stage. Moreover, the contribution of the private vocational secondary education surpasses that of preparatory secondary education (the Higher Council of Education, 2008A). The field of higher education has witnessed the establishment of several training institutions, and more international universities were set up this year in some major Moroccan cities.²⁵

Private higher education managed to double its share of students over 7 years, receiving 6.4% of the total number of students in 2006/2007, against only 3.4% in 1999/2000. This sector’s dynamism is attributed to the diversification of its specialties, in addition to its adaptation to economic demand and the qualitative improvement of its curricula (the Higher Council of Education, 2008C).

CONCLUSION

The Moroccan education and training system faces major challenges. On one end, it is facing the long-standing problems of illiteracy and high rates of pupils leaving school early, in addition to the growing number of unemployed graduates whose education does not meet with the labour market’s requirements, as well as the need to reform and equip educational institutions. At the other end, the education and training system also faces the pressures of globalisation

and the international competitive market which necessitate providing students with efficient training that enables them to integrate into the knowledge society, meeting its needs and requirements as well as its scientific, knowledge and personal efficiency.

Projects in Morocco are carried out in different sectors related to economy, governance, education and training, health, housing, transportation, elimination of poverty and marginalisation, and gender equality, aiming to create a modern, democratic Moroccan society. This makes it necessary for the education and training system to improve its contents, methodology, conceptions, objectives and philosophy. This new philosophy will raise the Moroccan society’s hope to overcome weaknesses and difficulties and enable it to get out of this cultural crisis. Such opportunity will be enhanced if the educational system’s philosophy moves from the traditional to becoming rational, modern, serious and flexible. It should also be guided by the international human experience and be equipped with knowledge, technology, culture and appropriate humanitarian ethics. It should also entail cultural openness and possess the tools and skills of the modern era which underlie the culture of creativity and innovation of the future generation.



THE ROLE OF UPBRINGING INSTITUTIONS IN PREPARING FUTURE GENERATIONS

The upbringing process goes beyond school education and training to include an integrated system of institutions in Moroccan society which contribute to preparing the future generation for the desired knowledge society. The upbringing institutions in Morocco involve family, language, and general economic and social conditions, along with media, religion, customs and the dominant social culture. These are supported by civil society institutions as well as the status of public and private freedoms.

FAMILY CULTURE AND PREPARATION OF THE FUTURE GENERATION

The family is considered a vital intermediary between the child and society. In the family, children develop their personalities and acquire the cultural models of their society. Thus, the family is considered the most prominent social institution that is concerned with upbringing and preserving a society's culture. In fact, it is difficult to speak about the Moroccan family in a singular form, as there are urban and rural families each with different economic, social and cultural backgrounds which reflect on their upbringing methods. Moreover, we should refer to the demographic, social and cultural transformations which Moroccan society has undergone over the past fifty years, because these transformations have greatly changed family relations and their relevant values. It should also be noted that the family is regarded as the

school's partner in preparing children. It is the first educational institution which prepares children for life before joining school, and therefore teaches them a set of behaviours and ways to deal with others, in addition to other values which children need in everyday life.

When children join school, "they enter the classroom with everything they have learnt at home" (Georges Mauco). Therefore, the kind of life, interpersonal relations within the family as well as the dominant relationship climate (democratic, domineering...), especially between parents and children, plays a major role in providing the future generation with certain types of values and attitudes that determine and direct their behaviour in society.

The Moroccan family has developed in structure, as it became more diversified and tends to the nuclear family model. Data from national family research demonstrates that there are 282 kinds of families with compound structures, including 183 with at least three consecutive generations. These extended families are found more often in rural communities rather than urban ones (The Possible Morocco, Fiftieth Anniversary Report, 2006).

The attitudes and values related to learning, a passion for knowledge as well as diligence, persistence and openness to development are prominent issues in upbringing. This is attributed to increasing parental awareness of the importance of knowledge acquisition as a prerequisite for integration under the changes witnessed by, and the challenges facing Moroccan society. The higher the

The attitudes and values related to learning, a passion for knowledge as well as diligence, persistence and openness to development are prominent issues in upbringing

Families are no longer valued and honoured for the number of their children as much as the kind of education, scientific specialism and jobs secured by their children. Today, the 'successful family' is one whose children have succeeded both economically and socially

economic and education level of parents, the more interested they are in educating their children and encouraging them in hard work and persistence. In order to achieve this, parents exert tremendous efforts on material or moral levels. This is particularly reflected in their choice of suitable educational institutions, private tuition and learning facilities which help children achieve success and excellence (Kholoud Al Sebaie, background paper for the report).

Today, parents have become aware that knowledge increases human capabilities, enriches their imagination and develops their sense of innovation. In addition to the inherent value of knowledge itself, it performs an important and objective role in increasing other freedoms. Knowledge helps human beings protect their interests and defend against exploitation. It also raises their awareness of how to avoid threats to health and helps them live a longer life in good living conditions. Knowledge also enables people to secure a better job with a higher income. Parents who have not had an education appreciate the value of learning, as it helps their children avoid the hardships of life which their families have faced (UNDP, 2010).

Thus, families are no longer valued and honoured for the number of their children as much as the kind of education, scientific specialism and jobs secured by their children. Today, the 'successful family' is one whose children have succeeded both economically and socially. Parents now derive their social status from their children's achieved academic and professional development (Kholoud Al Sebaie, report background paper). Given the pressures of the new world of technology, a considerable number of middle and upper class parents do not only push their children to succeed but insist on them achieving excellence and high scores, qualifying them to join institutes that ensure more opportunity for professional growth.

ECONOMIC, SOCIAL AND CULTURAL SITUATIONS OF MOROCCAN FAMILIES AND THEIR EFFECT ON RAISING CHILDREN

The process of preparing the future generation and providing young people with suitable learning opportunities inside or outside school is linked with the general economic and social conditions of their families. The living standard of most Moroccan families is moderate. However, it has developed significantly from half a century ago as a result of changes in the general consumption pattern of households which has recorded an improvement in the spending level per individual. But, it should be noted that this level is especially affected by the proceeds of agricultural crops in rural communities. The HCP indicators show that the poverty indicator in Morocco has improved, dropping from 28.5% in 2004, to 11.1% in 2007.²⁶ The change in the consumption pattern of the Moroccan people, even with a relative percentage, was a significant indicator for the advancement in living conditions and lifestyle. However, other expenses related to acquiring equipment and entertainment doubled. The improved general living conditions which were accompanied by an increased schooling development have led, especially in cities, to a reliance on types of consumption. Furthermore, nutrition, health, clothing, transport, accommodation and other aspects of social life have undergone profound changes. This has been reflected in the family's increasing demand to educate their children and select schools which can guarantee them a high quality education and that can also take care of their health.

THE STATUS AND EMPOWERMENT OF WOMEN IN MOROCCAN SOCIETY

There is no doubt that women are considered the primary care-givers in

the family and society. They have a substantial effect on developing children's personalities which are guided in the early years by the family's educational system and culture, in which women and especially mothers play a principal role. Therefore, development and modernisation efforts in developing societies which aim to eliminate underdevelopment have sought to educate women and enhance their status, enabling them to be activists in the process of human development. "Society is like a bird which cannot fly without both wings. Paralyzing the wings of women is an obstacle to the progress of the entire society" (Abdel Hadi Bu Taleb, in Arabic, 2000).

• Men and Women enjoy equal civil, political, economic, social, cultural, and environmental rights and liberties, stipulated in this chapter of constitution, as well as in international pacts and conventions as approved by Morocco, and in the framework of the provisions of the constitution and principles and laws of the Kingdom.

• The state seeks to achieve the equality principle between men and women. For this end, it introduced an authority for equality and struggle against discrimination.

The Moroccan Constitution, Chapter 19, 2011

The Moroccan Constitution provides complete gender equality in social, economic and political rights. The fifth article of the Kingdom's Constitution which was amended in September 1996, enables gender equality at voting age. Additionally, the twelfth article of the modified Constitution stipulates that all citizens are entitled to apply for all public jobs under the same conditions. Moroccan law also guarantees gender equality in the right of work and pay, especially in public jobs. In pursuit of gender equality, the Moroccan Personal Status Law or 'Code' which was executed in the form of a decree in 1957 was revised in 1993. Moreover, Morocco has adopted many human rights-related international charters and laws. This has facilitated decisions which guarantee full rights for women in society (Khadija El Madamad, in French, 2000).

The issue of women imposes itself strongly in the Moroccan society which has witnessed enormous changes in various urbanisation fields, as well as in education and integration of women into different business sectors. The Moroccan woman has managed several achievements of empowerment. The state has also given great attention to women's societies which have set up many developmental social projects. Moreover, "the parliamentary elections held in 2007, saw a qualitative leap in female representation. Women have gained 35 seats in parliament out of 325 members. Thirty women joined the House of Representatives via national lists, while 5 women accessed it via local lists. Thus, female representation in parliament grew from 0.6% to 10.8% (this percentage placed Morocco 69th instead of 121st, thereby topping the Arab countries in terms of female representation in the legislature".²⁷ The percentage of Moroccan women holding high university degrees increased to 35%. Women further represent 28% of the active work force in society. They also constitute 30% of civil servants.²⁸ Despite these gains, the outlook for many women in Moroccan society is still bleak, and their status has not drastically changed. Thus, what has been achieved is only one step in a long journey.

Today, the Moroccan woman is generally more empowered than in previous decades. The progress in her status is expected to reflect her ability to contribute more effectively to preparing the future generation on a cultural and financial level. The improved economic conditions help women contribute more to funding better learning opportunities for the family's children. In addition, the high education and cultural level of women allows them to respond more effectively to social and global developments related to developing the future generation for accessing the modern and knowledge societies.

"Society is like a bird which cannot fly without both wings. Paralyzing the wings of women is an obstacle to the progress of the entire society"

LANGUAGE AND IDENTITY PROBLEMATIC IN MOROCCO

The relationship of language with identity poses several problems, whether in terms of its relationship with the system of education and values cultivation, or its relationship with authority in its different knowledge, political and economic aspects.

Language is considered the vessel of culture which reflects its contents and conveys its effects on conscience and feelings. This matter poses a problem for Morocco with its matrix of versatile languages. This matrix goes beyond the various daily dialects or languages spoken by the population, to languages which are used for communication in formal managerial dealings and the modern knowledge by students and young people.

Multilingualism in Morocco is not a product of the modern age, but has a long history. The strategic position of Morocco - close to Europe and overlooking the Mediterranean Sea, in addition to its African roots made it a target for many invaders. The Amazigh language of indigenous Moroccans was exposed to various cultures of different nations, in addition to the Arabic which came with the Islamic conquest. French colonisation has heightened the language issue in Morocco, due to its economic and cultural sovereignty, since it assumed protection over Morocco's interests. Thus, we have a linguistic scene in which different languages conflict with their cultural and civilisational contents.

“Colonisation has caused separation in the Moroccan linguistic field by using the French language in the fields of education, economy and management at the expense of the Arabic language, whose role has diminished and become limited to the production and reproduction of religious knowledge in Al-Qarawiyyin University and Al Yussufiyah University (Ben Youssef University). Arabic language teaching was also reduced to a large extent in colonial schools.

Source: Mohamed Fawbar, 2000.

Generally speaking, it is not possible to talk about bilingualism in Morocco which seemingly includes Arabic and Amazigh, as well as the common Arabic dialects (Al Hassania).²⁹ There is also formal, classical Arabic which is used in education as well as some administrative correspondences and the media. It is also the country's formal language as stipulated by the constitution. In addition, French has become the functional language in the field of economy and global openness, as well as the language of scientific specialisms at universities and institutes of higher learning. We should not also exclude other languages learnt by the future generation, such as English and Spanish among others.

Thus, we notice that the Arabic language in Morocco is not in a good position; the language is fraught with linguistic interference. The disjointed linguistic position as well as linguistic insecurity may reflect negatively on the individuals' latent potential, thereby reducing the level of human development (The Possible Morocco, Fiftieth Anniversary Report 2006). Given the importance of the Arabic language and its close relation with the culture, its position has become a focus for study and research. The Higher Council of Education has made it one of its major concerns which should be decisively acted upon, especially after the students' knowledge revealed a large deficiency in this field. In addition, students have low linguistic competence reflected in their daily communication by moving quickly from one language to another.

Language and identity

“It is possible to handcuff peoples, take their clothes off and muzzle them, but they will still be alive. It is possible also to steal their works and take their passport, dining tables and beds, but they will remain rich. Peoples are enslaved when their ancestors' language is eliminated and thereupon they will be lost forever”.

Source: Ignazio Buttitta (Sicilian poet)

Given the importance of the Arabic language and its close relation with the culture, its position has become a focus for study and research

MEDIA CULTURE

Law No. (77.03) on Audio-visual Communication and the recent decree issued by the High Authority of Audio-visual Communication (2002), are aimed at consolidating the principle of freedom of communication to serve society. They also intend to keep up with the political and social projects chosen by Morocco. Both also aim to disseminate its culture and be open to cultural diversity, and eliminate state monopolisation in this field. Several procedures have been implemented to develop public media in order to prepare them to overcome the competition challenges in the media sector.

Cultural and linguistic diversity has been a principal input of Moroccan social life since ancient times. This rich input is not only included in educational plans as stipulated by the National Charter of Education and Training, but is also supported by the media which is broadcast in local, national and foreign languages. Thus, the culture communicated by this media and absorbed by the future generation creates “a state of integration between diversity and unity, history and future prospects, as well as local, regional and universal elements”.³⁰

To sum up, the media contributes, via its various channels, to cultivating cultural diversity in the personality of the future generation and exposes it to multi-faceted creative human thought. This helps it exceed the country's local and cultural boundaries.

RELIGION AND CUSTOMS AND THEIR EFFECT ON THE PREPARATION OF THE FUTURE GENERATION

Religion to Muslims does not only mean spiritual saturation and piety which appears through practicing religious rituals, but also directs Muslims' life and behaviours and determines their identity, as well as acting as their cultural and social reference.

It may also extend to the political field and ideological mobilisation. Thus, religion is a social and political factor that affects and guides efficiency and daily behaviour. Where do Moroccan youth stand in terms of religious culture? How does it direct and structure their conduct and behaviour?

The relative mainstreaming of education has changed the social fabric. A considerable number of educated youths focus on religion compared to their parents after political independence. The youth have revised their parents' religious culture and concepts and tried to re-establish them on new bases and modern knowledge obtained through education and the media (The Possible Morocco, Fiftieth Anniversary Report, 2006). Generally, it may be said that the levels of the religious awareness of the youth differ according to their upbringing, as well as their social and family environment.

We would also not be wrong if we say that religious education lately has become the main focus of education and upbringing in general. This has been triggered by contemporary international changes and events in which religious awareness of some young people is accompanied by religious movements and organisations that threaten the international system. These movements seek to change systems and impose their opinions through so-called 'religious violence'. They have moved from individual behaviour to group behaviour with the aim of affecting political and social systems and threatening social security (Abeer Amin, in Arabic, 2006).

The general concern with regards to the religious aspect does not prevent us from saying that the problem of today's youth generation is the lack of sound religious education, as well as bewilderment between original religious affiliation and the developments of the knowledge societies. In such an atmosphere, the family neglected its role, especially families that ignored the effective role of religious and moral guidance, together with conscious following-up of their children, and left this

The general concern with regards to the religious aspect does not prevent us from saying that the problem of today's youth generation is the lack of sound religious education, as well as bewilderment between original religious affiliation and the developments of the knowledge societies

The upbringing process and its mechanisms in any society are considered the means by which the future generation develops a social self-esteem and turns them from mere biological beings into social beings capable of participating in new life situations which require constant interaction

role to the freedom of media consumption with its differing ideas and religious trends (Mariam Ayat Ahmed, background paper for the report).

The conclusion is that “Moroccan society’s relationship with religion is not immune from international impact, the increasing forms of universal extremism, as well as the effect of the free religious product market which includes books, audio tapes, websites and television programmes. Therefore, Moroccan religious policy and reference to religious tradition are no longer concerned only with the religious structuring of citizens. However, religion is being restructured and this is evident in the different concepts which are formed by certain interpretations of Islam” (The Possible Morocco, Fiftieth Anniversary Report, 2006). Interest in religious structuring is also clear in the meetings and training forums held occasionally by the Ministry of Endowments and Islamic Affairs with the purpose of increasing understanding and awareness of religious culture.

SOCIAL CULTURE

The upbringing process and its mechanisms in any society are considered the means by which the future generation develops a social self-esteem and turns them from mere biological beings into social beings capable of participating in new life situations which require constant interaction. This enables them to be active participants in a society which cooperates with its members and conforms to its standards. This is done through the components of social culture which are common among upbringing institutions that seek to develop such components in the future generation. This requires questioning the cultural roles of upbringing institutions and their agencies in Moroccan society to understand whether or not the culture they produce helps develop the future generation’s personality in a way that prepares them to positively integrate into the knowledge society.

Undoubtedly, human beings’ personalities are the product of interaction between their biological structures and the different cultural effects of diverse cultural upbringing institutions. These include formal institutions, such as the family and school, or informal institutions, such as the media, peers, religious establishments, political organisations and cultural clubs, among other large institutions in today’s world. Despite the apparent scarcity of field research in this area, and taking into account Morocco’s social, cultural and linguistic complexities, the thorough researcher cannot overlook the significant role these different social institutions play in forming the future generation’s personality and determining its features either on the individual or group level. This has led some researchers to talk about the distinguished Moroccan personality with its definite cultural, linguistic and religious identity.

SCHOOL CULTURE

School culture can be regarded as a system of values, standards, beliefs, principles and practices which are established through time as a result of the interaction of the school community, including the administration, teachers and students in order to solve the problems and challenges facing them. This system consists of expectations and values that shape the way people think, and their feelings and behaviours in school. Such effects form the school’s internal environment and make it an integrated unit with its objectives, structure, curricula, and educational system, as well as distinct programmes and activities. School culture also involves the beliefs of teachers, students and administrators who represent models of values, beliefs and traditions established through school’s history.

School culture is influenced by the general culture of society and an educational philosophy which originates from its educational objectives, as well as the goals defined by the authorities

concerned with the school's education and training issues. As previously indicated, the National Charter of Education and Training has determined the content and objectives of school culture in Moroccan society.

School culture is important because it is associated with the students' activities in terms of academic attainment, achievements, and teamwork, in addition to the democratic interaction between teachers and students and between administrators and teachers. A viable and stable school culture reflects on the achievements and motivation of teachers and students. School culture which Moroccan schools seek to instil into students' minds, according to the educational and training system, originates from school life, which is a microcosm of social life. This culture is concerned with the full upbringing of students through various interactive activities which are supervised by teaching staff and the administration and supported by different societal partners. According to this system, school life can be defined as the life students spend at school for the purpose of their education through the programmed religious, educational and training activities which take into account the knowledge, emotional and motor sensor aspects of the students' personalities. In this regard, active and effective participation of all stakeholders is needed (students, teachers, the administration, educational guidance groups, parents and institutional partners), (The Ministry of National Education, Higher Education, Professional Training and Scientific Research, 2008C).

CULTURE OF CIVIL SOCIETY ORGANISATIONS AND ASSOCIATIONS

The concept of civil society involves individuals as well as informal institutions which serve as active elements in most fields of education, economy, family, health, culture, charity and others. It is an

interwoven fabric of relations between society's members on the one hand and the state on the other. The cultural roles undertaken by civil society organisations and associations in developing countries, like Moroccan society, include adopting and promoting the principles of democracy and human rights. However, such roles cannot be performed unless the state establishes independent and just civil laws and institution-based governance regimes, in addition to true political pluralism and sound mechanisms of power transfer. These will help the sector grow and flourish given the freedom which will reflect its growth and development.

Promoting the society's culture and strengthening its foundation is not limited to the efforts of the state and its formal channels. This role is also performed by civil society organisations and associations which believe that public issues are not only confined to the state, but that they are also responsible for providing different, ready solutions to societal problems. They also believe that all parties should participate in social development. The development and modernisation of Moroccan society requires the engagement of civil society organisations in spreading the value of initiative, as well as consolidating the concept of cooperation and independence instead of relying on the government.

Morocco has an estimated 30,000 civil society associations and organisations. The foundation of these associations is regulated by Law No. 1.58.376, issued on 15 November, 1958, which was amended by Law No. 75.00.³¹ Over the past two decades, the number of associations has grown substantially. These associations undertake cultural development work and activities and contribute, along with the state's efforts, to eliminating illiteracy, informal education, and empowering women and enhancing their skills, in addition to organising cultural awareness activities. The NIHD has had a great effect on activating and developing the social work undertaken by civil societies

The concept of civil society involves individuals as well as informal institutions which serve as active elements in most fields of education, economy, family, health, culture, charity and others. It is an interwoven fabric of relations between society's members on the one hand and the state on the other

to defend against different aspects of marginalisation and exclusion of some social categories, especially women and children.

- Civil Organisations and NGOs shall be founded and practice their rights freely, within the framework of respect for the Constitution and Laws.
- These societies and organisations can't be dissolved or detained by general authorities, unless by a judicial decision”.

