

## Suggested Educational Competencies for School Teachers In Light of the Global Tendencies towards a Knowledge Economy

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**[Abstract]** This study aims at preparing a vision for educational competencies of school teachers in light of the global tendencies toward a knowledge-based economy in order to refine qualifying teacher programs. To achieve these goals, the study addressed the following concerns: the educational competencies, the challenges that face the teaching systems in the current century as well as the knowledge-based economy, and the suggested educational competencies for school teachers. This study used an analytical descriptive method in the summation of information, opinions, facts, and concepts that were related to the core of the study to construct a knowledge system that highlights the studied problem's importance and its targets. This study suggested 45 educational competencies for teachers that were divided into seven categories.

**[Keywords]** teacher competency; knowledge economy; global knowledge system; instructional competencies.

### Background and Importance

The current communication and information revolution embodies a core of concern for human thinking and a controversial issue of modern life as a result of the technical aspect of life and a clear interest in reviving and improving different human lifestyles. It is similar to fishing net without strings or ropes; however, they have been inevitably able to hunt the word. People start out on journeys for them and move through their windows and electronics and creativity because they occupy an important position, especially in educational systems, as they are considered a matter of life or death to any modern society, as stated by the well-known scientist of civilization Arnold Twin. They are the means of nations to solve their problems as stated by Torans, the psychologist interested in the study of creativity and distinction (2005). Societies are in need of reviewing their systems and teaching methods in order to bring out new ideas imposed by the continuous process of change, development, and innovation and creativity. This is the only way for development associated with practice and activity linked to work plans (Morgerison, 1998).

The partnership report of 21st century skills for learning and competition (2008) referred to the necessity of reform and reshaping of educational systems for the following reasons: a) The change toward a knowledge economy and information. b) The need for trained qualified people who are able to adapt with time requirements. c) The ability to compete with developed countries in the fields of science, industry and economy. d) The need for obtaining the skills of critical and creative thinking and problem-solving methods and to apply them in real life situations (Bakhsh & Yasseen, 2009).

Jordan is the one of the countries that started an objective investigation of the educational system, aiming at all its inputs, processes, and outputs through a scientific and practical framework. Jordan is characterized as being realistic, flexible and dynamic. A clear vision in pursuing and comprehensively assessing the educational system is necessary to promote the output level of general education and align competences with the job market to concur with the needs and ambitions of the Jordanian society, their development plans, and keeping up with modern development and international (global) civilization and cultures. Educational reform for the knowledge economy, which has been adopted by the Jordanian government, is a sign of the concern of educational leaders about linking education to current innovations.

Education, regardless of its level, is like other sectors that have adopted change and modernization as a response to time requirements, globalization challenges, the information revolution, and the knowledge economy. Modern educational trends emphasize the necessity of keeping up with the educational policies of the 21st century, which are featured by the technological revolution, knowledge burst, and economic

blocs, and driven by education professionals who take the leading role of steering development and progress. Traditional educational methods and patterns are no longer able to meet the current level of innovation. It has become necessary to follow the modern, practical, positive methods with the participation of all aspects of the educational process through comprehensive programs and policies, which are characterized by qualitative performance and high quality. They should reflect the prospects of education and comply with national standards and international covenants associated with human rights, social fairness, equality of education opportunities, good citizenship, affiliation, freedom, democracy, tolerance, and deal with technology with a sense of honest competition, and diversity of instructional resources (Al-keel any, 2001)

Because teachers are one of the main inputs in the educational process, their efforts should elevate the quality of instruction and performance of students with high, professional standards because their role is to prepare and develop human resources along scientific, intellectual, cultural, economic, and social aspects.

The greatest and most important event in the preparation of teachers is the education movement based on the competencies adopted by the USA. Its principles, aims, and programs have been applied in different education and training fields. It was natural for Arab countries to be affected by this movement. The strategic report of the Arab education development came into harmony with this movement, expressing the modern attitudes that will be used in the development of the programs for preparing and training teachers to enhance their competences and capabilities.