The Moroccan Constitution, Chapter 12, 2011

There is a strong need for a culture which encourages development and not stagnation, so that young people can make use of science and technology while adhering to appropriate morals and values

The civil societies' efforts are not limited to the above mentioned cultural side. It has also implemented development projects in areas that suffer from a lack of electricity and potable water and medical services, supported by governmental sectors, international organisations, and donations and aid from Moroccan communities abroad. It is to be noted that such communities have had a remarkable role in development in recent years. They have helped strengthen the social fabric in many Moroccan regions and established partnerships and developmental projects with overseas institutions and groups. Thus, some Moroccan communities have gained support and cooperation from identical overseas communities established by Moroccan immigrants in several European countries, especially Spain, France and Belgium. Therefore, Moroccan communities abroad are not just a source of finance (their financial contributions represent 20% of the sources of hard currency for the public treasury, according to the Federal Union of Moroccan Workers and Traders abroad), but they also play an active role in realising social development by focusing their efforts on transnational networking in order to make use of institutional mechanisms based on partnerships and strategies. In addition to the financial support offered to communities by Moroccan communities abroad, they also play an important role in parallel transfers, such as the transfer of

knowledge, experience and skills to their homeland.³²

CONCLUSION

We cannot deny that there is a crisis in the dominant culture of Moroccan society within its institutions and structures, starting with differing models of familial culture. The first model adheres to long standing traditions and resistance to modernity, while the second adopts western culture to the extent of alienation. School culture also swings between tradition and modernity in content as well as in curricula and educational methods. Moreover, the media lacks original and distinguished cultural material, due to the absence of production methods of knowledge and the negligence of its role in today's world. Additionally, language is suffering from a crisis and its utilisation faces problems. Language is the vessel for culture and its primary tool. It is also a natural approach to cultural development and a catalyst for developmental trends. This requires developing language in order to understand changes along with defining language options relating to the Arab and Islamic cultural identity under the conflict of economic interests and a clash of civilisations.

The concepts and definitions of culture vary according to its various institutions and channels. However, culture can generally be defined as “the accumulated knowledge and a depository of a society's values, customs, rules and prevalent concepts which affect all society members, the educated and ignorant, the elderly and children, and men and women by different degrees according to their level of understanding. Therefore, culture plays a prominent role in determining an individual's behaviour, reactions and ways of thinking (the Arab League Educational, Cultural and Scientific Organisation -ALECSO, 2005). It is necessary to establish a comprehensive cultural strategy which aims at the overall development

of Moroccan society, especially the future generation who have a greater ability for absorbing culture. This will not be achieved unless conscious and purposeful plans and programmes are set up and roles are rationally distributed within the family, school and media with a special focus on the culture that helps develop a normal, integrated and creative personality. There is a strong need for a culture which encourages development and not stagnation, so that young people can make use of science and technology while adhering to appropriate morals and values. This entails reconsidering education systems as well as media messages and content, and keeping pace with global changes. This also requires preparing the future generation in a way that allows them to achieve independence and enhances their ability for innovation and self-development. They should be provided with the facilities that enable them to benefit from the knowledge revolution and steadily growing technology to meet the knowledge society's requirements.



ENABLING ENVIRONMENTS AFFECTING THE PREPARATION OF THE FUTURE GENERATION FOR THE KNOWLEDGE SOCIETY

Enabling human beings means enhancing their ability for constructive work and positive change in themselves as well as their surrounding environment. Therefore, enabling is linked with human development which depends on “giving people more freedom to help them live a long life of health and innovation, seek to realise their desired goals and take part in defining developmental tracks on the basis of justice and sustainability for the planet” (UNDP, 2010). How far do the enabling environments in Morocco create an enabling climate for the next generation?

POLITICAL FREEDOMS

Since the 1990s, Morocco has entered a stage of political openness through constitutional amendments in 1992 and 1996, and the subsequent installation of the so-called ‘Alternation Government’.³³ This stage was described as a ‘democratic transition’, in which a number of reforms were made with the strategic aim of moving from an authoritative political system which clashes with political parties to a system which seeks to integrate into a modern democratic project (Al Hassan Bou Kentar, background paper for the report).

The Moroccan constitution seeks to establish a state based on political democracy according to the principle of social justice. In addition, the supreme authority of the state expressed its determination to leave the past behind. To this end, the Equity and Reconciliation Commission was established on December 15th, 2003, at the

recommendation of the Advisory Council on Human Rights, and it was approved by the king. This required making constitutional and legislative amendments which state the dominance of the International Human Rights Law over domestic laws, as well as the right to a fair trial (Previous Source).

In any case, Morocco still lives in a stage of political transition, which like all transitional stages, has its ups and downs. However, Morocco, which has international commitments and which has integrated into a modern democratic project, can no longer be allowed to relapse. Morocco has no option but to promote democracy to develop a state of rights and laws whose governance depends on the power of law and institutions.

Following the events witnessed by the Arab world, Morocco has managed to enhance its democratic gains by declaring constitutional reform which responds to the requirements of political development, answers all the questions of national and progressive forces and aims to modernise the state’s structures.³⁴ The constitution will be revised in order to motivate the process of comprehensive reform. For this purpose, the king has installed an ad-hoc committee to listen to and consult with parties, syndicates, youth organisations, social workers and qualified intellectuals.³⁵ The reform is based on the following fundamental issues:

Dedicating the constitution to the diversity of the unified Moroccan identity, strengthening the rights and institutions, giving more individual and political freedom

The Moroccan constitution seeks to establish a state based on political democracy according to the principle of social justice. In addition, the supreme authority of the state expressed its determination to leave the past behind

and guaranteeing its practice, in addition to promoting the human rights system, making the judiciary an independent authority, promoting the principle of separation and balance of powers, enhancing institutional democracy, modernisation and rationalism, and constitutionalising good governance of institutions.³⁶

FREEDOM OF OPINION AND EXPRESSION

The freedom of the press has been recognised in Morocco since the Press Code was enacted in 1958. Despite the state's interference in restructuring the media sector, the printed press has accompanied the political scene as multiple forces and therefore it expressed multiplicity and contributed to informing readers about public issues. Since its independence, Morocco has not seen an informative speech on one political trend. "The media has gained substantial freedom and become a guiding force for the authority and the parties needed for democratic transition" (The Possible Morocco, Fiftieth Anniversary Report, 2006).

The media scene in Morocco has been widened by the establishment of six television channels, with some specialising in sports, education and religion. In addition, a new channel was founded to broadcast programmes in Amazigh. As for regional radio stations, nearly every city has its own station. The media landscape was boosted by the establishment of an independent specialised entity, the High Authority of Audio-visual Communication (Previous Source).

"The media has gained substantial freedom and become a guiding force for the authority and the parties needed for democratic transition"

ECONOMIC FREEDOMS

On the economic level, Morocco undertook several reforms between 1993 and 2005 to liberalise the economy and open it up to international trade. This was done through entering into free trade exchange agreements with the EU, the USA and some Arab countries. Morocco also carried out banking and collection reforms, and formulated new laws for anonymous major companies. Moreover, the Hassan II Fund for Economic and Social Development was a public tool which allocated a share of privatisation proceeds for setting up projects that provide job opportunities and develop the national economy. The fund has become a major player in the country's development. The total investments in such programmes are estimated at MAD 150 billion, and they have created 450,000 job opportunities.³⁷ The fund serves as a catalyst for the national economy, directing public and private partners towards its projects, thereby increasing the volume of investments (The Possible Morocco, Fiftieth Anniversary Report, 2006). Additionally, Morocco has started a free trade exchange with Europe, according to an agreement concluded in 1996 which has placed it in an "advanced position" with Europe. Morocco also ratified a free trade agreement with the US, as well as some Mediterranean countries such as Turkey and Egypt, together with other countries such as the UAE and Jordan.

Economic liberalisation, as well as the different incentives adopted by the country, has led to the emergence of a national industry on the regional level

TABLE 3-4-1

Fluctuations in economic growth

Growth rate (%)	Years
2.9%	1960- 1966
5.7%	1967-1974
2.7%	1988 -1995
4%	1996 -2003

Source: The Possible Morocco, Fiftieth Anniversary Report, 2006

which formed organising groups for Moroccan economic life.³⁸ Despite this, economic growth in Morocco has not seen much stability over the last half century, as indicated in the following figures (table 3-4-1).

ACCOUNTABILITY AND RESPONSIBILITY

In the early decades following independence, public planning and policy did not involve a systematic method for assessment and accountability. This did not help direct reform in different sectors. Several unproductive educational reforms may have been reoriented and re-established, if they had been assessed in time. Therefore, citizens who follow events feel that there is neither follow-up nor accountability. “Since independence, citizens have never felt that they have a social contract with the administration. If they have duties as citizens, they also have rights which include demanding public officials be called to account” (The Possible Morocco, Fiftieth Anniversary Report, 2006).

RATIONAL PLANNING AND MANAGEMENT THROUGH GOOD GOVERNANCE

The realisation of human development is conditioned by political contexts and practices, the limits of freedom, the belief in democratic principles and their practice, as well as public planning. Rational local and public planning under the rule of law requires adopting good governance, as well as the values of modernity and democracy. Morocco entered into several international agreements, and this necessitated making several reforms on different levels as well as activating mechanisms to eliminate bribery, corruption and social class differences. It also required formulating a policy based on modern planning and good governance in addition to adopting control and accountability. These will be implemented by Moroccan institutions,

such as the parliament, Council of Advisors and the Supreme Audit Council.

THE REALITY OF POLITICAL REFORM AND ITS MANIFESTATIONS; ASPECTS OF TRANSPARENCY AND GOOD GOVERNANCE

Human development cannot be realised unless there is a climate which provides the necessary enabling environment in order to grow and flourish. Undoubtedly, freedom and democracy release the potential of a society’s members who are the tools and products of development. Political orientation is responsible for the exercise of power in society, and its decisions are binding upon all society’s members and organisations. Integration into the knowledge society requires political, economic and cultural modernisation in order to define the major options and strategies which can build the society’s structures according to a clear and purposeful vision.

Thus, human development does not only entail fighting poverty and eliminating instability, or reducing social and economic differences and empowering women both socially and culturally, but also needs, above all, a political framework which defines the features and trends of social infrastructures.

Morocco has a royal, constitutional, democratic and social ruling system,³⁹ and the Moroccan constitution guarantees many basic freedoms in its chapters.⁴⁰ In 1990, the Advisory Council on Human Rights was founded and some modifications were introduced in 2002. This council has played an important role in investigating human rights violations, as well as making legislative reforms “for fair trials which guarantee the integrity of procedures to the interest of litigants. Its role further involves advising public authorities to enter into international agreements, in addition to training employees and educating people on human rights” (The

Human development does not only entail fighting poverty and eliminating instability, or reducing social and economic differences and empowering women both socially and culturally, but also needs, above all, a political framework which defines the features and trends of social infrastructures

The Moroccan governance system managed to guarantee and secure order and stability, but it still has a low ability as regards to making changes and adapting to transformations

Possible Morocco, Fiftieth Anniversary Report, 2006). In this context, Morocco also established a human rights ministry in 1993 which undertook many tasks in this regard. During the period 1999-2003, an arbitration and compensation committee was formed, assigned to process the complaints of victims of human rights violations.

In the field of decentralisation and regionalisation, Morocco undertook several experiments, most of which recorded no success. This drove the state's supreme authority to set up a national advisory committee for broad regionalisation.⁴¹

These different reforms were accompanied by attempts to restructure the political field through a new concept of authority, adopt true political pluralism which allows all actors to perform their role and at the same time keep the administration away from the interactions of other actors, especially political parties. In spite of the efforts made for good governance, some analysts believe that Morocco has not yet reached a high level of public responsibility and that it is still

fragile: The Moroccan governance system managed to guarantee and secure order and stability, but it still has a low ability as regards to making changes and adapting to transformations (Al Hassan Bou Kentar, background paper for the report). This has reflected negatively on several domains, especially the education and training field which has not achieved the required reform. This has led the country now to mobilise all its efforts to fill the gap in this field and focus on education and training to prepare the future generation for developing the country. The country regards education as the head of all national priorities after the territorial integrity issue.

REALITY OF ECONOMIC DEVELOPMENT AND ITS IMPACT ON ENABLING AND REFORM PLANS

Although the availability of economic capabilities and filling vital deficits are the prerequisites of human development, this aspect is not mechanical or one-sided. There are other factors, especially human

TABLE 3-4-2

Economic indices		
Economic indices	Value	Reference year
Gross Domestic Product (GDP) per capita (in USD)	1,099 2,811	1990 2009
Annual growth rate of GDP per capita %	1.1 3.6	1990-1999 2000-2009
Annual growth rate of final consumption %	2.4 4.5	1990-1999 2000-2009
Annual growth rate of consumption per capita %	0.7 3.8	1990-1999 2000-2009
Annual growth rate of available gross national income (GNI) (at current prices) %	6.5 6.5	1990-1999 2000-2009
Annual change of cost of living index (%)	4.5 1.9	1990-1999 2000-2009
Investment rate (% of GDP)	22.1 29.4	1990-1999 2000-2009
Total balance of treasury (% of GDP)	-2.7 -2.5	1990-1999 2000-2009

Source: Ministry of Health and HCP, 2009.

capital, which are considered the principal engine of development and production.

Since the 1960s, the Moroccan economy has seen stages of growth during which it alternates between uptrends and downtrends based on agriculture and the situation of the public sector which affects its movement either positively or negatively. This unstable situation did not help realise human development “especially in terms of its feature of inequality and the weak investments in important social sectors, such as education and health (Al Hassan Bou Kentar, background paper for the report). This led structural planning policy in Morocco to enliven the economic sector in order to serve its development goals for modernising the economy and reducing social divides. This is reflected in the economic development indices in the ‘Millennium Development Goals Report’ for 2009 (HCP, 2009), which stressed the qualitative change from the past two decades.

The figures in table 3-4-2 reflect modest economic growth. Over the past ten years the Moroccan authorities reconsidered their calculations to adopt new policies and plans, and economic planning moved to a policy of privatisation which helped many sectors see substantial growth. The telecommunications sector has generated wealth and contributed 6% to the state’s budget (Al Hassan Bou Kentar, background paper for the report).

Moroccan authorities transformed their function to become a guide and leader of several sectors through a strategic plan. This helped achieve industrial development through a number of off-shoring jobs which output meet the international market’s needs. In agriculture, the ‘Green Plan’ which pertains to farming and food, was introduced. This plan ensures food security in good conditions as well as environmental conservation. In tourism, the aim was to attract 10 million tourists in 2012. In addition, adopting new technology, especially digital technology, was also taken into account. For this

purpose, a special programme, the ‘Digital Programme’ was set up in order to develop and disseminate technology. These distinct measures have contributed to improving some indices. Comparing the last two decades shows that the average economic growth went up from 2.2% to 4.4%. This growth rate, without the primary sector, moved from 0.3% to 8.4%. Moreover, domestic demand increased by an annual average of 1.5% instead of 4.2%. Additionally, the total investment rate moved from 8.24% to 6.32% in 2009. The unemployment rate decreased from 13.8% in 1999, to 9.1 % in 2009. Household consumption expenditures grew by 4.3% as an annual average. Furthermore, the household purchasing power recorded an annual increase of 2.4%, as the income per capita increased by 3.4% annually and consumption prices grew by 9.1% (HCP, 2009).

Although such results are modest, they helped set up numerous projects in social and educational fields. This will certainly have a positive effect on preparing the future generation and providing them with an enabling environment.

REALITY OF SOCIAL DEVELOPMENT AND ITS IMPACT ON THE POPULATION

The goal of economic and strategic planning is to achieve development, contribute to improving the lives of citizens and guaranteeing them social justice and equal opportunities. This raises the issue of social justice which is at the core of every human development process. In the past, policies lacked a comprehensive vision to secure social justice on all levels. This led to social instability with many aspects of social injustice whether at the territorial or gender level, or on the citizen’s involvement in overall economic development. Realisation of this fact was one of the most important advantages of the modern era, and a number of

The goal of economic and strategic planning is to achieve development, contribute to improving the lives of citizens and guaranteeing them social justice and equal opportunities

About 20 primary public health programmes contributed to improving the health indicators, especially the National Immunisation Programme (NIP) whose national coverage rate is now 90%

projects were carried out to limit social injustice and improve Morocco's position in the development index. The average income per capita does not exceed USD 2,827 annually. This is emphasised by the Human Development Index which ranked Morocco 126th among countries of moderate growth (UNDP, 2008). The Fiftieth Anniversary Report (The Possible Morocco, Fiftieth Anniversary, 2006) reached the same conclusion as it saw that the efforts and achievements made were not commensurate with the demographic transformations in a country whose population increased three-fold. In 2005, development initiatives were accelerated. Such initiatives included programmes of educational reform, compulsory medical insurance and retirement system reform. They further involved social housing projects and eliminating shanty-towns programmes, in addition to employment activation programmes as well as the NIHD.

Despite the improved human development indices of Morocco (which ranked 114 in 2010, according to the 'UNDP Human Development Report 2010'), and the funds allocated for the social sector in the state's budgets, the achievements were apparently insufficient.

The NIHD (National Initiative for Human Development), which aims to fuel efforts to raise development levels, reflects a method, thought and comprehensive practice. This initiative helped show the large insufficiencies in vital fields. Its overall vision is to modernise and develop different areas suffering from poverty and underdevelopment. The new development policy sought to eradicate all forms of poverty and illiteracy together with all social diseases. The NIHD helped construct many housing units to accommodate the shanty-towns population, in addition to several social, educational and health institutions. Again, this initiative resulted in some 16,000 projects which have benefited nearly 4 million people across Morocco.⁴² However, these positive efforts which

targeted the underprivileged and social sectors at risk did not increase the quality of life for Moroccan families that allocate the majority of their incomes to their basic needs. According to the qualitative indices published by HCP, Moroccan families allocate 46.1% of consumption expenditures to food and clothing, 25% to accommodation and 28% to health, transportation, education, culture and entertainment. This is considered a low percentage compared with the needs necessary for achieving citizens' empowerment and welfare.

THE STATUS OF HEALTH (INDICES AND THEIR RELATION WITH THE SITUATION OF THE FUTURE GENERATION)

The Moroccan health sector has greatly improved compared with the post-independence period. Public expenditures in the health sector rose from 0.9% of GDP in 1990, to 1.3% in 2009 (HCP, 2009). Morocco has generally achieved good progress in the domain of health, with life expectancy at birth increasing from 65.5 years in 1988 to 72.9 years in 2009 (HCP, 2010).

Despite the intensive efforts made in this sector, it is still suffering from deficiencies as well as the inability to reduce social and other disparities in accessing health services. After independence, rural communities were not focused upon and were only provided with primary health services in the 1990s.

Today, Morocco has more than 2,460 primary institutions treatment institutions compared with 394 in 1960. The number of physicians and other medical workers increased to 13,955 and 27,644 respectively in 2002. The rate of physicians per person was one physician per 12,120 people in 1967, one per 2,933 people in 1994 and one per 1,611 people in 2008 (Ministry of Health and HCP, 2009).

TABLE 3-4-3

Health and demographic indices

Indices	Value	Reference year
Investment rate (% of GDP)/ general health expenditures	0.9	1990
	1.3	2009
Average annual population growth rate %	1.75	1994
	1.1	2009
Life expectancy at birth (years)	72.9	2009
	65.5	1998
Fertility indicator (number of children per woman)	3.28	1994
	(+) 2.36	2009
Infant mortality rate (per 1,000 live births)	57	1991-1987
	32.2 (+)	2009 -2008
Number of people per physician	2,933	1994
	1,611	2008

Source: Ministry of Health and HCP, 2009.

About 20 primary public health programmes contributed to improving the health indicators, especially the National Immunisation Programme (NIP) whose national coverage rate is now 90% (The Possible Morocco, Fiftieth Anniversary Report, 2006). The child mortality rate decreased from 57 in the period between 1987 and 1991 to 32.2 between 2008 and 2009. The maternal mortality rate declined from 332 in the period between 1985 and 1991 to 132 between 2004 and 2009 (HCP, 2009).

Morocco was the first country in the region affiliated with the Eastern Mediterranean Regional Office to be certified for the elimination of tetanus among infants. In 2008, NIP managed to reach a coverage rate of 96% for the BCG vaccine, 94% for the measles vaccine and 94% for hepatitis vaccine. In the same manner, women were immunised thereby protecting 90% of new births. Furthermore, the Programme for Combating Diarrheal Diseases, as well as the National Programme for Fighting Malnutrition Diseases reduced the infant mortality rate to a great extent (HCP, 2009).

These health measures have affected the life of the future generation and helped them live in improved health conditions. Table 3-4-3 indicates some health indices.

THE MOST SIGNIFICANT DEVELOPMENTAL CHALLENGES IN MOROCCO AND ITS POSITION IN TERMS OF ACHIEVING THE MILLENNIUM DEVELOPMENT GOALS AND THE WORLD FIT FOR CHILDREN GOALS

It is not easy to define the developmental challenges in Moroccan society due to the number of factors involved and complicated elements. However, an observer cannot deny the many reform projects which Morocco has initiated since the beginning of the millennium in order to overcome the obstacles which impede its development on political, economic, social, cultural and democratic levels. Thus, the goal of such reform projects is overcoming challenges, establishing large-scale projects, and renewing and updating social projects to achieve human development which is aspired to by any society suffering from the effects of colonisation. If we return to the achievements of Morocco since its independence to understand its rich history, vital culture, diverse identities and varied human capabilities, we will notice transformations and accomplishments in all fields. But, if we measure its general position according to new general international conditions, or if we compare its level with

If we return to the achievements of Morocco since its independence to understand its rich history, vital culture, diverse identities and varied human capabilities, we will notice transformations and accomplishments in all fields

that reached by some countries which have the same or almost the same capabilities, it can be said that its rhythm of action in the past has not met society's aspirations. This is attributed to complicated factors full of contradictions which have hindered Morocco's use of appropriate methods. Such factors accumulated deficiencies and deficits which now require even more effort to bridge the gaps which impede the desired human development.