Such movements came in response to political, technical, and scientific developments to meet economic and social requirements. The style of current life has not only been restricted to critical education, but has gone further to the domains of training and general education that enable learners to acquire knowledge and information, have skills and develop the attitudes required by their various roles in society, and provide them with appropriate training programs to promote their productive competence, and improve their performance in the different frameworks of educational institutes (Mar'I, 2005). International interest in the movement of competence-based education has grown in light of the growing revolution of communications and information. This movement has been entrusted with great responsibilities that emphasize the accomplishment of a host of educational, cultural, and social aims. These include enhancing quality by concentrating on inputs, processes, and outputs, and achieving equal educational opportunity through the use of educational technology to cope with current scientific processes.

Many pedagogical researchers did their best to define the educational competence; some linked it to the learner's behavior and skills, and others linked it to the teacher's performance and role. However, there has been an increasing attitude since the 1970's that calls for discrimination between them. What distinguishes the competence-based movement is its wide extension and concentration on the teacher's knowledge and productive skills and its guided training toward behavioral and practical performance. Competence-based education includes a host of criteria related to development, perception knowledge, behavioral performance, and education outputs and their assessment (Al-fatlawy, 2003).

Starting the new age requires beginning with educational and instructional institutes in their early stages because international and Arab future attention nowadays is looking toward bridging the digital gap in order to develop education in the direction of a knowledge economy, which is based on purposes, aims, and results and to promote the basic structure of economic, social, and political developmental knowledge. It has become the dominating power over production inputs in different aspects of economic activities after the period of capital, land, and labor power as the cores of economy. The computer is the core of this process because it is the primary and fast tool for processing information and builds the future economy, which is based on regenerated knowledge (Ali & Hijazzi, 2005).

Therefore, transition toward a knowledge economy in education, regardless of its level, requires the collaboration of all human efforts, providing financial, skillful, and technical conditions, passing legislation and organizing the environment, which makes its success possible. Because man is the intellectual core of the educational process and one of its inputs and outputs, it is necessary to have adequate content that changes and progresses as a comprehensive philosophy and national, modern

requirements. Consequently, all targeted skills and training opportunities should be available in order to apply this type of education (Lucy, 2004).

### **Importance of the Study**

The importance of this study stems from the role that the teacher will play in the educational process, representing the proposed educational competencies that he will acquire in light of the growing role of knowledge and information. Knowledge has become the main motivating core in all fields of life. Concentration on information and technology has become common. Many concepts and terms have appeared that reflect future attitudes, such as the information society information revolution, education economy, knowledge economy, digital economy, hypothesis economy, digital planet, intangible and net economy, electronic teaching, electronic government, information security, and information war, etc. The diversity of these titles should not confuse the education process, but there should be a suitable opportunity that allows the use of these innovations in a way that will shed light on the proposed educational competencies that should be acquired by the teacher.

These developments have imposed new tasks and responsibilities on the teacher, which enable him to perform his role effectively and with a high degree of accuracy. The study will also deal with the issues related to the importance of educational competence and the knowledge economy, and their impact on the educational process. Learners are expected to benefit in how they deal with various types of knowledge in all educational stages and levels.

### **Problem of the Study**

The world today encounters different changes in all political, social, and economic fields. It is described as a small or universal village that was launched by Marshal Macadam following the end of the Cold War. Technology is invading all aspects of life with all its different activities. Globalization has penetrated all educational institutions and is deeply rooted in all aspects, even the human conscience, without limits, restrictions, or controls. The intellectual effect of these events has moved to the field of education in a way that some countries, especially developed ones, have begun reconsidering the input of education process, and the teacher as the core of this process (Al-Tuwal, 2003).

Taking care of the preparation of teachers in the age of the knowledge economy is an important issue in developing education. Views about education have changed, and the concern now is about the individual needs of learning and their ability to cope with the educational environment. The behavior and performance of the teacher have been under study and analysis to determine the skills and knowledge required, as well as development (Abdilsalam, 2009).

Dealing with educational innovations does not cancel the teacher's effective, organized role in the educational process and without which no material or appropriate teaching aid could be chosen. The teacher is the person who plans for educational aims, designs, and develops programs and is responsible for implantation procedures and assessment methods. The teacher considers education as an organized process through which all participating components can be activated in order to enhance all students' creative and inventive learning.

In an effort to improve teachers' competencies in the age of the knowledge economy, increase their effectiveness, and emphasize the importance of these competencies in the formation of the suggested educational competencies, it is essential for their inclusion in the continuous programs of preparation, rehabilitation, and development.

Based on these facts and through the researcher's theoretical and practical experience in teaching, his feeling of the low level of educational outputs and the instability of teachers' and learners' competencies in dealing seriously with the requirements of the current age and stage of development, the theme of this study, its aims, content, and approach have been formulated.

### **Aims of the Study**

This study seeks to achieve the following aims: a) Offer an idea about the proposed educational competencies for school teachers in light of international attitudes toward knowledge economy.

b) Emphasize the concept, requirements, characteristics, and advantages of knowledge economy in the educational process. c) Identify the concept of educational competencies, their definitions, means, characteristics and reasons.

### **Questions of the Study**

- What is an educational competence and how can it be identified?
- What is the competence-based education movement, its characteristics, and its factors?
- What is a knowledge economy? What are its requirements, characteristics, and advantages in the educational process?
- What are the proposed educational competencies for school teachers in light of international attitudes toward the knowledge economy?

### **Methodology of the Study**

The researcher used the descriptive analytical method for gathering opinions, information, facts, and concepts related to the cores of the study in order to build up a knowledge system that explains the problem, background, importance, and aims of the study by referring to many studies, research, and articles. The researcher also investigated some international experiments in the field of knowledge economy application in education to benefit from them in regard to educational competencies and the knowledge economy. After, the researcher formed a list of suggested educational competencies for school teachers.

### ***Procedural Definitions***

*Educational competence:* It is the extent of the teachers' acquisition of distinguished personality components of academic, educational, and professional aspects that is able to communicate and deal with age requirements. This happens through the concentration on knowledge and how it is produced and created and its use in newly developed technical ways in educational situations.

*Knowledge economy:* It is the economy which concentrates on the teacher's role and his method of dealing with knowledge, its production creation, and its use with newly developed technical ways in educational situations, which emphasize dialogue free, expression, creativity, and time. Its core is the learner with all his senses and mental powers.

### ***Limitation of the Study***

For the sake of the safety and procedure of the study, in order to be in its correct frame, it was restricted to the preparation of an idea about the proposed educational competencies for school teachers (primary, basic, and secondary); emphasized the different sides of educational competencies and knowledge economy; and shed light on the challenges that were encountered in education in general in the beginning of third millennium.

### ***The Study Plan***

The study went through three main cores: theoretical frame, literature, and proposed educational competencies for school teachers. The theoretical frame discussed educational competencies, the determining characteristics of the increased factors that challenge and counter education in general in the beginning of third millennium, as well as the identification of the knowledge economy and its requirements and advantages. The second core discussed previous studies and some international experiments in the field of applying knowledge economy and educational competencies in education. The third core discussed the proposed educational competencies for school teachers.

### **Theoretical Definition**

#### ***Educational Competence***

All educators believe that the promotion of educational performance requires concern about teachers' preparation, training, and rehabilitation according to advanced educational programs that are based on

scientific bases originating in international attitudes and modern educational theories (competence-based education movement).

### ***Competence Definition***

The following are commonly used definitions in educational literature: *a)* Knowledge and skills that a teaching staff should have at universities and colleges in educational curricular and co-curricular situations to achieve expected aims (Kharabshih, 2009, p.119). *b)* The ability to perform a certain behaviors linked to educational tasks in teaching; it consists of knowledge, skills, and attitudes connected with teaching that are measurable and preformed with teaching outcomes that are measurable and preformed with an appropriate degree of accuracy for expected aims (Illias, 2009, P.5). *c)* The extent of the teacher's acquisition of planning, implementation, assessment, and development competencies in the framework of the educational process (Arabiyyt, 2007). *d)* The ability to do something effectively with accuracy and with a level of performance that uses less effort, time, and cost, and it could be related to knowledge and performance (Mari, 2005, p.8). *e)* The behavioral objectives that are clear and can be observed, implemented, assessed, and performed by the teacher inside the classroom (Al-fattlawy, 2003). *f)* The ability to do something or have an expected change or production (James, 2000).