Despite these difficulties, Morocco could overcome many of its challenges, starting with profound economic transformation to a change in family structure. The new legislative framework which regulates families has played a significant role in changing the status of women, as well as the family's way of life. Since 2004, the Moroccan family has had a new "code which sets forth equal rights and duties for married couples and protects children" (The Possible Morocco, Fiftieth Anniversary Report, 2006). There also emerged new channels of expression, i.e. many communities now comprise local activists from youth and women's movements.

In 1998, Morocco underwent political change which gave rise to many reforms in the law, the press and the Public Freedom Law, in addition to harmonising national laws with the requirements of international agreements on human rights, the status of women and childhood protection. Morocco has had a national childhood plan called 'Inkaz' which extends to 2015. This is a national programme which aims at combating the phenomenon of child labour, especially the employment of young girls as housemaids. Several procedures were also taken to counter this phenomenon by activating the requirements of the national action plan 'Morocco Deserves its Children'. Figures show that the number of child labourers was 600,000 in 1999, but it has dropped to 170,000, i.e. 3.4% of the children aged 7-15 according to the HCP's latest data. However, this figure should decrease

further given the programmes launched to mainstream children's education and keep them in the educational system until the end of the compulsory schooling period (The Possible Morocco, Fiftieth Anniversary Report, 2006).

HCP stated in the national report of 2009, around the objectives of the Millennium Development Goals that Morocco is too close to approaching year 2015. It is noted that Morocco has managed to make significant achievements in the field of human development. The comparison of the past two decades reveals that the growth rate rose from 2.2% to 4.4%. The unemployment rate also declined from 13.8% in 1999, to 9.1% in 2009. Household final consumption expenditures increased by an annual average of 4.3% and 5.6% as of 2003 and household purchasing power recorded an annual increase of 2.4%, since the income per capita increased by an annual rate of 4.3%, and consumption prices grew by 1.9%. The report added that the provision of basic services to the population was moving fast. Electricity and water services are more common in urban communities, while their coverage rate in rural communities rose from 9.7% in 1994, to 83.9% in 2009 for electricity, and from 14% to 90% for potable water. In education, various schooling rates witnessed continuous improvement, due to efforts to make school more available, as well as various support procedures for keeping learners within the schooling system.

Enrolment rates of various age categories during the year 2010/2011 achieved the following results at the national level:

- 97.5% for the (6-11) age category children in general, 96.3% for females against 87.9% and 85.2% respectively in 2004-2005;
- 79.1% for the (12-14) age category children in general and 73.5% for females against 68.2% and 61.9% respectively in 2004-2005;
- 52.8% for the (15-17) age category children in general, and 48.2% for

Despite these difficulties, Morocco could overcome many of its challenges, starting with profound economic transformation to a change in family structure

TABLE 3-4-4

Development of Internal Output Indices

Educational Stage	Repetition rates		Average rates of School drop-out		Study completion rates in educational stages	
	Registered rate	Difference between the two academic years	Registered rate	Difference between the two academic years	Registered rate	Difference between the two academic years
Primary Education	12.3%	-0.3 points	4.6%	-0.8 points	76%	3 points
Secondary Preparatory Education	15.2%	-1.2 points	13.1%	-0.3	52%	4 points
Secondary Vocational Education	19.2%	+1.7 points	14.1%	-0.4 points	26%	2 points

Source: The Ministry of National Education, Higher Education, Professional Training and Scientific Research

females against 45% and 39.9% respectively in 2004-2005.

- In rural areas, the percentage of schooling for the (6-11) age category children reached 95.4% in general, and 93.6% for females against 82.8% and 77.8% respectively in 2004-2005; and 59.1% for the (12-14) age category children in general, and 49.6% for females against 49.3% and 39.3% respectively in 2004-2005; and 22.3% for the (15-17) age category children in general, and 14.9% for females against 17.6% and 11.3% respectively in 2004-2005. The net enrolment rate of children aged 6-11 years increased from 52.4% to 97.5% at the national level in 2010/2011.⁴³

The Emergency Programme approved by the government in this field is intended to reduce the school drop-out rate and improve access in pre-school education, thereby helping decrease the illiteracy rate especially in the rural community and consequently developing human resources.

The drop-out rate also relatively

decreased though not to aspirations. This is attributed to weak interest of children in schooling in rural areas and especially for girls, due to economical and social reasons, and as well as far schools in some cases. Study completion rate in the three educational stages significantly improved in the last 2 academic years, as it reached respectively 76%, 52% and 26%, i.e. 2% in the vocational secondary education, 3% in the primary education and 4% in the preparatory and secondary education.

The table (3-4-4) shows development of educational output indices:

The number of crowded classes in secondary preparatory education witnessed significant decrease by 6.8 points during the two academic years 2007-2008 and 2008-2009, while the number of crowded classes in elementary and vocational secondary education witnessed a slight increase by 0.2 points in elementary education and 0.3 points which requires exerting more efforts for introducing new facilities and extensions. Table (3-4-5) shows that.

The educational framework for students

Generally, study completion rate in the three educational stages significantly improved in the last 2 academic years

TABLE 3-4-5

Crowdedness rate

Educational stage	2007-2008	2008-2009	Difference between the 2 years
Primary Education	7.1%	7.3%	+ 0.2
Secondary preparatory education	23.4%	16.6%	-6.8
Vocational secondary education	18.7%	19 %	+ 0.3

Source: The Ministry of National Education, Higher Education, Professional Training and Scientific Research

also witnessed a kind of stability, as the rate of students per teacher reached between 20 students in vocational secondary education, 25 students in secondary preparatory education and 27 students in primary education.

However, the administrative framework for students inside institutional education is not up to the required level, the rate of students per each administrative employee reached 260 students in primary education, 104 students in secondary elementary education and 65 students in the vocational secondary education. The report indicates that all social categories got benefit variably from general improvement of income available for families, the relative poverty rate changed from 16.3% in 1998 to 8.8% in 2008. Morocco, for the first time in this decade, achieved the development goal in the interest of the poor and stability of total level of social class differences. The national report, “The Millennium Development Goals 2009”, assures that, according to the pace of such achievements and the projection based assessment method approved by UNDP, Morocco will manage to realise the Millennium Development Goals by 2015.⁴⁴

CONCLUSION

The previous data shows the current status of development in Moroccan society, and makes it clear that Morocco has ambitions to effectively integrate into the knowledge society. To this end, it has made education, training, governance, health services and the economy the basic pillars and mechanisms for achieving progress and development. If this is the case, how successful have Morocco’s efforts been in preparing the future generation for the knowledge society? To what extent has it managed to provide them with the appropriate enabling environments? The field survey results in the next chapter will address these questions.



ASSESSMENT OF THE READINESS OF THE MOROCCAN YOUTH TO PARTICIPATE IN THE KNOWLEDGE SOCIETY: FIELD SURVEY RESULTS

INTRODUCTION

This chapter outlines the methods and results of field surveys which aim at measuring the skills and values of the youth, represented in the study sample, and to explore their surrounding enabling environments in order to ascertain whether or not they possess the required skills to effectively participate in the knowledge society. In addition, the chapter presents the opinions of a sample of the students' teachers regarding their professional conditions and the extent to which these conditions support or obstruct their educational duties. The chapter further tackles the findings of a workshop attended by intellectuals and decision-makers, with the aim of exploring their views about the most important skills and values of the future generation.

MOROCCAN FIELD STUDY SAMPLES

In accordance with the objectives of this report, which explore the opinions of students, teachers and their surrounding environments, the focus is on three societal categories. The first category is comprised of students, representing the central sample. The second category is comprised of teachers from the sample students' schools, and the third category is comprised of experts, academics and decision-makers concerned with the education sector.

RANDOM SAMPLE OF STUDENTS

In line with the general methodology used with all other country case studies (chapter 5 of the general report), the stratified sample was drawn randomly from twelfth grade students in the schools of the capital Rabat. The characteristic of the sample was as follows:

The sample was selected according to approved data sent by the National Centre for Assessment and Examinations. This data shows the number of students and their specialist subjects. The data included 38 secondary schools, 11 specialist subjects and 9,011 students. The study was limited to Moroccan students only.

The study was also confined to twelfth grade students in the schools of the capital Rabat for methodological purposes.

The random sample included twelfth grade students from public and private schools, but did not involve students who are subject to an educational system which differs from the public education system.

The sample covered all educational streams in Morocco.

SAMPLE DESCRIPTION

The sample covered 28 secondary schools in the city of Rabat (see the appendix for school names). The number of randomly

In accordance with the general methods of the report's field studies, which are based on exploring the opinions of students, teachers and their surrounding environments, the focus is on three societal categories

sampled students reached 1,574 (725 male and 849 female students) from all educational streams.

The field study was conducted on November 10th and 11th, 2010, under the supervision of, but without direct interference of, the National Centre for Assessment and Examinations.

SAMPLE OF TEACHERS

A random sample was drawn from the teachers of the sample students working in the same schools, and included all educational streams. The total number of teachers in the sample was 147.

EXPERTS AND DECISION-MAKERS

A brainstorming workshop was held on November 30th, 2010. The workshop was attended by a select group of experts, intellectuals and decision-makers with the aim of polling their opinions on relevant issues. The workshop was comprised of some 45 experts belonging to different areas of science and knowledge from both the public and private sectors. The aim of the workshop was to gauge their views on the most significant issues related to the preparation of the future generation for effective participation in the knowledge society. They were also required to identify the obstacles which, in their opinion, hinder this pursuit, and recommend ways to overcome them (a list of the names of workshop participants is included).

Due to the pilot nature of the case studies, cognitive, conative and social skills were measured in order to gauge the students' skill levels and their ability to access the knowledge society

RESULTS OF THE FIELD STUDY

SKILLS

Due to the pilot nature of the case studies, cognitive, conative and social skills were measured in order to gauge the students' skill levels and their ability to access the knowledge society. As previously indicated in the fifth chapter of the general report, each skill consists of several sub-skills with a maximum of 25 points each; thus the student has to obtain an average of 12.5 points for any sub-skill. The cognitive skill was assessed through four sub-skills with an aggregate score of 100 points and students were required to obtain a minimum of 50 points to indicate skill acquisition. As for conative and social skills, they comprise three sub-skills each with an aggregate score of 75 points. Students needed to obtain a minimum of 37.5 points to indicate their possession of each skill.

COGNITIVE SKILLS

The skills of information research, written communication, problem solving and the use of technology were used as a pillar to cognitive skills. Below is a review and analysis of the aggregate and detailed results of these cognitive skills.

The data of table 3-5-1 reveals that the total level of the sample students' cognitive skills is still low and has not reached the minimum level required to access the knowledge society. The total arithmetic

TABLE 3-5-1

Results of aggregate cognitive skills (Total score values range from 0 to 100)

Average (Arithmetic mean) ⁴⁵			Standard deviation ⁴⁶		Standard deviation ⁴⁷	Lowest score	Highest score	Statistical differences between males and females*
Males	Females	Total	Males	Females				
36.37	36.30	36.33	10.78	10.94	10.86	0	71	No difference

* At significant level 0.05

mean of the sample students' scores did not exceed 36.33 points. This means that the average score of the respondents is about 13.67 points lower than the minimum required score (50 points), reflecting a gap between both averages. It should be noted that such low skill levels were a trend among both male and female sample students, who obtained approximate scores with no statistically significant differences. There was a large gap between the performance level and the average level. The standard deviation value (10.86) emphasises this general weakness in the cognitive skills, as it does not reflect great variation.

Results of detailed cognitive skills

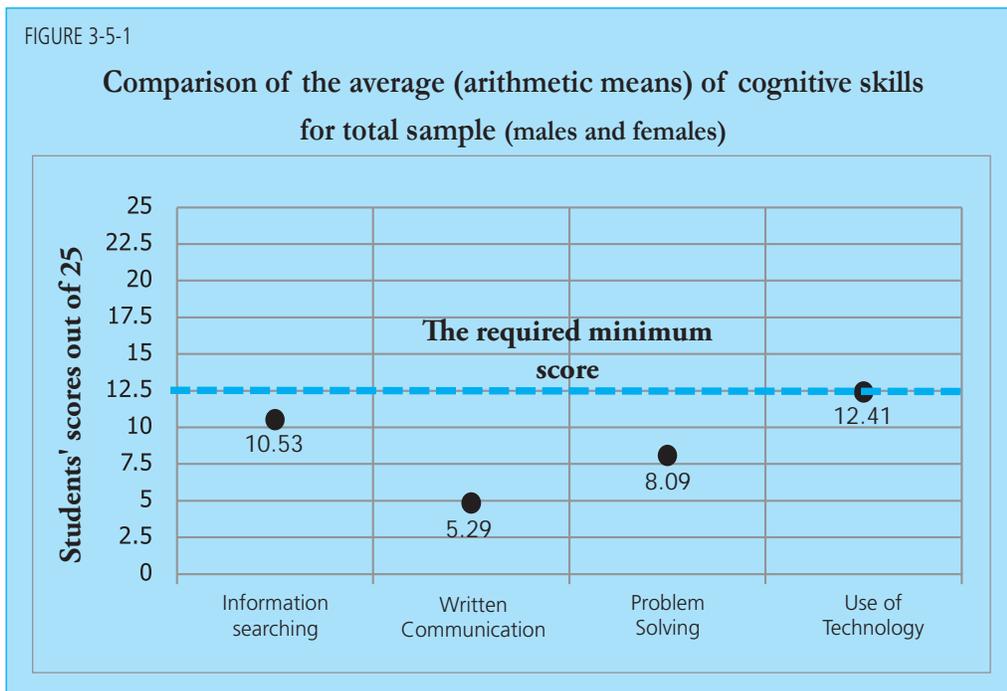
The comparison of the arithmetic mean of the cognitive skills shows statistically significant differences. Generally, students demonstrated low levels in all cognitive skills but to differing degrees. There are still fundamental differences in skill possession levels. Comparing the scores of the four skills shows that the written communication skill is the weakest, with an actual total arithmetic mean of 7.21 points, lower than the minimum required score to indicate such a skill has been acquired. Moreover, nearly a fifth of the

Students demonstrated low levels in all cognitive skills but to differing degrees

TABLE 3-5-2

Results of detailed cognitive skills
(Total score values range from 0 to 25)

	Average (Arithmetic mean)			Standard deviation		Standard deviation	Lowest score	Highest score	Statistical differences between males and females
	Males	Females	Total	Males	Females				
Information searching	10.42	10.95	10.53	3.59	3.28	3.58	0	19.05	Females scored higher than males
Written communication	4.44	6.022	5.29	4.61	4.9	4.84	0	25	Females scored higher than males
Problem solving	8.202	8	8.09	4.84	4.62	4.72	0	25	No difference
Use of technology	13.3	11.65	12.41	3.58	3.47	3.62	0	20.90	Males scored better than females



If we compare the results of males and females in the four skills, we notice statistically indicative differences in favour of females in the information research and written communication skills

questioned students (19.6%) scored zero in this skill. Large variation is also evident in the scores of the sample students, who recorded different levels in the written communication skill (poor to excellent). This explains the standard deviation value of 4.84, close to the total arithmetic mean.

Regarding the problem solving skill, this skill appears to not be possessed by the sample students. Their general performance level was nearly 4.5 points lower than the minimum required level. Only 8.4% of the respondents reached the minimum required score of 12.5 or above. However, the standard deviation value does show a relative difference between the sample students' results.

The information research skill recorded an arithmetic mean of 10.53 points, about two points lower than the minimum required score (12.5). This placed it second in the cognitive skills of the respondents. However, this does not negate the fact that there is an overall weakness in this skill. This is emphasised by the standard deviation value which does not reflect

much dispersion in the students' scores.

As for skills in the use of technology, the general performance level of the sample students was close to the required level, thereby denoting relative skill acquisition. The minimum required score for the skill was 12.5 out of 25 and approximately 58.8% of the respondents achieved or exceeded this score. The standard deviation value reveals the homogeneity between the sample members.

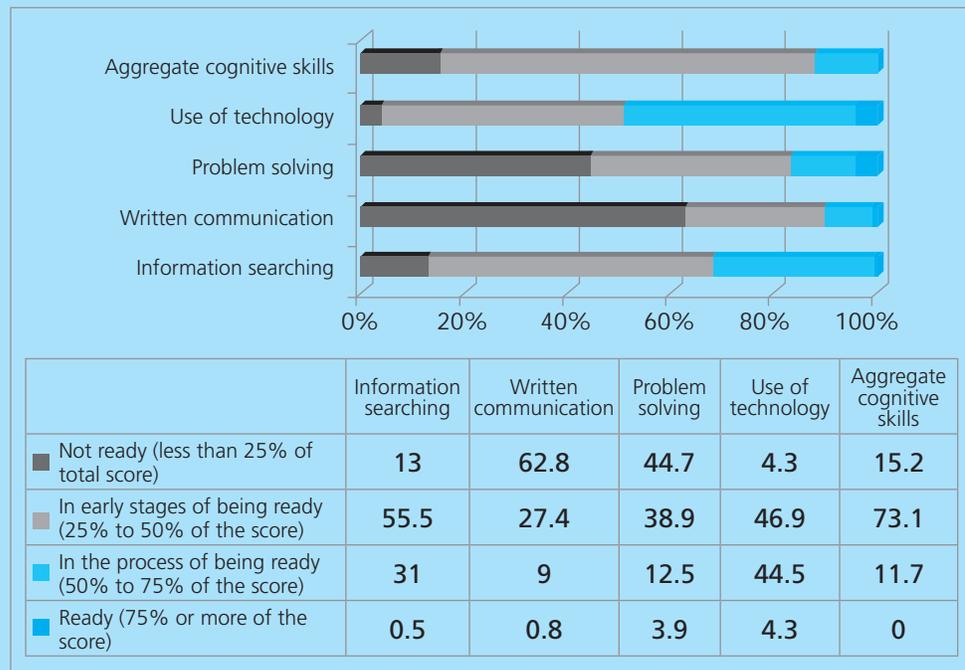
If we compare the results of males and females in the four skills, we notice statistically indicative differences in favour of females in the information research and written communication skills. Conversely, the results of the technology skill were in favour of males. In the problem solving skill, males exceeded females slightly but with no statistically significant differences.

Students' readiness in terms of cognitive skills

The overall results shown in figure 3-5-2 reveal that 15.2% of the respondents do

FIGURE 3-5-2

Students' readiness in terms of cognitive skills



not have the minimum required skill levels that prepare them to access the knowledge society, while almost three quarters (73.1%) are only at the 'early stages of being ready' of such skill acquirement. 11.7% of the students are close to preparedness, but no student reached the level of full preparedness for the knowledge society, although it does seem to be an attainable target.

The detailed results emphasise the above mentioned conclusion, that the use of technology is the strongest skill, with 4.3% of the students reaching full preparedness. For further analysis, we totalled all the students who came under the 'not ready' category in all the cognitive skills and found that they constituted 12 students (0.8%). No student achieved total readiness in all skills at the same time.

General discussion of cognitive skills survey results

Accessing the knowledge society requires a comprehensive upbringing plan with new behavioural patterns and thinking methodologies and new approaches to the different facts. Thus, curricula should reflect an education philosophy that leads to growth and societal development. This requires severing relations with traditional teaching methods that rely on instruction and limit the learner. Traditional teaching methods reduce students to devices that merely save and store information "banking education",⁴⁸ dependent on one authority figure and finding only one answer to each question. They are not able to ask questions, criticise, analyse, compare or innovate using logical thinking which would enable them to judge and discuss different ideas and alternatives.

If we examine the reality of the training and education system in Morocco, we find that it has made a qualitative leap in terms of formulating a new educational policy that meets the requirements of this era and the knowledge society. This is evident in the 'National Charter of Education and

Training' and the 'Emergency Programme'. Regardless of its flaws and shortcomings recorded in this effort, meeting the goals of these two programmes and gaining benefits from them requires a significant time period for reform, action and establishment of this new pedagogical methodology. This fact accounts for the skill deficiencies shown by the sample students.

The reason behind weak information research and problem solving skills could be that these are two skills which cannot be acquired under the traditional curricula, which depends on quantity rather than quality.

The analysis of the teachers' results regarding their ability to enable students to acquire the educational skills which prepare them for the knowledge society shows that they don't possess great abilities. 40.6% of respondents felt their greatest teaching ability was related to the skill of memorising the rules and laws of scientific materials. Following that was 32.1% who felt their greatest teaching ability was the skill of analysing various information (See table m3-13 in the appendix). This shows that teachers have limited abilities to help students gain the cognitive tools needed for integration into the knowledge society. Teachers are still preoccupied with memorisation methods of teaching. This is what new methods of reform are trying to avoid by adopting a competency-based approach to teaching, as well as activating the pedagogy of integration. Such reforms will help students make use of the benefits of their education and develop their competencies and employ them in everyday life. It should be noted that international assessments conducted on a sample of students emphasised deficiencies in cognitive skills.

Contrary to information processing and problem solving skills, the use of technology skill has a relative presence among the sample students. The reason is not only that Moroccan schools have introduced information access and application programmes, but also because

If we examine the reality of the training and education system in Morocco, we find that it has made a qualitative leap in terms of formulating a new educational policy that meets the requirements of this era and the knowledge society

Standard complex language has disappeared and has been replaced by a hybrid language resulting from a culture of speed and economy: the language of SMS text messages that are exchanged via mobile phone or during online chat sessions

the use of IT has become an important, dominant part of an electronic culture in the age of globalisation. Young people are deeply embedded in this culture outside the school gates, and it has attracted them to the use of IT for communication purposes.

It seems that electronic communication which is so common among young people today has had a negative effect on written communication skills. Standard complex language has disappeared and has been replaced by a hybrid language resulting from a culture of speed and economy: the language of SMS text messages that are exchanged via mobile phone or during online chat sessions. This new language does not develop writing and linguistic expression skills, since it uses mostly Latin letters to express Arabic words or meanings. We should also not overlook the impact of bilingualism and diglossia, which are common features of the Moroccan language. Thus, weak writing skills make it necessary to review the curricula in order to promote literacy skills and their teaching.

Comparing the results of males and females shows that females surpassed their male counterparts in the information processing and written communication skills. This may be attributed to females' ability to focus on analysing input. Furthermore, females outperformed males in written communication because they have more of a penchant for linguistic skills and verbal expression, as compared with males. With respect to the skill of problem-solving, there was no statistically significant difference between males

and females since it is associated with teaching methodology. However, males outperformed females in the technology skill because they have more opportunities to use technology outside school, which females do not have due to the culture and traditions of Moroccan society.

CONATIVE SKILLS

As previously mentioned, conative skills were evaluated through three sub-skills: the skill of self-awareness and self-esteem, the skill of maintaining learning motivation and the skill of future planning.

Table 3-5-3 illustrates that the students' scores ranged between 0 and 66.27 in the aggregate conative skills, but no student obtained the expected maximum points. In addition, 146 students (9.3%) scored (0). The total arithmetic mean was 37.33 out of 75 points. If we say that 37.5 is the minimum required points for indicating that the student has attained the lowest level of conative skills, we find that most respondents reached this level (73% of them scored 37.5 and above) in contrast with the cognitive skills. The standard deviation value shows that the students' scores are clustered, i.e. there was no great score dispersion. It was also revealed that the arithmetic mean of the female scores was higher than that of the male scores with a statistically significant difference.

Results of detailed conative skills

The detailed results emphasise what was mentioned in the general results.

TABLE 3-5-3

Results of aggregate conative skills
(Total score values range from 0 to 75)

Average (Arithmetic mean)			Standard deviation		Standard deviation	Lowest score	Highest score	Statistical differences between males and females
Males	Females	Total	Males	Females				
36.11	38.34	37.33	17.6	16.03	16.8	0	66.27	Females scored higher than males

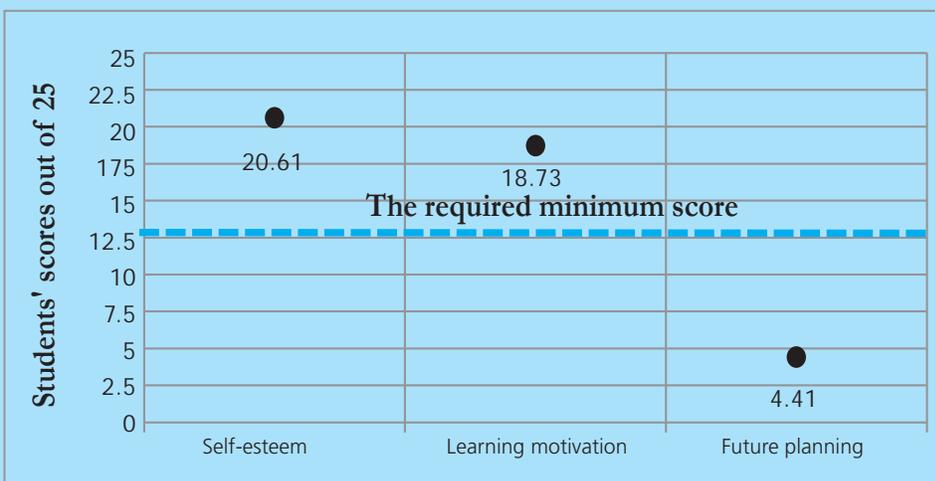
TABLE 3-5-4

Results of detailed conative skills
(Total score values range from 0 to 25)

	Average (Arithmetic mean)			Standard deviation		Standard deviation	Lowest score	Highest score	Statistical differences between males and females
	Males	Females	Total	Males	Females				
Self-esteem	20.48	20.72	20.61	2.91	2.87	2.89	2.68	25	No difference
Learning motivation	18.79	18.66	18.73	3.24	3.4	3.33	1.39	25	No difference
Future planning	4.42	4.39	4.41	3.64	3.65	3.65	0	17.86	No difference

FIGURE 3-5-3

Comparison of the average (arithmetic means) of conative skills for the total sample (males and females)



Students' performance differs from one skill to another: the future planning skill was the weakest, while the skills of self-knowledge and esteem, as well as maintaining learning motivation, were the strongest

There was a tangible progress in the self-knowledge and self-esteem skill acquisition (with total arithmetic mean 20.61) and the learning motivation skill (with a total arithmetic mean of 18.73). Moreover, the standard deviation value reveals that the respondents' scores in both skills are considerably clustered. By contrast, there was a clear deficiency in the future planning skill (with a total arithmetic mean of 4.44 with high variation in students' scores). Such results apply to both males and females, since they demonstrated no statistically significant differences across all the conative skills.

A comparison of the arithmetic means of the conative skills reflects statistically significant differences, since there were

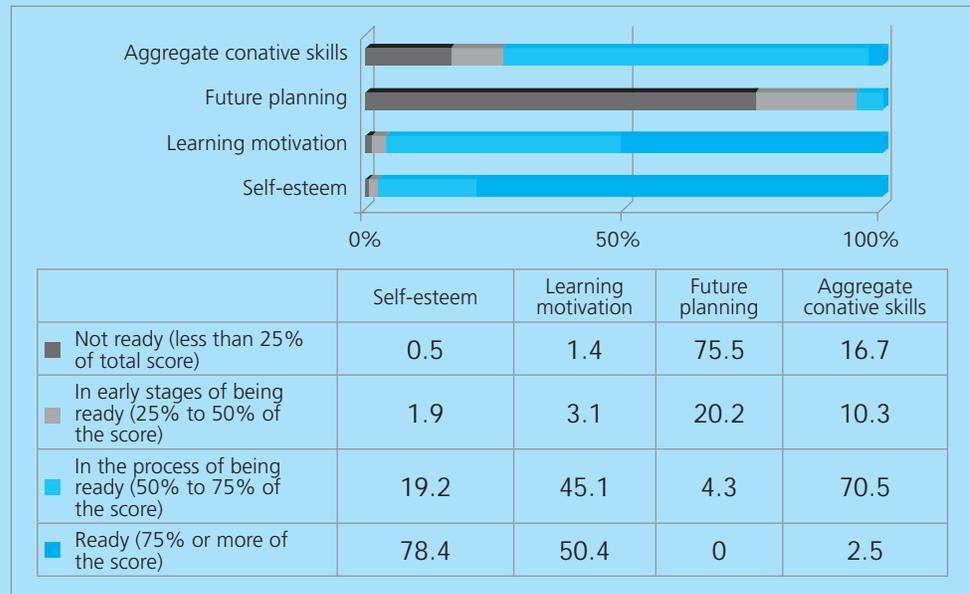
actual differences in the levels of skill possession. The students' performance differs from one skill to another: the future planning skill was the weakest, while the skills of self-knowledge and esteem, as well as learning motivation, were the strongest.

Students' readiness in terms of conative skills

It is noticeable that 16.7% of the questioned students do not possess the minimum level of the aggregate conative skills which help them access the knowledge society. On the other side of the points scale, we find that 2.5% of the students reached the readiness level. Moreover, in contrast with the cognitive

FIGURE 3-5-4

Students' readiness in terms of conative skills



With respect to the self-awareness and self-esteem skill, today's children represent a social value and they achieve a certain level of satisfaction from their parents

skills, most students (70.5%) attained the third level, i.e. they are 'nearly ready'.

Table 3-5-4 shows that, excluding the future planning skill, most respondents reached the third and fourth levels of the readiness scale. They recorded 78.4% in the self-esteem and self-awareness skill and a lower percentage (50.4%) in the maintaining learning motivation skill. This prepares them to meet the conative requirements for the knowledge society.

For further analysis, we totalled the number of students who fell in the 'not ready' category in all skills and found that this constituted only two students. No student reached the fourth level in all skills at the same time.

General discussion of the results of the three conative skills

The overall results of the three conative skills and the four readiness levels of each skill, self-knowledge and self-esteem scored 78.4%, the skill of learning motivation scored 50.4% and the future planning skill 0%. Thus, it is evident that the majority of the sample students are ready to meet the conative requirements of

the knowledge society, except in the case of the future planning skill, which is severely deficient. The reasons for this may be attributed to the upbringing pattern as well as the dominant culture which surrounds the future generation, i.e. family, society, and school culture, which will be discussed later.

With respect to the self-awareness and self-esteem skill, today's children represent a social value and they achieve a certain level of satisfaction from their parents. Parents, especially in middle-income families to whom most of the sample students belong, seek to cater to their children's basic needs. Undoubtedly, children brought up in such circumstances feel safe and secure and consequently develop a sense of self-confidence and self-esteem, as revealed in the aforementioned results. This explains the sample students' mastering of self-knowledge and self-esteem skills, and the learning motivation skill. Such percentages make them ready to respond to the knowledge society's prerequisites.

Regarding the large deficiency in the future planning skill (0%) we would attribute this to the feeling of the young generation that they are the core of

interest and care for their parents does not make them occupy their minds with the future's issues, problems and possible consequences. So, they do not think of crystallizing specific future projects.

Nevertheless, modern education ideology has become concerned with the importance of future planning for both the individual and society. Moreover, guiding students and helping them choose a suitable specialism and profession is considered a criterion for the education system's success in performing its duties. Thus, we now live in the stage of the educational institution which seeks to adopt a philosophy geared towards orientation and project building, in addition to enabling students of all educational levels to form their own educational projects. It is for this reason that the Charter of Education and Training called for the necessity of adopting the personal student project and defined it as follows: "Immersion in the future and its horizons and projecting the self onto its path through defining a desired goal. The project is adopted by the individual in order to realise certain goals by anticipating them and providing the means for their achievement" (Al Ghali Ahershaw, 2009).

Given the importance of the personal student project in helping students acquire the future planning skill, the National Charter of Education and Training includes the principles of educational reform which state that teachers, educational administrators as well as educational and professional guidance specialists should help students set up their personal projects. This is stressed in Articles 99,100 and 101 of the charter. However, such educational

developments have only recently been introduced to the pedagogical practice. Moreover, no sufficient procedures have been put in place for some of the charter's principles. Therefore, such developments have not yet had an influence on the sample students, though many schools are applying this new educational trend. Enhancing such a trend entails further emphasising and encouraging of the adoption of these principles to help students gain the kinds of skills which will help them integrate into the knowledge society.

The detailed conative skills did not reveal a statistically significant difference between males and females, but the aggregate conative skills reflect a statistically significant difference in favour of females. The current reality of the Moroccan society shows that women in general have been granted many rights that their fellow male citizens enjoy, especially in cities. This has enabled women to take part in all kinds of educational pursuits and demonstrate many abilities; they may also outperform males in several situations that require self-related skills.

SOCIAL SKILLS

Like the conative skill, the social skill was assessed through the results of three sub-skills, namely: communication with others, team work and public participation. Below is a review of the aggregate and detailed students' results in the social skills.

The statistical indicators show that students' scores ranged between 0 and 73.25 points, but no student obtained the maximum points. In addition, 270 students

The current reality of the Moroccan society shows that women in general have been granted many rights that their fellow male citizens enjoy, especially in cities

TABLE 3-5-5

Results of aggregate social skills (Total score values range from 0 to 75)

Average (Arithmetic mean)			Standard deviation		Standard deviation	Lowest score	Highest score	Statistical differences between males and females
Males	Females	Total	Males	Females				
36.36	36.44	36.39	21.86	22.83	22.37	0	73.25	No difference

(17.2%) scored 0. The total arithmetic mean was 36.39 out of 75. If we say that 37.5 is the minimum required score which shows that the students have attained the lowest level of the social skills, we find that 47.2% of the students obtained the minimum score (37.5) and above. On the other hand, the aggregate results of the social skills indicate a great dispersion in the students' scores, but do not reflect a statistically significant difference between males and females.

Results of detailed social skills

The detailed results show that approximately half of the respondents acquire the social skills but with varying degrees and levels. The total arithmetic mean showed 18.19

points for the communication with others skill, 13.8 points for public participation and 12.7 points for teamwork. There was no statistically significant difference between males and females in any of the social skills. Moreover, the students' scores were clustered in figure 3-5-5.

Students' readiness in terms of social skills

Regarding the aggregate social skills, almost all students are equally distributed among the four readiness levels. However, the third category includes more students than the second; therefore students in the third and fourth categories represent nearly 57% of the sample students.

The data shows that the students are

Regarding the aggregate social skills, almost all students are equally distributed among the four readiness levels

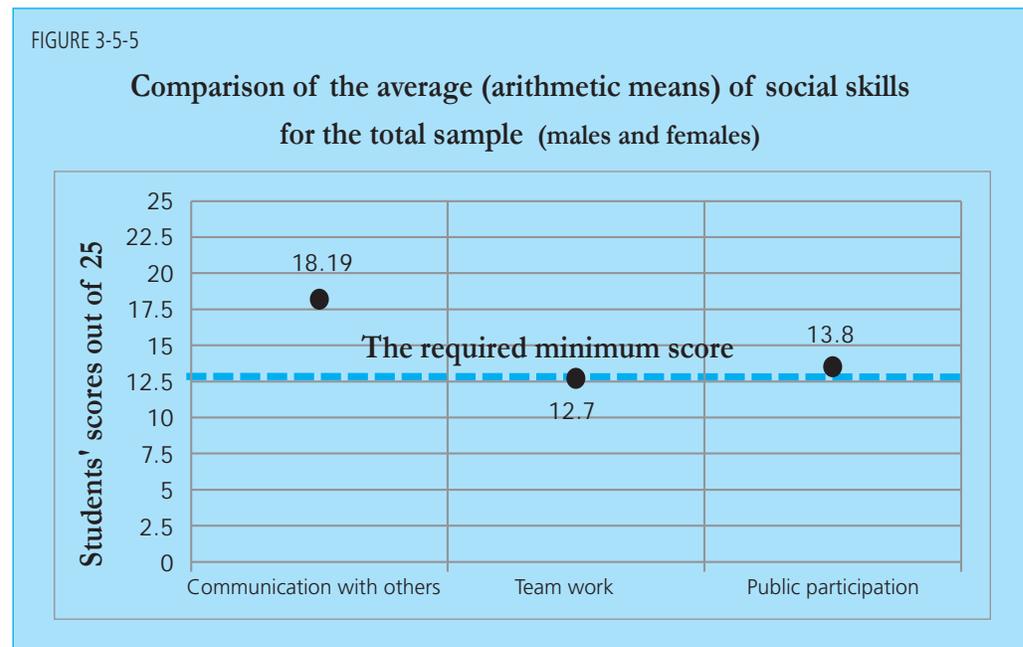


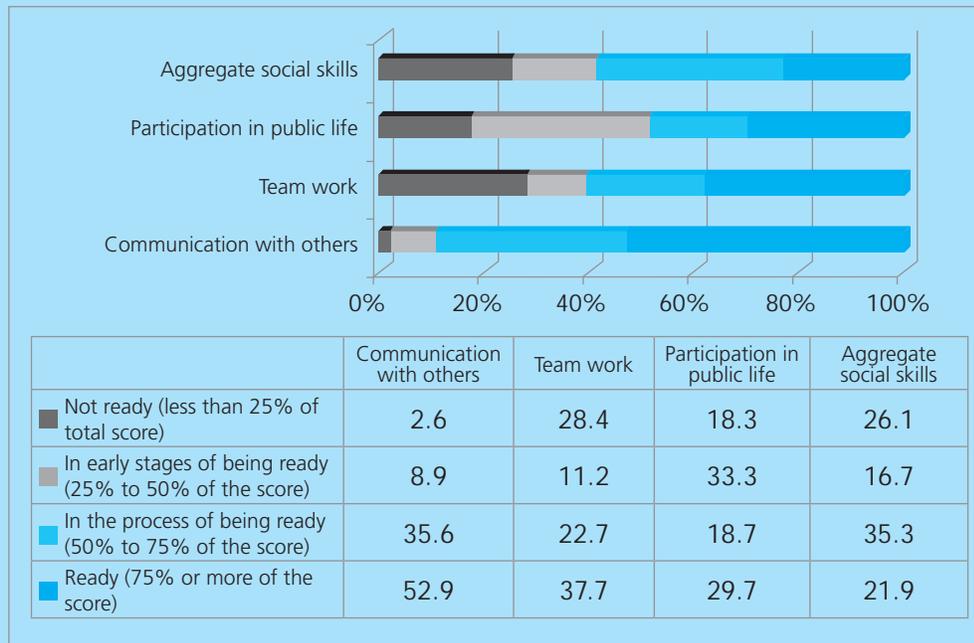
TABLE 3-5-6

Detailed results of detailed social skills (Total score values range from 0 to 25)

	Average (Arithmetic mean)			Standard deviation		Standard deviation	Lowest score	Highest score	Statistical differences between males and females
	Males	Females	Total	Males	Females				
Communication with others	17.95	18.39	18.19	4.57	4.67	4.63	0	25	No difference
Team work	12.79	12.64	12.70	8.3	8.7	8.52	0	24.56	No difference
Public participation	13.59	13.99	13.8	21.86	22.83	7.13	0	25	No difference

FIGURE 3-5-6

Students' readiness in terms of social skills



It is noticeable that males and females in the Moroccan society have equal rights and duties. However, females outperform males in some social skills, demonstrated in the professions of nursing, secretarial work and social aid work

'ready' to participate in the knowledge society in terms of social skills more than cognitive and conative skills. But, if we compare the percentage of students in the 'not ready' category in cognitive, conative and social skills, we find that the social skills showed the largest percentage of students in this category (26.1%), followed by conative skills (16.7%) and then cognitive skills (15.2%).

It is noticed that communication with others was the best skill, with most students falling in the 'ready' category. While, public participation was the weakest skill with the lowest percentage of students in the 'ready' category (29.7%).

For further analysis, a search was made on the number of students who came under the 'ready' category in the three overall social skills and it was found to be 137 students, or 8.7%.

General discussion of three social skills results

The detailed social skills results showed that more than half of the sample students

(52.9%) are 'ready' to respond to the social requirements of the knowledge society with respect to the communication with others skill. This skill is of paramount importance in the educational field and in public life, where one may encounter cultural diversity, because this skill relies on good listening, understanding, interpretation and criticism. The acquisition of this skill may be attributed to Morocco's geographical position, which is close to Europe and Africa. By contrast, the research results reflected a deficiency in the teamwork skill, which revealed that only one third of the sample students are in the 'ready' category (37.7%). Moreover, the results indicated that the public participation skill showed the lowest percentage of students in the 'ready' category, i.e. 29.7%. The reason may be that the respondents are affected by the surrounding political and economic conditions, especially the difficult political climate in Morocco before the democratic transformation.

The results also revealed no statistically significant difference between males and females in the social skills. The reason

FIGURE 3-5-7

Views of participants in the workshop about the importance of skills and their availability in students



It should be noted that when we talk about values, we talk about what has been stated by the students, which does not necessarily reflect their actual possession or practice of such values

may be that both of them practice such skills in life generally. It is noticeable that males and females in the Moroccan society have equal rights and duties. However, females outperform males in some social skills, demonstrated in the professions of nursing, secretarial work and social aid work.

The findings of the workshop held in Rabat in the context of preparing this report, which was attended by a number of experts and decision-makers, are compatible with the results of the students' skill tests. The workshop participants underlined that the future generation should possess critical analytical thinking, innovative thinking, decision-making and problem solving skills in order to be able to integrate into the knowledge society. Moreover, the experts participating in the workshop pointed out that the future generation's strongest skills

include communication and technical skills, while the weakest skills were future planning, decision-making and problem solving. These findings are consistent with the results from the surveyed student.

VALUES

Values represent the second item which the field surveys tried to measure in order to explore the students' readiness to join the knowledge society. Four kinds of values; cognitive, conative, social and universal values were rated on a scale from 1 (minimum) to 5 (maximum). Students needed to score 3 points to demonstrate their possession of these values. The results of the value ratings of the sample students are illustrated below.