According to the above definitions of the concept of educational competence the following can be summarized: *a)* Educational competence is a host of knowledge skills are attitudes that the teacher should have in order to be able to present the study material manage educational situation and encounter whatever stimulating activities that many occur inside and outside the classroom. *b)* Educational competence is a combination of knowledge skills capabilities and tasks connected with the teacher's behavior and his ability to determine aims and their implementation assessment and follow up procedures. *c)* Educational competence includes everything related to planning education preparation managing educational situation communicating and teaching with teachers and learners' implementation and assessment.

### ***Ways of Determining Educational Competences***

Determining competence in a secure way is one of the important things that competence-based teaching success depends on. One of the advantages of competences that describes a specific behavior to be accomplished in light of determining the competence that are the group of aims methods training activates the teachers role and assessment requirements. For the purposes of determining educational competences there are number or frameworks and references that could be applied to achieve them:

- a) Describing and analyzing the inputs of educational process on the top of which are the teacher and the learner.
- b) Describing and analyzing instruction procedures and methods.
- c) Describing and analyzing programs and curricula.
- d) Accrediting the results of previous researches and studies in the fields of education.
- e) Accrediting the experiences and opinions of concerned people in the field of teacher preparation.
- f) Accrediting the theories and experiments of some training countries in the field of teacher preparation.
- g) Accrediting ready-made lists of educational competences.
- h) Accrediting the methods of observation and deduction.

To determine the proposed educational competences for school teachers in this study, the researcher depended on several theoretical frameworks, field studies of previous research, and international experiments that dealt with the topic of the teachers' educational competences traits and characteristics in light of the international attitudes toward knowledge economy.

### ***Definition of Competence-Based Education Movement***

The issue of education is linked to a greater movement in the field of preparing teachers in the world, called "competence-based education movement". This movement has its origin, aims, educational programs based on scientific bases, and modern educational behavioral theories on which it is based. It

has relationships with other movements that preceded and followed, and several definitions have appeared which reflect its main concepts and characteristics: *a)* The program which includes a group of technology, knowledge and skill competences which are related to the field of educational technology use and the way of teachers training (Beacher, 1991, p.17). *b)* The program which includes knowledge, skill and aptitudes which enable the teacher to reach new types of learning (Kennedy, 1991, p. 17). *c)* The program which is flexible in training and allows progress in competence from the easy to the difficult (Themson, 1991, p. 90).

In the context of their discussion about educational competences, Chisholm and Ely (1993, p. 80) refer to a group of common characteristics of most competence based educational programs:

- a) The competences (information, skills, behavior) which will be an acquired by the learner taken from the direct imagined roles of the teacher and explained in a way that makes it easier to assess the learners behavior toward already stated competences.
- b) The criteria used in assessing specific competences which are clear in showing the expected levels of accuracy in light of already stated circumstances .
- c) The extent of the learners' progress in covering the program is determined by the competence shown rather than by the time spent or by the course finished.
- d) Most educational programs follow a personal manner which takes into account the learners needs.
- e) Educational techniques are mostly part of competence-based programs.

Therefore, the use of competence-based educational programs has several benefits. The most prominent of which is concerned with information, skills, individual needs, concentration on specific aims, and emphasis on the process in which the general and special aims of program are stated and used as a basis for assessment. Preparation efficiency is reinforced by the appropriate use of technology and the characteristic of accountancy and benefit.

### ***The Rise of Competence-Based Education Movement***

It is certain that the factors which led to the rise of competence-based education movement has gone beyond educational, instructional and cultural frames and extended to include other aspects and dimensions, hindered by political, economic and social circumstances which occurred by current scientific development and technological progress in the world. Competence-based educational programs were applied in the 1970s, but this concept is not new. Educational studies and researches refer to the fact that this concept in its basis and origin traced back to some curricular theories and their educational applications which appeared in the beginning of lost century and which emphasized in one of their parts the concept of performance (James, 2000).