The results indicate that the arithmetic mean of the participating students'

TABLE 3-5-7

**Results of aggregate values
(Total score values range from 1 to 5)**

Average (Arithmetic mean)			Standard deviation		Standard deviation	Lowest score	Highest score	Statistical differences between males and females
Males	Females	Total	Males	Females				
3.84	4.01	3.94	0.369	0.275	0.33	2.54	4.77	Females scored higher than males

scores was 3.94 points. This shows that most of the respondent students possess all the assessed values. Moreover, the standard deviation value reflects that the students' scores are greatly clustered. However, it should be noted that when we talk about values, we talk about what has been stated by the students, which does not necessarily reflect their actual possession or practice of such values. Therefore, these results should be treated with caution. Moreover, the results illustrated that the arithmetic mean of the females' scores was greater than that of the males' scores with a statistically significant difference.

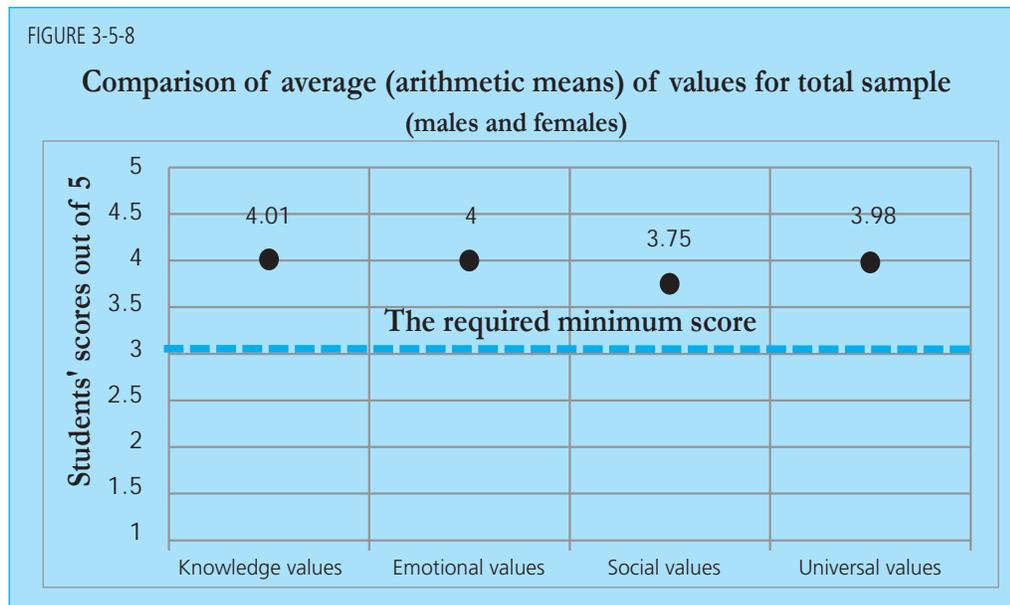
VALUES DETAILED RESULTS

Table 3-5-8 shows that students have a strong presence of values, according to their statements. Cognitive values topped all the other values with a statistically significant difference, followed by the conative and universal values which recorded no statistically significant differences. The social values ranked last, with the lowest scores for the sample students. Additionally, the standard deviation values revealed that the students' scores are greatly clustered. It was also found that the females outperformed the males in all values with a statistically significant difference.

TABLE 3-5-8

Results of detailed values
(Total score values range from 1 to 5)

	Average (Arithmetic mean)			Standard deviation		Standard deviation	Lowest score	Highest score	Statistical differences between males and females
	Males	Females	Total	Males	Females				
Cognitive values	3.94	4.08	4.01	0.48	0.4	0.44	2.06	5	Females scored higher than males
Conative values	3.9	4.09	4	0.429	0.328	0.38	2.37	5	Females scored higher than males
Social values	3.69	3.8	3.75	0.449	0.388	0.42	2	4.88	Females scored higher than males
Universal values	3.85	4.09	3.98	0.478	0.378	0.44	2	5	Females scored higher than males



STUDENTS' READINESS IN TERMS OF VALUES

Students' aggregate results on values placed most of them in the two upper levels of readiness: 51.5% of them are 'nearly ready' and 47.2% of them are 'ready'. It is clear that such results contrast with the cognitive skills results. For further analysis, we searched for the number of students who fell in the 'ready' category and found that they numbered 194 students (12.3%). No student was 'not ready'.

Cognitive and conative values showed the largest percentage of students in the 'ready' category, followed by universal values, and finally social values. However, the results are better than those from the cognitive skills assessments, in the sense that all the students, except for a few, possess the minimum level of values, which places them in the 'nearly ready' or 'ready' category.

GENERAL DISCUSSION OF VALUES RESULTS

The study results showed that nearly half

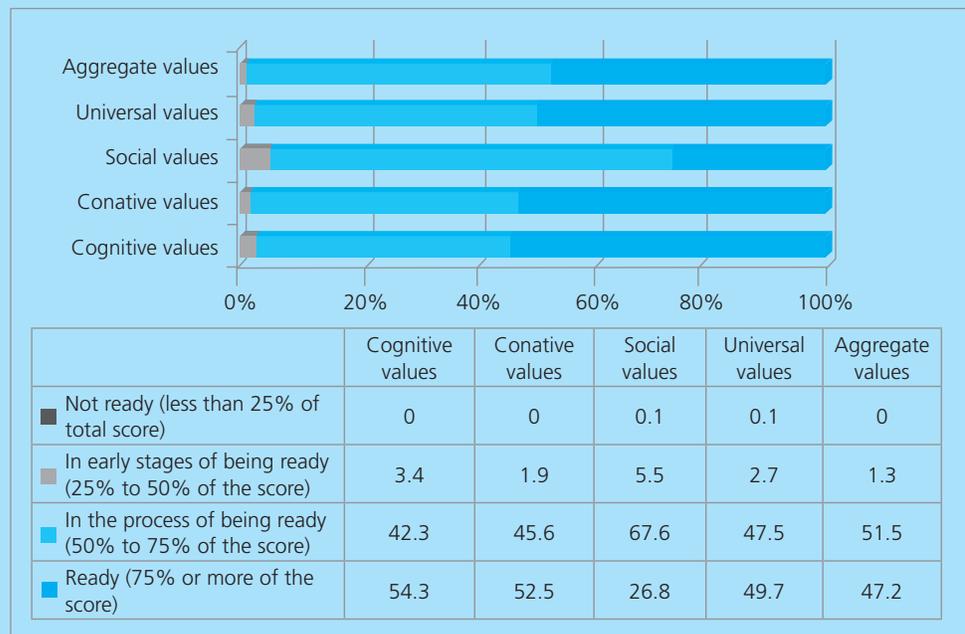
of the sample students (47.2%) are 'ready' for the knowledge society in terms of possessing the values required. More than half of the students (51.5%) achieved scores which reflect that they are about to fully possess the values needed for the knowledge society but to differing degrees on their four assessed values (they come under the 'in the course of being ready' category).

It is worth mentioning that the level of the students' value acquisition meets the requirements of the development stages in a normal personality. Cognitive values came at a high level, since they are associated with learning, knowledge acquisition and persistence. Conative values came next as a symbol of humanity; a being not only composed of a physical, mental or knowledge side, but also needing a complementary emotional side. At the same level as conative values came human universal values, which make human beings universal creatures which are open, cooperative, tolerant and friendly with their fellow beings. Universal values are followed by social values, which make the human being a

Cognitive and conative values showed the largest percentage of students in the 'ready' category, followed by universal values, and finally social values

FIGURE 3-5-9

Students' readiness in terms of values



communicative person.

Regarding the gender variable, it is known that females adhere to values more than males. This is stressed by the value results which reflected a statistically significant difference in favour of females.

In order to further investigate the value levels of the students, teacher's opinions were surveyed on the importance of such values in building the knowledge society as well as the value acquisition levels of the students. The results analysis showed that the teachers expressed their views on the importance of all values by approximate degrees. When the statistical tests were conducted, it was noted that there was no statistically significant difference in the importance level between conative and social. On the other hand, there were statistically significant differences between cognitive and universal values. This means that, teachers give great importance to universal values, followed by social and conative values at the same level and then finally, cognitive values.

Regarding the comparison between student's value acquisition levels as perceived by teachers, the analysis results revealed that according to their teachers, the students' strongest values are conative

values followed by universal values, social values and finally cognitive values, with statistically significant differences among all of them.

Conversely, the comparison between the importance of values and students' acquisition levels of such values according to teachers, revealed statistically significant differences in favour of the importance of the values, which was greater than their level of possession by students.

Based on the comparison with the value levels demonstrated by the students themselves (from their point of view) (see table 3-5-8), we noticed that students build their values systems outside the arrangement pattern perceived by their teachers. The comparison revealed that students' assessment of values was better than the assessment of their teachers who may be governed by other objective data. While this refers to the existence of two distinct systems, it also indicates that the students make use of other sources to establish their value systems. It further shows that students, driven by their self-esteem which may be excessive at this age, have prioritised cognitive values that include persistence, diligence and curiosity, as shown in the table of the

Conversely, the comparison between the importance of values and students' acquisition levels of such values according to teachers, revealed statistically significant differences in favour of the importance of the values, which was greater than their level of possession by students

TABLE 3-5-9

Teachers' opinions on the importance of values

Values	Cognitive values	Conative values	Social values	Universal values
Arithmetic mean	3.24	3.45	3.54	3.63
Standard deviation	0.71	0.62	0.67	0.62
Minimum	1	1	1	1
Maximum	4	4	4	4

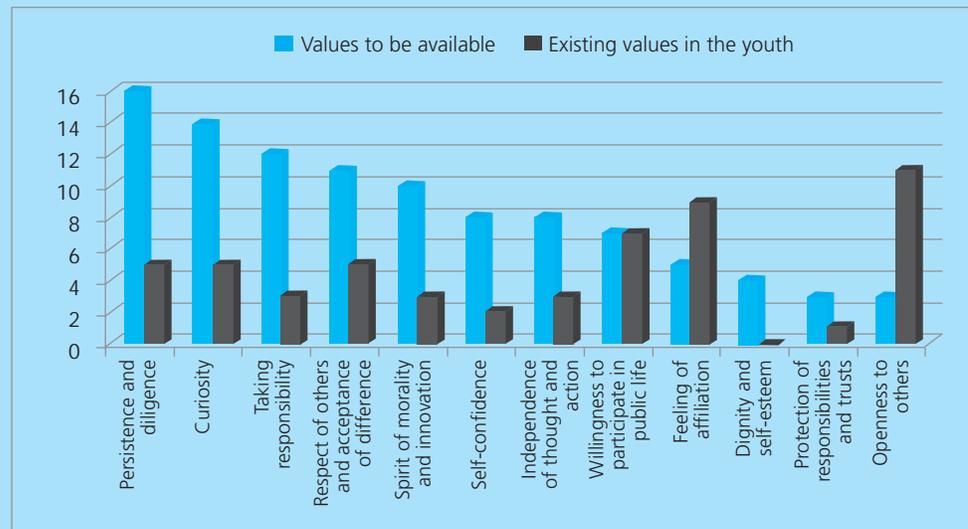
TABLE 3-5-10

Teachers' opinions on the level of availability of values among students

Values	Cognitive values	Conative values	Social values	Universal values
Arithmetic mean	2.04	2.26	2.11	2.24
Standard deviation	0.68	0.63	0.65	0.67
Minimum	1	1	1	1
Maximum	4	4	4	4

FIGURE 3-5-10

Views of workshop participants about the importance of values and their availability in students



Moreover, the teachers' survey showed that students have a weakness in the values of taking responsibility, self-confidence, independence of thinking and action as well as independence

aggregate results of student values (table 3-5-7).

The intellectuals and experts who took part in the workshop unanimously agreed that the future generation should have three necessary values to enable them to integrate into the knowledge society. These are diligence, curiosity and taking responsibility. Such values are basically associated with learning and were strongly demonstrated by the students. Furthermore, the workshop participants see the strongest values of Morocco's future generation as maintaining personal freedom, ambition and openness to others. The participants strongly attributed the acquisition of these values to Morocco's geographical position, its contact with the west and other cultures, the future generation's desire to maintain their identity while communicating with others, as well as the history of Morocco and its development following independence. Moreover, the teachers' survey showed that students have a weakness in the values of taking responsibility, self-confidence, independence of thinking and action as well as independence.

ENABLING ENVIRONMENTS

THE IMPACT OF ENABLING ENVIRONMENTS ON SKILLS AND VALUES

Based on the student survey, the enabling environments were summarised in the following variables:

- Family structure: an integrated family or separate family (absence of father or mother due to divorce, death or migration)
- Father's education level
- Mother's education level
- Family's interest in the student's learning
- Family's method of raising children
- Family's level of financial welfare
- Educational welfare at home
- Educational welfare in the local environment
- Educational welfare at school

The regression analysis (see table m3-20) revealed the following:

1. Cognitive skills: There are six significant variables of the enabling environments that affect cognitive skills;

the mother's education level, family's interest in the student's learning, family's level of financial welfare, educational welfare at home and educational welfare at school, and the father's education level.

2. Conative skills: The results show that there are two significant variables which influence conative skills; the family's pattern of raising children and educational welfare in the local environment.

3. Social skills: Three significant variables of the studied enabling environments affect social skills. Such variables include educational welfare at school, educational welfare at home and educational welfare in the local environment.

4. Cognitive values: There are four important variables of the monitored enabling environments that impact cognitive values; the family's method of raising children, educational welfare at home, the family's level of financial welfare and educational welfare at school.

5. Social values: Six significant variables of the enabling environments affect such value; the family's method of raising children, the mother's education level, interest in the student's studies, the family's level of financial welfare, educational welfare at home and finally, educational welfare in the local environment.

6. Conative values: There are four significant variables of the studied enabling environments which affect conative values; the family's pattern of raising children, the family's level of financial welfare, educational welfare at home and finally, the mother's education level.

7. Universal values: These are influenced by six significant variables of the explored enabling environments; the family's method of raising children, the family's level of welfare, educational welfare at home, the mother's education level, interest in the student's studies and finally, educational welfare in the local environment.

To sum up, we can see that most independent variables that occur in the models are basically related to the family, then the local environment and the school

environment. This means that the families' financial and educational capabilities play an important role in helping children acquire primary skills (dependent variables). In addition to the variable of family, there are also the variables of the educational welfare in the local environment and the educational conditions in school.

Based on this conclusion, we note the following:

If the variables occurring in the models prioritise the family, this is normal and necessary as the family is the place which embraces the respondents and provides them with their basic and educational needs.

However, what is really surprising is that the local environment comes second, preceding the school. This worrisome situation can be attributed to the fact that the educational services of Moroccan schools have been deteriorating, especially over the last two decades. The school no longer maintains its prestige for both students and parents, due to its cumulative problems and inability to solve such problems, despite several attempts at reform. The variable of educational welfare in the local environment ranked second, although this environment lacks information and documentation centres, cheap book fairs, information campaigns and seminars. However, this may be attributed to the availability of infrastructure for accessing information, as emphasised by the workshop participants (see figure 3-5-10).

It is worth mentioning that although these variables are important, they do not explain all the differences observed among the students. That is to say, they are not the only factors that determine the acquisition level of skills and values, as their effect ranges between 3.4% and 16%. This means that there are other factors which help enable students, including the technology culture and children's fondness for its media, as previously emphasised by the research results. It is clear that students interact frequently with the internet and social networking websites. Furthermore,

The school no longer maintains its prestige for both students and parents, due to its cumulative problems and inability to solve such problems, despite several attempts at reform

The analysis of the teachers' survey showed that there is a positive atmosphere in most educational institutions, almost entirely free of any student-teacher conflicts

the personal project plays an important role in inspiring the respondents to search for other knowledge sources to help them. Also, we should not overlook the role of peer communication which is one of the development features during this age period. Despite these attempts at explanation, the research results concluded that there are still other independent variables which affect students' skills and values. These variables should be investigated further.

that students are somewhat satisfied with the dominant relationships in the school environment as they can adapt to their teachers and classmates. The results further revealed that the students' educational institutions are somewhat safe and secure, helping the students receive the education and training which prepare them for the desired future.

The students teachers' feedback somewhat agreed with this result. The analysis of the teachers' survey showed that there is a positive atmosphere in most educational institutions, almost entirely free of any student-teacher conflicts. 37% of respondents stated that such conflicts rarely occur, while 23.9% stated that student-teacher conflicts do not take place at all. However, 42.3% of the respondents said that conflicts occur occasionally among the students themselves, which can

*OPINIONS OF STUDENTS,
TEACHERS AND WORKSHOP
PARTICIPANTS ON ENABLING
ENVIRONMENTS*

School environment

The study results (table 3-5-11) showed

TABLE 3-5-11

Values of students on school and their relationship to its components (%)

	Completely agree	Somewhat agree	Disagree	Completely disagree
A. I can easily understand school subjects	18.2	67	13.1	1.7
B. My school strengthens my desire for learning and excellence	39.3	41.7	12.9	6.1
C. I feel safe and comfortable at school	45.1	36.4	11.5	7
D. I have good relationships with my teachers (we have mutual respect)	70.9	23.6	3.2	2.3
E. I have good relationships with my school friends	70.6	26	2.6	0.8
F. My school prepares me well for the future	43.9	39.9	9.1	7.1

TABLE 3-5-12

Views of students on school's health enabling environment (%)

	Completely disagree	Disagree	Somewhat agree	Completely agree
A. The school offers periodical medical checkups for students.	29.1	20.7	25.9	24.3
B. The school offers all students medications free of charge.	34.1	25.2	19.3	21.4
C. The school clinic is fully equipped (bed, examination equipment, primary medications).	43.3	20.5	16.2	20
D. The school organises health campaigns to combat unexpected epidemics.	19.4	14.8	32	33.8
H. The school conducts awareness programmes about dangerous diseases.	13	12.8	32.6	41.6
I. The school has a social worker who helps students solve their social problems.	37	19.8	19.3	23.9
J. The school has an educational guide/psychologist to help students settle their psychological problems.	40	19.7	16.6	23.7
K. We study issues related to health education.	20	16.1	33.3	30.6

sometimes lead to violence. This could be because the students are at an age when they are trying to prove themselves among their peers, which can sometimes lead to violent incidents (see table m3-14 in the appendix).

Teachers' opinions were negative when asked about the environment provided by the school to motivate students to learn. 52.6% of the sample teachers said that schools do not provide substitute teachers when full-time teachers are absent. They also stated that schools lack a system for student evaluations of teachers, and do not offer regular teacher training courses (see tables m3-15 and m3-16 in the appendix).

All these factors impede students performance and increase school leaver rates. Furthermore, teachers agreed that the most important factors affecting students are the lack of school's facilities and resources (92.6%), limited material and professional incentives (89.1%), and the low quality of Arabic and English teaching (80.2% and 88% respectively). Other factors include the multiple competitive sources of knowledge outside the school environment (57.5%), and inadequate teacher training (69.6%), (see table m3-17 in the appendix). Such factors do not help facilitate the school's educational reform and as a result

the Emergency Programme has tried to solve these issues (the Ministry of National Education, Higher Education, Professional Training and Scientific Research, 2008B).

Regarding the school environment in terms of health-related issues, the respondents did not agree on the availability of such facilities. Students' answers ranged from 'completely disagree' to 'completely agree' as illustrated in table 3-5-13.

Educational institutions generally provide them with a satisfactory environment for health-related issues. For example, schools occasionally conduct health campaigns to combat unexpected epidemics. They also offer students awareness programmes for dangerous diseases. Educational programmes and curricula include subjects related to health education and human rights. However, some educational institutions still lack fully equipped medical clinics and not all schools provide social workers or psychologists.