Abu Zainah (1990, p. 115) praised the role which the theories of behavioral education played in providing this movement with practical principles and strategies for designing instructional programs peculiar zing and mastering education, determining competence-related characteristics and providing the leaner with specific aims to manifest his capabilities and ultimately enhance his skills.

In spite of the fact that some educators have used the two expressions of competence and educational performance as synonyms, there has been an increasing trend since the 1970s which calls for discrimination between them. The most importance thing that distinguishes competence-based education movement is its extension and clear concentration on education, knowledge, and production skills and training oriented toward practical and behavioral performance. Some researchers and educators discussed a group of factors that had a prominent role in the rise of competence-based education movement (Mar'i, 2005):

- a) Questioning and Responsibility Movement.
- b) Accounting and Yield.
- c) The Influence of Some practical Philosophies such as Pragmatic and behavioral ones.
- d) Experimentation, Training and Field work.
- e) The change of the concept of education and the change of the role of school and teacher.
- f) The development of the concept of education technologies.

- g) The appearance of micro-teaching.
- h) Linking knowledge to performance.
- i) Making education peculiar.
- j) Development of assessment methods (measurement, assessment and rating).
- k) Development of the concept of systems method.

It seems clear from the previous presentation of the educational competences movement that there is harmony between its aims and international attitudes toward linking education with current educational innovation like knowledge economy, communication revolution and education technology. The benefits resulting from this movement in different educational stages and fields are not less important than the aims sought by these international attitudes, where the inputs of educational process have been emphasized, especially the teacher, concerning preparation and training through appropriate educational and training programs which have enabled him to effectively take part of the preparation, training and planning of educational aims in order to produce knowledge and obtain necessary competences and apply them in appropriate time and place, achieving highly qualitative educational products that serve the individual and society.

This movement has rooted democratic principles, freedom, and competition in individual and group education through the involvement of teachers and learners in making educational decisions. The movement has applied the principles of learning through the use of education technologies in a way that shifted the role of the teacher from being a giver of knowledge to a person who is able to produce and guide the learner in his educational course. The movement also has employed a lot of educational concepts like motivation, reinforcement, feedback, and self-assessment, the fact which led to the increase in the learner's self-confidence and success opportunities. It has linked education to work by enabling the teacher to perform some tasks efficiently away from the restriction of time and place and with little cost in a ways that leads to the achievement of expected aims in an ideal way.

### **Knowledge Economy**

There is no doubt that the communications and information revolution have become the backbone and influential power in current life. Scientific and technical accomplishment has entered all fields; the fact that has led to an ultimate change in lifestyle and job patterns because the human being has always sought to increase his information and cultural affairs and improve their quality and management. A knowledge economy constitutes the basis on which education is built and will be in the future. Many researchers have examined this topic starting from the justifications of applying knowledge economy skills in education. The following are some definitions related to knowledge economy:

- a) It is an educational system based on technical means and scientific research to benefit from individuals' potential at their different ages, as being the economic wealth for getting and employing the knowledge in order to develop national and human life through the acquisition, use, and production of the knowledge (Al-Hashimy and Al Ghazzawy, 2007).
- b) It is the economy which is related to the manner of obtaining and participating the knowledge, inventing and employing it with the aim of enhancing education at all levels and linking it to job market requirements to improve and sustain the quality of life in all fields (Nassir Al –Deen, 2007).
- c) It is the economy in which cultural affairs development and creativity play the greatest role (Al-Kisswany, 2005, p. 6). It is the economy that is basically built on the use of ideas and cultural affairs more than raw materials (Al-Ottaiby, 2004, p.105).
- d) It is the economy which is centered on the knowledge and the manner of obtaining, inventing, producing, and employing it with the aim of improving life quality and achieving sustainable development in a way that conforms to the challenges of globalization, technology, communications, and the information revolution (Mu'taman, 2004, p. 95).

It can be concluded from the previous presentation that the knowledge economy is the economy which is distinguished by a huge wealth of cultural affairs, not through its accumulation, but through the

processes of deduction and induction, information exploration, employment of brain, knowledge and thinking in production, research, development, participation, education, and application in all fields of life. All these cultural affairs grow strongly and increase through continuous use and circulation.

### ***Knowledge Economy Requirements***

The change toward a knowledge economy in education requires the collaborative effort of humanity. It also requires the availability of financial support, skills and technology, and legislation and an organizational environment that may guarantee the success potentials for this type of education. Because a human being is the intellectual capital and at the core of the educational process and one of its inputs and outputs, it is necessary for him to have enough conviction that change and development are a comprehensive philosophy and a social requirement and not a temporary one. Therefore, purposeful training opportunities, all cultural affairs, means, and real desire should be available when applying this type of education.

The knowledge economy requires a human educated, supportive, trained and qualified infrastructure, and a wide social base in the area of the use of communications and internet. Statistics show that the number of the users of the internet in the world is continuously growing. The number was five million in 1991 and it is expected to reach 600 million in 2006. Of this number, 75% was in America and Canada. In Africa and the Middle East, the percentage of the users of the internet is 1.5% of the population (Press?, 2003). The knowledge economy requires an educated society at all its age levels and cultural affairs. The percentage of people who work in the information sector in America reached 66% of the entire labor market. Increases in the information sector in France reached 30%, which is five times the increase of the general economy in Europe, which reached 6% in 2001 (Al-Shamary & Al-Leithy, 2008, p. 30).

Some international economic committees emphasized the fact that the knowledge plays a decisive role in production and should be involved in the essence of economic and educational programs and their intellectual human capital, which requires a public institutional economic and political framework. It also requires an effective system of education, training, creativity, invention, research, development, and a social cultural affair structure at all levels (David Skyme Association, 2002).

### ***Characteristics of the Knowledge Economy***

The knowledge economy occurs when knowledge achieves the greatest amount of added value and it is an economy of abundance, and not scarce. Knowledge, when it exists, is common if employed and managed appropriately. This means that the knowledge constitutes a basic component in the productive process as in marketing. Figures show that 50% of the whole product in advanced countries is based on knowledge, the growth of the knowledge, and its circulation increase by the increase of this component, which is based on information technology and communication exchange as the basic platform from which it is launched. The knowledge economy is distinguished by a huge wealth of information through the process of employing the knowledge in production, research, development, participation, and application in all aspects of life.

These cultural affairs are characterized by flexibility and conformity with circumstances. The knowledge as expressed by Socrates and Plato, "cultural affairs come out of the knowing self." Psychologists like Skinner and Piaget agreed with this by saying that it is like intimacy, which grows with participation, and this is an investment of the human being who is the capital of intellectual productive power (Sultan, 2006). A knowledge economy does not disappear because of its use, as is the case with consumed materials and substances. On the contrary, the more the brain is used, the more knowledge will be produced (Al-Ahmed & Al-Shury, 2007, P.148).

### ***Benefits of the Knowledge Economy***

It seems clear that the application of the knowledge economy in education reflects the following benefits:

- Emphasis on thinking and cultural affairs skills, their production, management and employment in different fields.

- Emphasis on the brain and mind rather than the body and power.
- Adoption of education by work, practice and continuous training and assessment all life through the participation of family, society and general life.
- Efficient investment of human resources as being the intellectual capital.
- Respect for the individual or the learner by giving him greater self-confidence and wider freedom to achieve his goals and solve his problems.
- Promotion of the educational process and improvement of its level in order to obtain high quality outputs which meet people's needs and job market requirements.
- Support and encouragement of educational institutions to meet the needs of society.
- Playing an important role in determining production components, their employment, and linking them to skill, specialization, and training.
- Employment of information technology and communications and achieving electronic exchange in all the aspects related to the application of the knowledge\_economy.
- Consideration for time and preserving it as long as it is necessary.
- Justice and equality in distributing the requirements of educational process to all students in a way that suits their needs and potentials.
- Emphasis on the principle of self, co-operative and group learning, and concentration on the spirit of participation for all.