Social environment

The social environment cannot be separated from the school environment. The negative impact of the lack of political education at schools was reflected in the students' answers. Most of the students

Most of the students have no affiliation to a specific political party (69%) and have no inclination towards political participation (63%)

FIGURE 3-5-11

Views of students regarding political participation

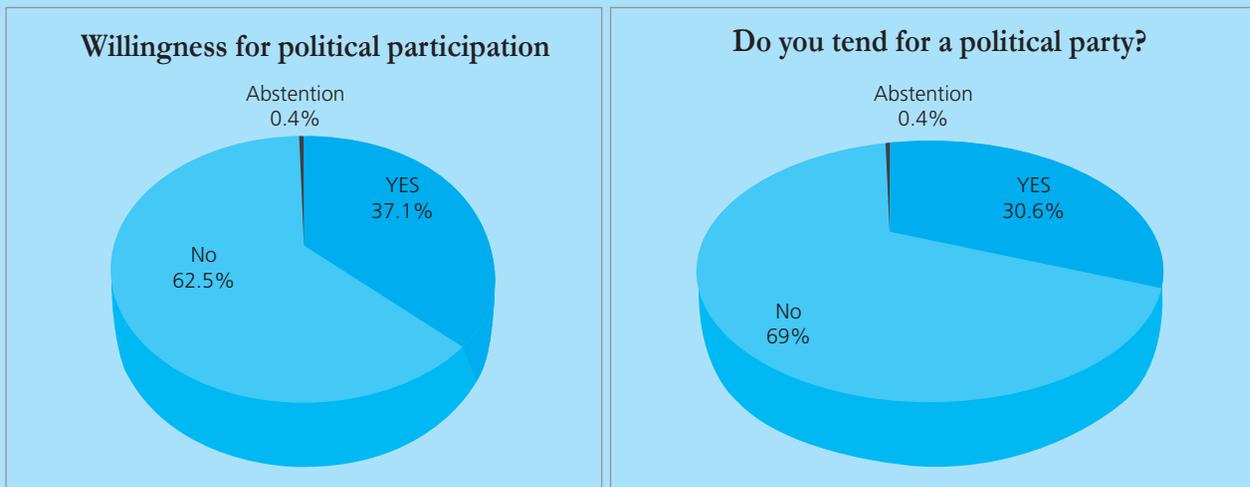


TABLE 3-5-13

Views of students regarding freedom of choice (%)

	Much freedom	Moderate freedom	Little freedom	No freedom
A. Personal options	64.5	30.9	3.8	0.8
B. Academic options	43.4	45	9.2	2.3
C. Intellectual options	59.7	31.1	7	2.2

Teachers feel that they have a high level of personal freedom and intellectual freedom, followed by academic freedom and finally professional freedom

have no affiliation to a specific political party (69%) and have no inclination towards political participation (63%). This demonstrates that the future generation, like the adults, avoids political issues. This apathy is reflected by the low participation rate (37%) in the most recent parliamentary elections. Similarly, according to the Interior Ministry, the participation rate in the communal council elections held in June 2009 did not exceed 51%.⁴⁹

The research results revealed that most of the respondents (64.5%) believe they have 'much freedom' to determine their personal options. Likewise, they also have 'much freedom' to determine their intellectual choices undoubtedly related to personal choices. However, only 43.4% of the students said that they have 'much freedom' to decide their academic choices (Table 3-5-14). The reason is that students are not able to choose their academic subjects at school or their disciplines

after obtaining the general secondary school certificate (Baccalaureate), as this is determined by their scores.

Teachers' results were similar to those of the students, as shown in table m3-18. Teachers feel that they have a high level of personal freedom (35% 'absolute freedom' and 37.3% 'much freedom') and intellectual freedom, followed by academic freedom and finally professional freedom, which 53.7% of the sample teachers said they have to a limited degree. The results impact teachers' professional performance; the availability of professional, intellectual and academic freedoms help facilitate creativity and innovation at work. On the other hand, the students' results were positive regarding their ability to express their opinion, either within or outside of their family, as shown in figure 3-5-12.

86.6% of teachers stated that they have freedom of opinion (see table m3-19 in the appendix). This could be

FIGURE 3-5-12

Students' expression of opinion within and outside the family

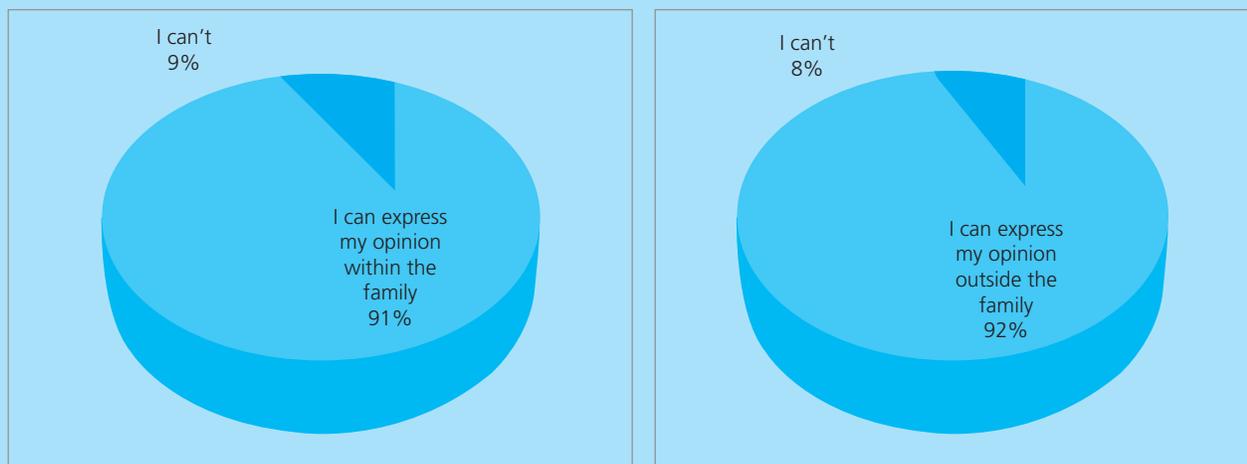


TABLE 3-5-14

Students' views on government run media (%)

	Do not know	Completely disagree	Disagree	Somewhat agree	Completely agree
A. Audio-visual media convey news honestly.	4.2	8.2	20	40.6	27
B. Audio-visual media convey different views of society.	5	5.1	11.3	45.3	33.3

TABLE 3-5-15

Students' views on non-government run media (%)

	Do not know	Completely disagree	Disagree	Somewhat agree	Completely agree
A. Audio-visual media convey news honestly.	6.9	7.3	17.8	38.7	29.3
B. Audio-visual media convey different views of society.	8.1	5.1	11.6	41.3	33.9

because the Moroccan education system has established institutional councils to give teachers a voice with the aim of increasing the role of the school.⁵⁰

Regarding the integrity and objectivity of the media, a moderate percentage of the respondents 'somewhat' agreed that the audio-visual media convey news

honestly (40.6%) and that they present differing views in society (45.3%). A lower percentage of students said they 'completely agree'. The answers for non-government-run media were similar to those for government-run media.

The research results showed that 40.1% of the students are fully convinced that

Regarding the integrity and objectivity of the media, a moderate percentage of the respondents 'somewhat' agreed that the audio-visual media convey news honestly (40.6%) and that they present differing views in society (45.3%)

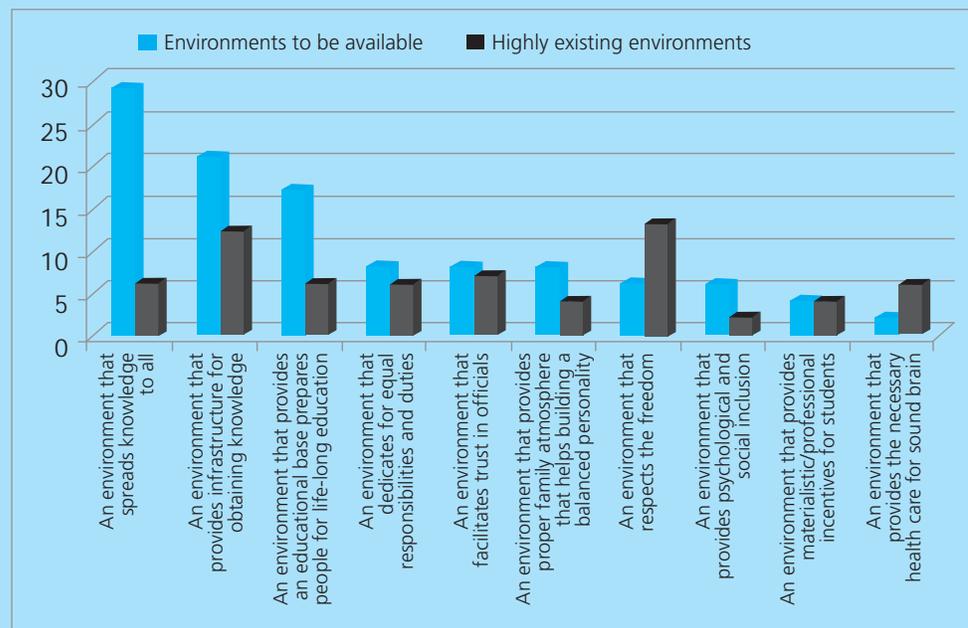
TABLE 3-5-16

Students' perceptions of their legal and social enabling environment (%)

	Do not know	Completely disagree	Disagree	Somewhat agree	Completely agree
A. Strict laws exist in schools that give rights to individuals.	4.2	5.5	13	37.2	40.1
B. Strict laws exist in society as a whole that give rights to individuals.	5.8	8.4	20.5	39.5	25.8
C. The student thinks carefully before violating the code of ethics due to the school's laws.	5.7	7.2	18.9	34.6	33.6
D. The person thinks carefully before violating the code of ethics due to society's laws.	6.5	10.6	21.2	34.5	27.3
E. Law is applicable to all people in school, regardless of their capacity or position.	5.9	12.9	20.1	32.2	28.8
F. Law is applicable to all people in society, regardless of their capacity or position.	7.4	20.7	23.2	25.7	23
G. Those that have money have better opportunities for education.	3.1	7.6	10.5	20.3	58.5
H. Jobs are occupied according to candidates' efficiency and not through other considerations (personal influence, for example).	9.1	14.2	20.5	32.1	24.1
I. Job promotion does not depend on objectivity but personal views.	14.5	6.5	15.2	38.2	25.6
J. Certification, employment, promotion and other privileges should be based on objective considerations and not by using personal influence or favouritism.	18.7	9.7	15	33	23.6

FIGURE 3-5-13

The importance of environments and the extent of their availability according to views of workshop participants



Even if not all respondent students are ready to participate in the knowledge society, they are on the cusp of reaching the readiness level.

the school has strict laws that give rights to individuals, while they were less convinced that such laws exist in society as a whole (25.8%). This result is emphasised by the low percentage of students (23%) who completely agreed that law is applicable to all people in society, regardless of their capacity or position. Moreover, most respondents (58.5%) stated that accessing good education requires a significant cost outlay. Only 24.1% of the students completely agreed that the occupation of high ranking positions in society is based on competency and not through other considerations. Similarly, only 23.6% completely agreed that certification, employment and promotion depend on objective considerations.

The workshop findings revealed that the intellectuals and decision-makers disagreed on the availability of environments that promote equality and allow people to trust officials. A number of intellectuals agreed with the students who said that the predominant environment in Morocco is one that facilitates trust in officials. They

attributed this to the efforts of the state and civil society as well as the climate of public freedom in Morocco. By contrast, another group of intellectuals thought the opposite. The reason for such disagreement between workshop participants is mostly due to their diverse cultural and intellectual backgrounds.

CONCLUSION

Based on the data gathered from the respondent students and teachers as well as the views of the group of intellectuals and decision-makers who took part in the workshop, we can draw the following conclusions:

There is a progressive movement which will be promising if it is strengthened, motivated and its weaknesses are fixed. Even if not all respondent students are ready to participate in the knowledge society, they are on the cusp of reaching the readiness level.

The different respondents, including students, teachers, as well as intellectuals

and decision-makers had differing opinions over the issues of this research. This is to be expected given their different backgrounds.

The differing answers of the respondents will contribute to establishing future educational plans and strategies.

We hope to expand on findings which have raised questions and understand their causes using deeper research methodology and extending the respondent base to include different social categories which affect the future generation.

The two ends of the education continuum, namely, early childhood and higher education, hold great importance in the education and training system. Therefore, studying the conditions of the future generation throughout this educational continuum is important; it helps the future generation realise its full potential and gain maximum knowledge, and consequently helps us form a more complete idea about this issue.



ACTION SYSTEM: PREPARING MOROCCO'S FUTURE GENERATION TO ACCESS THE KNOWLEDGE SOCIETY

“If we set up annual projects, we may grow wheat. If such projects last for a decade, we may plant trees. But, if these projects last for a lifetime, we just need to educate the human being.”

Chinese Proverb

Acquiring knowledge as well as building a knowledge society and integrating into it effectively in order to achieve development requires a strong will to overcome problems, and the ability to work industriously. Building the knowledge society does not only entail specifying the gaps and obstacles facing us in reality, but also demands efforts to mobilise all the elements that will work harmoniously and interactively towards building that society. Some of these elements are related with enabling environments, while others are associated with knowledge localisation as well as establishing an education and training system that facilitates creativity and innovation.

Taking a serious and courageous political decision may be the most basic approach to the development process. This requires liberating the energy of the youth to reach their potentials and capabilities, through consistent training and preparation to engage them in the building of the knowledge society. Therefore, such a process requires opportunities to be made available, in addition to promoting the rule of law and activating laws which support development policies. It also requires encouraging creativity and innovation through public social activities. This should be done without prejudice against the national and cultural identity which has Arabic as one of its basic pillars, and without overlooking the role of other international

languages that allow the translation as well as the transferal and localisation of basic modern sciences and knowledge. Moreover, the development process also requires encouraging scientific research and supporting its institutions.

THE WILLINGNESS TO ACT FOR POSITIVE INTEGRATION INTO THE KNOWLEDGE SOCIETY

Morocco's integration into the knowledge society requires exerting efforts to correct deficiencies and bridge the knowledge gap. It also entails having an overall vision for action which is associated with existing achievements in order to monitor, review and analyse its positive and effective policies using a thorough assessment method which aims to narrow the gap to accelerate the process of achieving the desired goal. The historic underdevelopment of Morocco in several fields can be overcome once a strong will exists. Morocco certainly has the desire to move forward, since it has already taken important steps towards achieving the desired goal. For example, there has been a national agreement on reforming the education and training system since the beginning of the 21st century. In fact, the objectives and mechanisms of such reform have been expressed in the principles of the 'National Charter of Education and Training' and the 'Emergency Programme'.

Morocco has made education the second most important national issue

Morocco certainly has the desire to move forward, since it has already taken important steps towards achieving the desired goal

after territorial unity, and to this end allocated resources constituting 27.1% of the state's public budget from 2002 to 2006. The social subsidy for schooling is a mechanism aimed at facilitating children schooling and achieving equal education opportunities for accessing schools and ensuring continuity. Thus the number of beneficiaries of the social subsidy of all its components witnessed a significant increase (See table m3-21 in the appendix).

This educational reform helped reduce the illiteracy rate, as the number of beneficiaries of illiteracy elimination programmes from 301,488 to 629,748 beneficiaries of which 527,799 beneficiaries during the period 2001/2009.⁵¹ Generalization of schooling reached in 2010 a percentage of 94.8% and its rate changed from 43% to 30% in 2010.⁵² Moreover, schooling was made more widely available by 94.8% in 2010 according to authorities. Also, the Emergency Programme in this field approved by the government seeks to reduce the school leaver rate and improve access to pre-school education, thereby helping to reduce the illiteracy rate further. Driven by its desire to develop education, the educational authorities have been eager to participate in international learning assessments, such as PIRLS and TIMSS, as well as conducting national tests.

Morocco's desire for change is also evident in the remarkable progress it has made in creating enabling environments for the future generation in many vital fields. In the field of health, public expenditures increased from 0.9% in 1990 to 1.3% in 2009 (HCP, 2009). There have also been marked improvements in standards of living and in programmes to prevent and fight diseases, helping to increase life expectancy at birth from 65.5 years in 1988 to 72.9 years in 2009. This reflects development in public health and nutrition. Additionally, the consumption expenditures of Moroccan households rose by an annual average of 4.3% and 5.6% from 2003. The relative poverty rate

also decreased from 16.3% in 1998 to 8.8% in 2008.

Given the pace of such achievements and the projection based assessment method approved by the UNDP, Morocco will accomplish the Millennium Development Goals by 2015 (HCP, 2009). This provides evidence that Morocco has the desire to positively engage in the knowledge society.

Notwithstanding all the previous gains, there are challenges to be overcome, such as eliminating illiteracy, youth unemployment and administrative corruption, as well as achieving more social equality in order to pave the way for reaching the desired goal.

THE ABILITY TO ACT TOWARDS THE KNOWLEDGE SOCIETY

The youth in Morocco have innate creative abilities and skills which could be facilitated and developed through appropriate enabling environments. Morocco has demonstrated its ability to develop through the establishment of major projects over the past decade in the fields of economy, educational reform, demographic transformation and social changes in addition to medical insurance and social housing, among others. These projects are capable of eradicating poverty and marginalisation as well as incorporating urban and rural areas in the human development process. Moreover, the economic reform which took place from 1993 to 2005 has helped liberalise the economy and opened it up to international trade by entering into several trade exchange agreements with multiple countries. These efforts will help motivate Morocco to proceed with its political reforms, and will also improve economic transparency indices and direct the national economy towards international modernisation and integration.

The expansion of the media in Morocco has promoted its openness to

Morocco's desire for change is also evident in the remarkable progress it has made in creating enabling environments for the future generation in many vital fields

the modern world and culture. The media scene has grown through the addition of different media channels which have contributed to instilling the future generation with openness to cultural diversity and intellectual human creativity. Furthermore, the High Authority of Audio-visual Communication was founded with the purpose of promoting democratic discussion as well as strengthening a culture of responsibility and transparency. Morocco was also keen on adopting IT, because accessing the new 'network society' requires strengthening communication and acquiring its tools in order to develop and improve the performance of administrative services. Morocco has sought to make digital technology a basic pillar for economic and public administration and enable citizens to make use of internet services. In addition, Morocco is preparing to launch government ministries' services through e-government which will initiate its work in 2013.

All such trends reflect the ability of Morocco to build generations that can lead the knowledge society. However, what is important is the successful accomplishment and sustainability of these significant projects in order to help build the future generation and enable it to establish the desired knowledge society.

METHODS OF ACTION TOWARDS THE KNOWLEDGE SOCIETY

Movement towards the knowledge society requires achieving the pillars of knowledge, freedom and development. This movement also needs to establish plans and strategies which can create a supportive environment for knowledge and help produce and develop its economic and technological principles in order to overcome new problems facing the knowledge society. In this context, we see that Morocco is pursuing overall economic reform which has helped to liberalise and stimulate the

economy. This has led to the emergence of a national industry on the regional level. There are also trends towards supporting scientific research, whose allotted budget rose from 0.3% in 1993 to 0.8% in 2005 (the Possible Morocco, Fiftieth Anniversary report, 2006). The NIHD is also considered a tool for development on several levels. As a reflection of the government's political commitment, its approach to human development is based on local partnerships as well as prioritising disadvantaged social sectors. With respect to the empowerment of women in Moroccan society, this is closely associated with general cultural, social, political and legal conditions. In fact, all development plans and social development strategies will fail unless women are enabled and empowered.

Moving positively towards building the next generation and preparing it for establishing the knowledge society undoubtedly requires monitoring existing policies and trends through review and analysis using scientific methods. The goal of this is to assess such policies and trends and direct them in a positive and active manner. Morocco's underdevelopment in many fields can be overcome once the political will exists. However, this political will should be supported by the allocation of resources required to establish enabling environments and institutions that are concerned with the development of knowledge and the use of its gains in achieving overall development for all of society. All these inputs are capable of providing Moroccan society with the ability to accomplish its plans and effectively integrate into the knowledge society. It is noted that the new political reform initiatives witnessed by Morocco after the radical changes which have taken place in the Arab world have invigorated Morocco, thereby resulting in the establishment of the National Human Rights Council, in addition to fundamental constitutional amendments.

As a reflection of the government's political commitment, its approach to human development is based on local partnerships as well as prioritising disadvantaged social sectors

FIGURE 3-6-1



Even if the current output of the education and training system is unsatisfactory, the positive results of the educational system need time to emerge

SECURING ACTION REQUIREMENTS

Morocco has witnessed developments with regards to the economy, governance, education and training, health, housing and transportation, in addition to the elimination of poverty and marginalisation, the achievement of gender equality and the establishment of broad regionalisation, which helps in local governance. Morocco has changed its function to become a leader in several sectors and has affected overall reform through institutional democratisation, political actions and economic openness, as well as guaranteeing social housing. In addition, Morocco has been keen on enlivening the NHID. These efforts are considered important in achieving human development as well as securing the requirements of preparing the future generation for the knowledge society.

Even if the current output of the education and training system is unsatisfactory, the positive results of the educational system need time to emerge. Education is a complex and intricate process

which includes interrelated subjective, objective, national and international factors. In addition, it is a process that requires dealing with the present and the future at the same time, since it seeks to change the present, aspire to the future, but cannot sever relations with its past. The findings of the field study, especially those which reflect the weak cognitive skills of the future generation, should not induce pessimism. They should instead help us become aware of the current reality on the ground, make more serious decisions, and formulate action strategies which can yield more positive results.

Undoubtedly, moving towards preparing the future generation for the knowledge society requires 'building a sound knowledge capital' in the first place. This entails designing curricula according to a sound educational philosophy and clear vision, especially in terms of promoting the culture of productivity, achievement and quality, responsibility and accountability and the culture of information and decision-making based on reliable knowledge" (the UNDP and Mohammed bin Rashid Al Maktoum, 2009). One of the

most important issues is the availability of the institutional aspect which pertains to the readiness of the educational system in terms of objectives, purposes, structures and content. In other words, there should be input, processes and output which achieve the desired goal. However, efforts made in this regard still face challenges, including the lack of involvement of some school parties in the thrust towards knowledge, especially some educational administrators, teachers and parents. This may be attributed to inadequate training, in addition to those parties' unawareness of the high stakes involved. Nevertheless, we should remember that there are positive developments in this domain. These developments involve the National Charter of Education and Training, the Emergency Programme, a curricula review as well as the inclusion of new concepts, such as human rights, women's rights, citizenship and tolerance. The developments further include extending the offer of education, encouraging decentralisation, and controlling and securing time spent in school, in addition to improving the school environment by providing it with equipment, educational facilities, pedagogical methodology and improved buildings.

GENERAL CONCLUSION

The first decade of the third millennium is considered an important historic turning point. In this decade, Morocco has witnessed significant changes and managed to achieve comprehensive development broad enough to cover all of society's vital sectors: education and training, politics, the economy, society, health, and women's rights, with the aim of overcoming underdevelopment in these areas which has accumulated over the past few decades. This underdevelopment placed Morocco in a low position on the human development scale according to international assessment. Morocco's shortcomings were manifested in several

domains, including:

- Deficiencies in the education and training system which resulted in educational outputs falling short of society's aspirations. This system resulted in producing large numbers of unemployed people lacking the cognitive skills required to integrate into the knowledge economy society. The school leaver rate was high and there was a substantial increase in the illiteracy rate among adults. All these factors contribute to the underdevelopment of society.
- Decrease in the expenditure in the field of health care in general and the inequality between urban and rural areas in terms of health services.
- A threat in terms of food security for a significant number of Moroccan citizens. This was attributed to the lack of policies and the government's inability to distribute wealth, as well as the imbalance between production and consumption together with a low GDP per capita compared with other countries.
- Economic and industrial recession which hindered developmental efforts and reflected negatively on the number of job opportunities, thereby raising the unemployment rate.
- Marginalising youth in society by not utilising or engaging their abilities, and not listening to their needs or trying to accommodate them. This deprived society of the full political participation of young people, suppressed their creative abilities, and wasted their efforts in work and production. It also made the youth fall prey to despair and pushed them to look for other outlets which would restore their dignity and humanity.

Given the deficiencies observed in several of society's vital fields, there has emerged an attempt to form a strategic vision with the aim of establishing corrective projects. Education has been the core of reform in any society that aspires

Given the deficiencies observed in several of society's vital fields, there has emerged an attempt to form a strategic vision with the aim of establishing corrective projects

Efforts should continue in several sectors at the same time, due to their interactive and overlapping elements and determinants. Moreover, human development is an ever-developing and changing ambition and not a ready and fixed idea

to acquire knowledge. The reason for this is that the role of education has a positive effect on the role of other sectors in society. Accessing the knowledge society is based on human capital and its capabilities. Education develops the creative abilities of the younger generation and helps achieve progress in society. In addition, creativity, innovation and scientific imagination are considered the true wealth of a society's present and future. "If accompanied by positive economic, political and social conditions, a sound, distinguished, open, flexible and high-quality education will be one of the most important ways of developing society in terms of culture, thought, literature, arts, sciences, technology, structures, institutions, lifestyles, relations and dealings" (Abdul Aziz bin Abdullah, 2002).

It is difficult to list the primary issues according to their importance in the developmental process. Efforts should continue in several sectors at the same time, due to their interactive and overlapping elements and determinants. Moreover, human development is an ever-developing and changing ambition and not a ready and fixed idea. However, a thorough review of existing developmental plans as well as their ability to meet the requirements of the current situation, and their responsiveness to the needs of the future is considered a basic approach to arranging priorities. It is noted that any aspects of development in different areas should be accompanied by progress in education, because no social or economic development can come about under a regressive education system or vice versa. This requires a structural review of the educational system to enable it to meet the conditions of sustainable, renewable education.

Our recommendations at the end of this study focus on the correlated triad of knowledge, freedom and development. They are the foundations of societal development and closely related to the areas analysed during the study:

- Reviewing and improving the National Charter of Education and Training

in light of national and international developments in order to set a new philosophy and vision for education and training that fits a democracy and rights oriented modern societal project.

- Linking the education and training system with the overall objectives of sustainable human development with the aim of developing people and society in terms of thought, culture, economy and behaviour.
- Developing the education system in a way that makes it an effective tool that helps students develop their creative and innovative skills and possess the ability to analyse and criticise.
- Invigorating educational reforms to penetrate classrooms and include the education/learning processes taking place in the smallest educational unit, with the aim of developing them to achieve quality.
- Developing curricula in a manner that helps students build their personality in terms of knowledge, skills and values, and in a way that serves the agreed-upon societal plan, satisfies the needs of the knowledge society, helps students adhere to tolerant Islamic values as well as national constants and instil in them universal human values.
- Adopting effective pedagogical methodologies which cherish self-learning and cooperative learning, as well as active communication and interaction methods in order to encourage students to establish personal projects.
- Making the education and training system emphasise the two ends of the education continuum, early childhood and higher education, as well as life-long education.
- Forming a national vision to build the knowledge society and defining its current and future basis and mechanisms, as well as guaranteeing a well-knit plan for its implementation, assessment and development as necessary.

- Setting up a national monitor for the issues of adolescents and youth with the purpose of monitoring their situations and desires, as well as understanding their current and future needs, so that society can always be aware of their concerns, aspirations and expectations.
 - Encouraging students to read more, beyond the scope of school books, to increase their knowledge and broaden their intellectual horizons.
 - Disseminating school, district and neighbourhood libraries in order to promote the culture of reading for all.
 - Supporting and encouraging the translation of modern scientific and knowledge developments in order to enrich Arab libraries with various types of sciences and knowledge that can be transferred and localised.
 - Encouraging printing and publishing as well as all other media to enable society's members to access knowledge that forms their minds, refines and develops their thinking.
 - Following up on efforts to eliminate the school leaver rate by achieving high-quality appropriate education and generalising pre-school education.
 - Trying to raise the school enrolment rate in preparatory and secondary education, and find mechanisms which may keep students in the education system until they finish their secondary and university education.
 - Giving attention to the intensive professional training of teachers and guaranteeing them regular training, especially in the field of human rights and gender equality.
 - Activating all mechanisms and methods which can bring about the achievement of the millennium goals as well as the education-for-all goals.
 - Investing in scientific research; a strategic option for overcoming existing difficulties and deficiencies as well as a basic pillar for developmental sustainability. Without it, development loses one of its important foundations.
 - Encouraging creative, talented and distinguished individuals and researchers who promote development in different intellectual, cultural and economic fields and establishing awards of excellence for them.
 - Providing support by the state and civil society for the social and cultural development of the family, the first place where children receive care and upbringing;
 - Promoting and developing the role of the media in Moroccan society with the aim of forming a purposeful media policy which raises public awareness on the issues of development, human rights and democracy;
 - Adopting the participatory method with the population to plan their developmental projects as well as enabling them to take responsibility for planning and implementing their local projects;
 - Supporting freedom of expression and strengthening political, social, economic, and cultural democracy in society;
 - Supporting current efforts in human development and activating such efforts by linking them with overall developmental projects which have social, cultural and economic dimensions;
 - Placing emphasis on the Arabic language as a tool for maintaining Arab and Islamic identity, as well as a means of bringing about knowledge localisation while remaining open to international languages and encouraging their acquisition, especially the languages of scientific research and electronic communication.
- Morocco has become involved with the human development project. Educational reform has sought, through its principles set forth in the National Charter, qualifying the Moroccan citizen and link education with development. However, the state's plan to reform the education and training system has not been limited to the

Morocco has become involved with the human development project. Educational reform has sought, through its principles set forth in the National Charter, to qualify the Moroccan citizen and link education with development

provisions of the charter which constitutes the method of reform and its basic reference. It has also set up an emergency programme which activates and acts upon the principles of reform and provides it with a new strong dynamic. Moreover, the NIHD has been a strong influence in eradicating exclusion, poverty and marginalisation of some sectors of society. Therefore, the initiative's philosophy and sustained activity will be a helpful factor in preparing those urban and rural sectors whose developmental participation was excluded. The initiative intends to engage such sectors in public policy with the aim of developing society and bringing about the desired human development.

The challenges faced by Morocco on several levels require the creation of a new vision of public policy. Comprehensive development cannot be achieved by ready-made solutions, but will be the product of public policy and its continued effect. Despite the obstacles facing the desired societal outcome, the initiatives which have emerged since the beginning of the millennium are capable of overcoming all challenges. Thus, it can be said that there is hope that the next generations can realise a dream of a better future.

End Notes

- ¹ United Nations Development Programme, Mohammed bin Rashid Al Maktoum Foundation, Arab Knowledge Report for 2009.
- ² A statistic issued by the Ministry of National Education, Higher Education sector, pgs.27-28. 103% is attributed to rounded up figures, duality and interrelation in the research units' specialties.
- ³ Thomson Scientific Data, OST, Computing. Sited in Country Leaflet-Morocco: Evaluation of Scientific, Technology and Innovation capabilities in Mediterranean countries. Francoise Laville, Jean Theves. Updated version 2007.
- ⁴ According to statistics from the International Telecommunication Union which included the communication sector in 233 countries around the world during 2010, Morocco ranked second after Egypt, with regards to Internet, since the number of subscribers reached 13.7 million subscribers. <http://press.marcs.net/t1994>, dated 17 October 2011.
- ⁵ See website <http://www.assabah.com/378.html> November 9, 2010
- ⁶ Human Development Report 2010, UNDP.
- ⁷ The field study was conducted among students in Rabat as a pilot. The study may expand to cover the remaining Moroccan schools at a later date.
- ⁸ See the mechanisms of Law 01.00 to improve the quality of higher education.
- ⁹ See Article 122 of the National Charter of Education and Training.
- ¹⁰ Statement of the Minister of National Education, Higher Education, Professional Training and Scientific Research before parliament on 9 November 2010, case writer Ahmed Auzi.
- ¹¹ Statement of the State Secretary, Ministry of Education, before Parliament on 13 October, 2010, case writer Ahmed Auzi.
- ¹² Website of Mohammed IV foundation www.fm6-education.ma
- ¹³ Card of achievements of the Ministry of National Education and High Education and forming scientific research and framework in the school education sector 2007/2008 – 2010/2011.
- ¹⁴ The Ministry of National Education, Higher Education, Professional Training and Scientific Research, 2008/2009, Literacy and Non-formal Education Sector, Directorate of Non-formal Education (folded).
- ¹⁵ Card of achievements of the Ministry of National Education and High Education and forming scientific research and framework in the school education sector 2007/2008 – 2010/2011
- ¹⁶ Statement by the Minister of Social Development, Family and Solidarity during a press symposium on 3 December 2010, which coincided with the International Day of Persons with Disabilities. Al Alam newspaper 4, 5 December 2010, case writer Ahmed Auzi.
- ¹⁷ This center is a joint cooperation between Morocco and South Korea in the field of scientific research in order to monitor the impact of ICT on educational output. In July 2006, a partnership was signed between the Korea International Cooperation Agency (KOICA) and Al Akhawayn University for this purpose.
- ¹⁸ A comparison-based international test to measure the abilities of fourth grade students in reading skills in their native language.
- ¹⁹ An international test to assess the attainment of fourth and eighth grade students in science and maths.
- ²⁰ The Ministry of National Education, Higher Education, Professional Training and Scientific Research/School Education Sector "A summary of education statistics" 2010-2011
- ²¹ The Ministry of National Education, Higher Education, Professional Training and Scientific Research
- ²² The Moroccan Kingdom, Ministry of National Education, Higher Education, Professional Training and Scientific Research, 2010, a summary report on the results of national and international learning assessment studies.
- ²³ The Moroccan Kingdom, the Higher Council of Education, 2008, 'Report on academic achievement assessment.
- ²⁴ Website of Morocco News Agency, 12 July 2010, www.map.ma
- ²⁵ The International University of Rabat (IUR) and Lebanese International University (LIU) in Casablanca are two universities that have been established and will be inaugurated in the 2010-2011 academic year.
- ²⁶ According to the multi-dimensional approach of poverty. See the HCP reply to Oxford Report, Al Ittihad Al Ichtraki newspaper, 10 September 2010.
- ²⁷ Aisha Ghaloum, www.womengateway.com/NR/excerces, dated 9 February 2011.
- ²⁸ These statistics were given by Amina Al Mariny, a member of the Advisory Council on Human rights in a symposium held by Moroccan Channel One in September, 2003, following the announcement of a draft code.
- ²⁹ Amazigh is not one language but languages which are used in different geographic regions of Morocco: 'Tachelhit' in the Sous region in southern Morocco, 'Tarifit' in the rural area in Northern Morocco and 'Tamazight' in the Middle Atlas region.
- ³⁰ Mohamed Al Medallawy Al Manbhy, Modern Discussion, Issue 2004-2007/8/11, (<http://www.ahewar.org/debat/show.art>) dated 9 September, 2010
- ³¹ Al Wadoud Mohamed Ahmed et al., 2007, the Moroccan Civil Society: Functions, capabilities and challenges: www.almichael.org on 30 July 2011

- ³² According to 2007 statistics, the number of Moroccan community members living abroad was approximately 3,292,599. Therefore, the communities' financial contributions over the last ten years have played a significant role in achieving political, economic, social and cultural development.
- ³³ In 1998, Morocco witnessed the formation of a government led by Abdel Rahman Al Youssefi, former opponent and Secretary General of the Socialist Union for the Popular Forces (SUPF).
- ³⁴ The referendum on the new constitutional reforms was held on 1 July, 2011, gaining votes from several Moroccan societal sectors.
- ³⁵ The committee was required to submit the constitutional amendments in June, 2011, to hold a referendum on the amended constitution.
- ³⁶ Speech of King Mohammed VI on 9 March 2011. See also Al Alam newspaper, issue 21920, Friday 11 March, 2011.
- ³⁷ The Hassan II Fund for Economic and Social Development has contributed to funding major national projects, such as building roads, ports and railways, in addition to cultivating agricultural lands. It also financed the Tangier-Med project among others.
- ³⁸ These industries include Morocco Telecom, Moroccan Royal Airways, "L'ONA", and the Sherif Phosphates Office.
- ³⁹ See the Constitution of 1996
- ⁴⁰ See specifically the ninth chapter of the Constitution of 1996
- ⁴¹ This declaration came from King Mohammed VI when he launched the next phase of the advanced regionalisation process, initiated on 3 January, 2010. He appointed the Advisory Committee on Regionalisation on 10 March, 2011.
- ⁴² The assessment conducted by the Moroccan government in its meeting on 20 May 2009, the fourth anniversary of the NIHD, opened a discussion was on the NIHD's strengths and weaknesses.
- ⁴³ The Ministry of National Education, Higher Education, Profession Training and Scientific Research - "A summary of education statistics" 2010/2011.
- ⁴⁴ http://www.alalam.ma/def.asp?codelangue=23&id_info=28856&date_ar=2010-7-4, dated 04 August 2010
- ⁴⁵ A measure which reflects the central value around which the sample data is clustered (a measure of central tendency).
- ⁴⁶ This is used in statistical tests and is a function of standard deviation and sample volume.
- ⁴⁷ This refers to the degree of data dispersion. A low standard deviation indicates clustering of data.
- ⁴⁸ A term used by Paulo Freire to refer to memorization teaching methods.
- ⁴⁹ Hameed Bahkak (Thursday, 4 June 2009).
- ⁵⁰ See the statute of public education institutions published in the official gazette, issue 5024 on 25 July, 2002.
- ⁵¹ Directorate of Strategies, Statistics and Planning
- ⁵² Hespresse (www.hespresse.com) February 19, 2001

REFERENCES AND BACKGROUND PAPERS

References

ARABIC REFERENCES

- Abeer Amin. 2006.** (Misleading Youth between Globalization and New Preachers). The General Egyptian Book Organization, Cairo.
- Abdel Hadi Bu Taleb. 2000.** (Opening Speech of the Symposium on Women in the Twentieth Century). Dar Al Maarif Al Jadida, Rabat.
- Abdullah Saef. 2005.** (Experience of Reform in the Moroccan Education Sector During Alternation Experience 1998-2000). In a book entitled "Reforming Public Education in Arab States". Beirut.
- Abdul Aziz bin Abdullah Al Sonbol. 2002.** (Education in the Arab World at the Threshold of the 21st Century). Modern University Office, Al Azarita. Alexandria, Egypt.
- Ahmed Auzi. 2005.** (The Effective Curricula and Professor's Role in Achieving Excellence and Innovation in Higher Education). The Tenth Conference of Ministers of Higher Education and Scientific Research in the Arab World, ALECSO.
- . 2000.** (Educational psychology, Educational Issues and Situation). Al Najah Al Jadida Printing Press, Casablanca.
- ALECSO, Science and Scientific Research Department. 2005.**(Strategy for Promoting Technological Culture in the Arab World).
- Al Ghali Ahershaw. 2009.** (The Child between Family and School), publications of Oloum Al Tarbiya Journal, issue 19, Al Najah Al Jadida Printing Press, Casablanca, Morocco.
- Al Wadoud Mohamed Ahmed et al. 2007.** (The Moroccan Civil Society: Functions, capabilities and challenges). www.almichael.org in 30 July 2011.
- Mohamed Fawbar. 2000.** (The School System and its Languages in Morocco). Oloum Al Tarbiya Journal, issue 19. Al Najah Al Jadida Printing Press, Casablanca, Morocco.
- Mohammed Abu Tag El Din. 2007.** (Inclusion of ICT into Education). Info-Print, Fes.
- The Moroccan Kingdom. 2006.** (The Possible Morocco, Involvement in Public Discussion for Common Ambition, Fifty years of Human Development). The Moroccan Publishing House, Casablanca.
- The Moroccan Kingdom. 2011.** (The Moroccan Kingdom Constitution, 2011). Morocco.
- The Moroccan Kingdom, Higher Council for Education. 2008A.** (Status and Prospects of the Education and Training System, Part 3: Atlas of the National Education and Training System). The Moroccan Kingdom.
- . 2008B.** (Status and Prospects of the Education and Training System, Part 1: making school a success for all).

---. **2008C.** (Status and Prospects of the Education and Training System, Part 2: Analytical Report).

---. **2008D.** (Report on Academic Achievements Assessment).

---. **2008H.** (Status and Prospects of the Education and Training System, Part 4: Teaching Profession and Staff).

The Moroccan Kingdom, HCP. 2004. (General Census of Population for 2004).

---. **2009.** (Millennium Development Goals Report)

---. **2010.** (Millennium Development Goals Report, national report).

The Moroccan Kingdom, the Ministry of National Education, Higher Education, Professional Training and Scientific Research, School Education Sector. 2007. (Human Rights and Citizenship Education in the Education and Training System).

The Moroccan Kingdom, the Ministry of National Education, Higher Education, Professional Training and Scientific Research. 2008A. (Report of the Emergency Programme (2009-2012).

---. **2008B.** (The Emergency Programme for Education Reform in Three Years (2009-2011).

---. **2008C.** (School Life Guide).

---. **2009.** (Millennium Development Goals Report: Interim Findings of 1er passage).

The Moroccan Kingdom, the Ministry of National Education, Higher Education, Professional Training and Scientific Research, “The directorate of the evaluation, the organization of school life and common training

among the academies – the National Center for Assessment and Examinations”. 2010. (A Summary Report on the Findings of National and International Learning Assessment Studies), Stenbar.

The Moroccan Kingdom, the Ministry of National Education, Higher Education, Professional Training and Scientific Research, School Education Sector. 2010/2011. (Scoring card of the Ministry of National Education, Higher Education, Professional Training and Scientific Research, School Education Sector).

The Moroccan Kingdom, the Ministry of National Education, Higher Education, Professional Training and Scientific Research, Directorate of Strategy, Statistics and Planning. 2010-2011. (A Summary of education statistics).

The Moroccan Kingdom, the Ministry of National Education, Higher Education, Professional Training and Scientific Research. 2011. (The national report for stages output of the urgent program with the duties of 2009 and 2010 and the first semester of 2011).

The Moroccan Kingdom, Special Committee on Education and Training. 2000. (The National Charter for Education and Training).

Rashida Barada. 2009. (The Moroccan School as Perceived by Adolescents and Youth). Publications of Oloum Al Tarbiya Journal, issue 16. Al Najah Al Jadida Printing Press, Casablanca, Morocco.

Salah Bayoumi. 2002. (Socialization and Personality: the Child between Reality and Future). Dar Al Maaref Publishing House, Cairo.

UNDP. 2002. (Arab Human Development Report-2002). Amman, Jordan.

---. **2003.** (Arab Human Development Report-2003). Amman, Jordan.

---. **2007.** (Achievements of the Arab Countries that Participated in the Trends in International Mathematics and Science Study TIMSS). Al Nool International for Advertising, Amman.

---. **2008.** (The Human Development Report). Virginia, USA.

UNDP and Mohammed bin Rashid Al Maktoum. 2009. (The Arab Knowledge Report 2009: Towards Productive Intercommunication for Knowledge). Al-Ghurair Printing and Publishing House, Dubai.

FRENCH REFERENCES

Delors J. 1996. (L'éducation: Un trésor est caché dedans, Rapport à l'Unesco de la commission internationale sur l'éducation pour le vingt et unième siècle). Editions Unesco/Odile Jacob, Paris.

Khadija Elmadmad, 2000. (La femme Marocaine entre l'Egalité et l'Inégalité des Droits in un Siècle de Femmes). Maroc.

Ministère de l'Education Nationale, de l'Enseignement Supérieur, de la Formation des Cadres et de la Recherches Scientifique. (Rencontre Nationale de restitution des résultats de l'étude d'évaluation du système de recherche dans les domaines au Maroc). Juin 2009.

Ministère de l'Education Nationale, de l'Enseignement Supérieur, de la formation des cadres et de la Recherche Scientifique. (Recueil statistique de l'éducation 2008/2009). Maroc.

LIST OF BACKGROUND PAPERS (AUTHOR NAME; PAPER LIST):

Abdellah El Khyari. (School Knowledge and Knowledge Society in Morocco).

Ahmad Idaly. (Pedagogical reform in Morocco: strong good will versus weak qualitative performance).

Al-Hassan Boquentar. (Impact of reform on the education system in Morocco).

Kholoud Al Sibai'e. (Family upbringing and its role in preparing Morocco future generation for the knowledge society).

APPENDIX



LIST OF NAME OF RABAT WORKSHOP PARTICIPANTS

This workshop was held under the auspices of Mr. Ahmed Akhchichine, Minister of National Education, Higher Education, Professional Training and Scientific Research.

Mr. Adel Al Khiary	Dr. Mohammed Al Radi
Dr. Mohammed Al Sawali	Mr. Said Al Rahouny
Dr. Ibrahim Shadaty	Dr. Madi Lahssan
Dr. Al Tawil Hassan	Dr. Mohammed Wakidy
Dr. Abdul Aziz Al Ghazi	Mrs. Khadija Alimilahy
Mr. Mostafa Mohsen	Dr. Ahmed Edali
Dr. Mariam Ait Ahmad	Ms. Rajaa Lahwaidek
Mrs. Saida Edrisi Tefrawty	Mr. Mostafa Hosny
Dr. Mohammed Ahmeed	Dr. Mohammed Fatehy
Dr. Al Zaki Abdul Kader	Mr. Ahmed Rekeyy
Mr. Abdul Karim Balhag	Mr. Khalil Al Edrisi
Dr. Al Saadya Ayash	Dr. Kholoud Al Sebaie
Dr. Mohammed Zakour	Dr. Halima Al Gharari
Mrs. Yousra Al Omrani	Dr. Nadia Al Tazy
Mr. Mohammed Al Iraqi	Mr. Al Shohob Mohammed
Dr. Abdul Latif Kadai	Mrs. Fatma Yassin
Ms. Safaa Kadoury	Mr. Al Kaddam Mohammed
Ms. Ghuzlan Al Assry	Mr. Ali Badran
Ms. Zohour Al Naeem	Dr. Mohammed Mo'men
Ms. Elham Kusair	Mr. Ismail Al Moussawi
Ms. Sanaa Al Wahaby	Mr. Mohammed bin Gloun Andalusi
Ms. Naema Eskerie	Mr. Kabash Mohammed
Dr. Al Araby Hannan	Mrs. Nagah Zahra
Mr. Al Arafu Hudeya	Mr. Mohammed Shakroun
Dr. Al Malky Al Hassy	Dr. Al Jamei Halima
Dr. Bouartis Mulay Ahmed	Dr. Omar Binayash
Mr. Mawad Nour El Din	Mr. Al Mekki Al Marouni
Dr. Rashida Barada	



NAME OF SCHOOLS PARTICIPATING IN MOROCCO SURVEY

The Commercial Technical School	Al Malki School
Ibn Batouta School	Abu Bakr Al Sedik School
Ibn Rushd School (Rabat)	Haman Al Fatwaky
Ibn Sina	Dar El Salam
Al Hassan II School (Rabat)	Abdul Karim Al Khattabi
Al Sharif Al Idrisi	Abdullah Kanoun
Al Elmia Private School	Omar Al Khayam School
Al Laimoon School	Lalla Aicha School
Mullay Abdullah School	Mullay Youssef School
Princess Lalla Nezha	Hassania Schools
Al Moubadara Private Schools	Mohammed V Schools
Atlas Schools Group	Rabat Institute
Mulhakat Gibran Khalil Gibran	Al Sabeel InSTITUTE
Al Manbaa Institute	Riad Al Maarefa Institute



MOROCCO QUESTIONNAIRE RESULTS

Table m3-1: Teachers' reasons for using technologies (%)

	Yes	No
Searching for educational resources	88.6	11.4
Preparing lessons	84.4	15.6
Selecting exercises and activities	88.1	11.9
Consulting with other colleagues	68.3	31.7
Communicating with students	54.5	45.5

Table m3-2: Opinions of teachers on the practice of some teaching activities and methodologies (%)

	In all classes	In most classes	In some classes	No practice
A. Participating in educational/learning activities with students	47	42.5	9.8	0.7
B. Training students on problem solving	37.1	39.4	22	1.5
C. Explaining theoretical concepts	55	21.7	21.7	1.6
D. Writing lessons on the board	45.3	22.7	21.1	10.9
E. Discussing the concepts of the lessons with students.	65.7	27	7.3	0
F. Discussing student achievement relating to the concept of the lessons	7.2	17.4	63.8	11.6
G. Assessing student achievement (tests, exams)	13.8	25.4	60.1	0.7
H. Helping students accomplish scientific/practical experiments	5.7	14.2	36.8	43.3
I. Organising student work in small groups	7.4	18.5	62.2	11.9
J. Linking educational material with the requirements of everyday life	27.7	35	31.5	5.8
K. Keeping silence in the classroom and deterring troublemakers	62.1	26.4	9.3	2.2

Table m3-3: Opinions of teachers on the importance of some teaching practices (%)

	Not necessary	Somewhat necessary	Very necessary	Do not know
A. Training students to analyse varied information	3.6	20.7	75.7%	0
B. Training students in critical thinking	2.1	16.4	79.3	2.2
C. Encouraging students to work independently and take the initiative	1.4	22.7	75.2	0.7
D. Helping students conduct research	2.8	41.8	54.6	0.7
E. Training students on problem solving	0.8	22.6	73.7	2.9
F. Helping students memorise rules and laws of scientific material	4.5	38.1	52.2	5.2
G. Motivating students to interact with the teacher	1.4	10.1	87.1	1.4
H. Following students step by step in all their assigned activities	9.4	47.5	43.2	0
J. Training students on self-evaluation practices	0.7	27.8	70.7	0.8
K. Training students on team work	1.4	27.7	70.2	0.7
L. Teaching students on social principles and values	0	16.1	83.2	0.7
M. Requiring students to memorise lessons	23.4	53.2	23.4	0

Table m3-4: Features of knowledge society as perceived by teachers (%)

	Yes	No
A. Density of information	73.5	26.5
B. Easy access to information	89.3	10.7
C. Fast dissemination of knowledge	84.1	15.9
D. Competition on gaining information	57	43
E. Possession of knowledge which is the measure of the power of nations	83.1	16.9
F. Production of knowledge which is the measure of the wealth of nations	85.7	14.3
G. Intensive use of the computer and internet	83.1	16.9
H. Growing demand for knowledge	73.1	26.9
I. Associating the labor market with the level of knowledge	74.8	25.2
J. Linking production with the outputs of scientific research	81.7	18.3
K. Localising knowledge instead of importing its outputs	70.5	29.5
L. Development of technological sciences but not necessarily human sciences	54.8	45.2
M. Knowledge is an approach to human development	91.6	8.4
N. Knowledge is a human right for the whole population	89.1	10.9

Table m3-5: Educational trends of teachers (%)

	Completely agree	Somewhat agree	Disagree	Completely disagree
A. It is necessary to focus on strengthening the memorisation ability of students to succeed in their study	14.5	51.1	22.9	11.5
B. All students can learn and succeed if they are taught by efficient teachers	34.6	51.1	13.5	0.8
C. Successful teachers are those who can accomplish their curriculum tasks in the specified manner and within the specified timeline.	34.1	40.2	19.8	6.1
D. Giving teachers the chance to take the initiative or innovate harms the education system.	11.4	12.1	46.2	30.3
E. Teachers are not required to know all teaching methodologies but should have mastered one of them.	9.8	39.1	42.9	8.2
F. Tests and exams are the best way of encouraging students to concentrate and learn.	9	13.4	58.2	19.4
G. The best way to improve the ability of students to learn is to adopt a qualitative evaluation system (without grades).	21.2	65.2	12.1	1.5
H. Consulting and coordinating with students' parents is part of the teachers' duties.	45.9	45.9	6.8	1.6
I. Educational reform processes pressure teachers and decrease their outputs	24.8	42.9	27.8	4.5
J. It is sufficient for teachers to be experts in their specialties in order to succeed in their mission	17.3	39.8	36.1	6.8
K. It is the mission of teachers to help their students have a passion for learning and knowledge	78.9	19.5	1.6	0
L. The important feature of successful teachers is their ability to communicate information related to their specialty	60.4	29.9	9	0.7
M. It is necessary for teachers to be familiar with aspects of other subjects to be able to teach their own subjects	33.8	48.9	15	2.3

Table m3-6: Opinions of teachers on some assessment practices (%)

	No importance	Little importance	Moderate importance	Much importance
A. Regular school attendance(no absence)	2.8	0.7	5.6	90.9
B. Effort exerted in homework	2.8	2.1	12.8	82.3
C. Steady improvement of results	2.9	0	10.9	86.2
D. Good conduct inside and outside classroom	2.1	3.5	12	82.4
E. Effective classroom participation	2.7	0.7	8.2	88.4
F. The ability to innovate	1.4	2.2	36.4	60
G. The ability to think and question	2.1	1.5	16.4	80
H. Taking the initiative	0.7	2.2	31.4	65.7
I. Correct answers on the exam paper	3.6	2.2	23.9	70.3

Table m3-7: Time devoted weekly to some educational, administrative and training activities (%)

	None	Less than one hour	From one to two hours	From 3 to 4 hours	More than 5 hours
A. Planning and preparing lessons	0	3.6	39.1	34.8	22.5
B. Correcting students' homework	0	5.9	21.5	30.4	42.2
C. Attending administrative meetings	12.3	39.2	39.2	8.5	0.8
D. Holding meetings with students' parents	33.6	52.2	9	5.2	0
E. Meeting students (in clubs or private tuitions)	34.4	12.2	38.2	13.7	1.5
F. Undertaking activities for professional development (attending lectures, reading specialised journals, etc)	12.4	18.8	34.8	18.8	15.2
G. Participating in an educational production (authoring books, setting up projects, taking part in an assessment, etc)	52.6	11.9	14.8	11.1	9.6

Table m3-8: Teachers' views on themselves (%)

	Completely agree	Somewhat agree	Disagree	Completely disagree
A. The society no longer shows respect to teachers.	58.5	33.8	6.3	1.4

Table m3-9: Opinions of teachers about students (%)

	Completely agree	Somewhat agree	Disagree	Completely disagree
A. Students generally show less respect to their teachers than in the past.	56.3	35.9	6.4	1.4
B. Student interest in study is decreasing day after day.	59.7	30.6	8.3	1.4
C. The current generation of students has strong personality.	14.9	51.8	22.7	10.6
D. The preparation of the current generation of students is better than the preparation of previous generations	7.9	23.6	43.6	25
E. The material values of most students surpass their knowledge values.	54.9	40.8	3.6	0.7

Table m3-10: Teachers' relations with the teaching profession and its requirements (%)

	Completely apply	Somewhat apply	Do not apply	Do not apply at all
A. I will leave teaching if I find a job with the same salary and conditions.	20.9	15.5	44.2	19.4
B. I will leave teaching if I find a job that generates a higher income	26	23.6	38.2	12.2
C. The teaching profession salary does not make me feel self-sufficient	42.1	32.9	21.4	3.6
D. The teaching profession makes me feel I have a mission to fulfill	86.5	12.1	1.4	0

Table m3-11: Teachers' views on enabling environments

	Completely agree (%)	Somewhat agree (%)	Disagree (%)	Completely disagree (%)
A. The education system offers teachers facilities to resume their education during their career.	12.5	23.4	43.8	20.3
B. Training centres for teachers exist near the school and I can attend them when necessary.	12.5	14.3	33.9	39.3
C. The state offers incentives to highly efficient teachers.	15.3	9	31.5	44.2
D. The state provides several training opportunities during work to improve the level of education.	14.3	42.9	26.8	16
E. The state provides training courses to new teachers.	35.1	43.9	12.3	8.7
F. The selection of candidates for the teaching profession is governed by strict criteria.	21.6	38.8	24.1	15.5
G. There is a gap between the training of teachers and the true requirements of the teaching profession.	35.7	49.2	8.7	6.4
H. The state offers salaries to teachers which guarantee them a good standard of living.	14	20.2	39.6	26.4
I. There are laws and institutions that protect the rights of teachers.	18.8	40.2	26.5	14.5
J. The state provides teachers with in-service training upon request.	10.9	32	35.3	21.8

Table m3-12: Teachers' views on curricula (%)

	Completely agree	Somewhat agree	Disagree	Completely disagree
A. The educational programmes and curricula prepare students to overcome future challenges.	44.2	38	16.2	1.6
B. The educational programmes and curricula help students acquire necessary skills.	34.6	51.5	12.4	1.5
C. The educational programmes and curricula help prepare efficient students who are up to external competition.	30.2	39.5	25.6	4.7
D. The educational programmes and curricula contribute to promoting the value of citizenship and civilised behaviour.	37.4	47.3	14.5	0.8
E. The educational programmes and curricula prepare students to cope with problems in everyday life.	26.7	43.5	26	3.8
F. The educational programmes and curricula provide training that takes into account knowledge and emotional dimensions.	25.4	53.1	20.7	0.8
G. The educational programmes and curricula provide training which keep up with scientific development.	28.2	46.6	23.7	1.5

Table m3-13: Teachers' evaluation of their abilities to enable students to acquire multiple skills (%)

	Limited ability	Intermediate ability	Great ability	Do not know
A. Varied information analysis	12.2	47.3	32.1	8.4%
B. Critical thinking	19.1	53.4	20.6	6.9
C. Taking initiative	18.2	55.3	23.5	3
D. Accomplishing research	15.3	54.2	28.2	2.3
E. Solving problems	13.2	58.1	20.2	8.5
F. Using their knowledge in different situations.	13.4	45.5	29.9	11.2
G. Memorising rules and laws of scientific material	10.2	35.2	40.6	14
H. Working independently	23.6	44.9	22	9.5
I. Memorising lessons	20.2	42.6	26.4	10.8
J. Life-long education	21.5	35.4	24.6	18.4
K. Team-work	21.6	44	28.4	6
L. Future planning	28.8	34.1	19.7	17.4

Table m3-14 Opinions of teachers on school environment (%)

	Always	Sometimes	Rarely	Never
A. Violence occurs in school between teachers	2.1	5.7	19.3	72.9
B. Violence occurs in school between students and teaching and administrative staff	4.3	34.8	37	23.9
C. Violence occurs in school between students	9.5	42.3	39.4	8.8

Table m3-15: Teachers' views on support provided to students (%)

	Always	Sometimes	Rarely	Never
A. The school helps students who have learning difficulties.	24.6	47	17.2	12.1
B. The school provides incentives to distinguished students.	45.3	25.2	17.3	12.2
C. The school has a system for substituting absent teachers.	22.2	16.3	8.9	52.6
D. The school has specialists who help teachers deal with the material, psychological or social difficulties faced by students.	9.4	13	8	69.6

Table m3-16: Teachers' views on support provided for them (%)

	Always	Sometimes	Never
A. School has a system for regular evaluation of teachers by students	9.5	10.4	72.2
B. School has a system for regular evaluation of teachers by management	37.9	16.1	33.1
C. School helps teachers develop their abilities and skills by providing them with regular training courses	11.6	31.1	39.9
D. Teacher meetings are held in school for consultation and coordination of educational activities	19.7	47.9	12.7

Table m3-17: Factors affecting the preparation of generations (%)

	Yes	No
A. The weak material resources of the school	87.8	12.2
B. Tense relations between students, teachers and administrators	65.1	34.9
C. Shortage of facilities and equipment in school	92.6	7.4
D. Inadequate training of teachers	69.6	30.4
E. Mismatch between training and the growing needs of teachers	82.7	17.3
F. Low incentives (material, professional, etc)	89.1	10.9
G. Multiple competitive sources of knowledge outside school	57.5	42.5
H. Low learning motivation of students	88.5	11.5
I. Inability of students to master the Arabic language	80.2	19.8
J. Insufficient command of foreign languages	88	12

Table m3-18: Freedom of choice for teachers (%)

	Absolute freedom	A good deal of freedom	Limited freedom	No freedom
A. Personal options	35	37.3	27.7	0
B. Academic options	15.9	42.4	36.4	5.3
C. Intellectual options	27.1	40.6	29.3	3
D. Professional options	14.2	26.1	53.7	6

Table m3-19: Teachers' freedom of opinion (%)

Yes	No
86.6	13.4

Table m3-20: Effect of available enabling environments on student skills and values*

Enabling environments / Skills and values	The Family's method of raising children	Mother's education level	Family's interest in the student's studies	Family's material welfare	Educational welfare at home	Educational welfare in the local environment	Father's education level	Educational welfare at school	Standard coefficients
Cognitive skills	-	0.169	0.132	0.134-	0.206		0.097	0.084	
Conative skills	0.150	-	-	-	-	0.098	-	-	
Social skills	-	-	-	-	0.083	0.074	-	0.098	
Cognitive values	0.266	-	-	0.232-	0.225	-	-	0.102	
Social values	0.229	0.131-	0.086	0.123-	0.089	0.060	-	-	
Conative values	0.241	0.108-	-	0.142-	0.142-	-	-	-	
Universal values	0.249	0.092-	0.073	0.242-	0.175	0.062	-	-	

* numbers in the table express the standardised regression coefficient



EDUCATIONAL QUANTITATIVE DEVELOPMENT INDICES IN MOROCCO

Table m3-21: Development of number of beneficiaries of the social subsidy

		2003-2004	2010-2011
Beneficiaries of school feeding	Primary Education	975,085	1,135,107
	Secondary Elementary Education	20,915	42,556
	Total	996,000	1,177,663
Beneficiaries of boarding schools	Primary Education	720	1,260
	Secondary Preparatory Education	39,750	40,522
	Vocational Secondary Education	43,457	50,279
	Total	83,927	92,061
Donees	Primary Education	913	1,829
	Secondary Preparatory Education	36,837	50,941
	Vocational Secondary Education	44,389	51,579
	Total	82,139	104,349
Beneficiaries of school tools	Primary Education		2,959,648
	Secondary Preparatory Education		254,932
	Total		3,214,580
Beneficiaries of Dar Talib in the 2 divisions of secondary education			30,687

Source: The Ministry of National Education, Higher Education, Professional Training and Scientific Research

Research Table m3-22: Curricula Developing

Indices	Achievement 2009 & 2010, and the 1st semester of 2011	Goals 2009 & 2010, and the 1st semester of 2011	Achievement rate
Methodological framework for rebuilding curricula	Preparing a methodological framework for rebuilding curricula	Preparing a methodological framework for rebuilding curricula	100%
Current Curricula Assessment	Preparing reference items for assessing different components of primary education	Preparing reference items for assessing different components of primary education	100%
Defining shortcomings and deficiencies of current education programs	Counting shortcomings and deficiencies that should be addressed in primary education programs	Counting shortcomings and deficiencies that should be addressed in primary education programs	100%
Correction and appropriateness of current school curricula to updates of the urgent program	Reviewing school programs for all subjects of the primary education	Reviewing school programs for all subjects of the primary education	100%
Updating educational instructions in light of updates of the urgent program	Preparing educational instructions for all schools subjects in primary education	Preparing educational instructions for all schools subjects in primary education	100%
Putting a framework for the production of new school books	Preparing specification sheets for preparing school books and teacher guides for primary education	Preparing specification sheets for preparing school books and teacher guides for primary education	100%

Source: The Ministry of National Education, Higher Education, Professional Training and Scientific Research

Table m3-23: Equipping educational institutions:

Indices	Achievement 2009 & 2010, and the 1st semester of 2011	Goals 2009 & 2010, and the 1st semester of 2011	Achievement rate
Number of institutions equipped	4760	6556	73%
Number of institutions equipped with extensions of health facilities or fences	1464	2332	63%
Number of rooms overhauled	13594 are being overhauled 18221 overhauled	40142	79%
Number of Available:			
Fences	908	1257	72%
Water Circuits	1730	2510	69%
Water tanks	2330	2629	89%
Number of institutions linked to different Networks:			
Water	2730	2423	80%
Electricity	2481	3363	74%
Solar Panels	938	1088	86%
Decontamination	567	776	73%
Decontamination refineries and wells	1009	1100	92%
Number of education institutions benefiting from renewing school furniture	2595	4518	75%
Number of boarding schools overhauled	286	295	97%
Number of schools benefiting from preventive maintenance	5111	10416	49%

Source: The Ministry of National Education, Higher Education, Professional Training and Scientific

Table: m3-24: Integrating ICT in Education

Indices	Achievement 2009 & 2010, and the 1st semester of 2011	Goals 2009 & 2010, and the 1st semester of 2011	Achievement rate
Number of institutions equipped with a multi-media room	913	1432	63.75%
Number of training centres equipped with a multi-media room	49	49	100%
Number of institutions linked to Internet	3002	3182	94.34%
Number of teachers benefiting from training in TICE	69956	148937	46.97%
Number of inspectors benefiting from training in TICE	2752	2752	100%
Number of acquired digital equipments	142605 Cd	100000 CD	142.6%
Number of distributed digital equipments	56844 Cd	100000 CD	56%
Number of digital equipments put on the internet	56844 Cd	100000 CD	56%
Number of digital equipments put in place	85764 Cd	142608 CD	60.13%

The Ministry of National Education, Higher Education, Professional Training and Scientific Research