### Literature

The knowledge economy represents the foundation upon which education is and will be based at all levels. Many researchers have examined and analyzed this topic, starting from the prospects of what education will be in light of political, economic, and cultural crises, as well as globalization, which encountered the world. The following presentation will shed light on a group of studies, which concentrated in most of its cores on the preparation of the teacher and his competences in light of international attitudes toward knowledge economy. Illias (2009, p. 5) presented a suggested view for the preparation of teachers according to the concept of educational competences to encounter current challenges as follows:

- a) The teacher should be a researcher and well-educated person.
- b) He should be able to organize the educational environment in a way that enhances the learners' self- learning.
- c) He should emphasize the skills of deduction, induction, and exploration.
- d) He should be a guide and a facilitator of learning.
- e) He should use and employ technology in all dimensions.
- f) He should help the students to discover their potentials and enhance their talents.
- g) He helps the students with the skills of communication and cooperative education.
- h) He should provide the students with the values of democracy and human rights.
- i) He makes the students aware of the importance of cultural change and scientific advancement.

Bakhsh and Yasseen (2009, p. 46) presented a suggested view of the qualities of public education teacher in light of the challenges of globalization, competitiveness, economy, and cultures as follows:

*Personal characteristics:* They include full understanding of divine religions, physical fitness, sound senses, language fluency, communication and collaboration with collages, self-confidence, open-mindedness, good appearance, scientific honesty, patience and loyalty.

*Characteristics of educational values:* they include perseverance motivation, self-esteem, tolerance, self-assessment and team work.

*Characteristics of development and profession progress:* they include the continuous familiarity with all new things in the fields of education, interest in the culture of teaching and learning, training and rehabilitation, wide knowledge, and cultural tolerance.

*Characteristics and competences of learning, teaching and learners:* it includes the identification of

psychological qualities of learners, determining their different needs in regard to their potentials and attitudes, designing educational situations in regard to students' characteristics; stimulating and motivating students; promoting the skills of observation, deduction, critical thinking, problem-solving method; diagnosing and treating learning difficulties; exploring talented and creative students and enhancing their potentials; being familiar with the basics of instructional strategies designing the activities which stimulate students to invent and create; mastery of the use of modern technologies, such as electronic learning and the internet; providing opportunities for students to use the types of learning, such as co-operative, collaborative, and hypothesized learning; considering the cultural and social background of students; mastery of the use of various assessment methods and employing them to solve students' problems and mastery of the use of statistical analysis methods.

*Characteristics related to the age of globalization and economic blocs:* they include the mastery of scientific research methods in the educational situation; being a successful educator, brilliant leader, distinguished critic, and honest advisor, expert in communication and information means; enjoying a strong intellectual capability when expressing judgments and belief in defending heritage and culture away from intolerance.

AL-Mahdy (2009, p. 628) discussed the teachers' renewed role in the age of knowledge; it is the ability to comprehend and manage modern technologies, root the values of belongingness to society, produce and employ knowledge, and respect, and take care of teachers' capabilities. He should be a versatile academic encyclopedia, a capable researcher who masters the language of dialogues and debate management, a strategic mediator between school and society, discovers his students' potentials and talents, stimulates students' enthusiasm, motivation and creativities, and pursues new things in education in general and his specialization in particular.

Aish (2007, p. 3) presented a strategy for applying the approach of knowledge economy in education of the schools of Dorham District in Canada, which included:

- a) Long life learning by providing all requirements of education situations, starting from family, society, school, and then public life.
- b) Teaching and learning by using all skills of thinking, reading, writing, mathematics, computer, information management and giving students freedom and training for problems.
- c) Solving shouldering responsibilities, cooperating and mutual respect among them.
- d) Questioning through the participation of parents and society in the evaluation of students' performance and using reports, interviews, and various tests to reinforce distinguished students and solve the problem of low-achieving ones.
- e) Fairness and equality in distributing the requirement of educational process to all students in accordance with individual differences that guarantee the opportunities of purposeful education to all. This was emphasized in Dakar conference in 2001 when the meeting issued the commitment to provide education to all by 2015. The aims of that meeting included the expansion of the education base, early childhood care, providing free compulsory elementary education, reinforcement of the skills of life and education, increase of the percentage of education among adults to 50%, equality between the two sexes and securing qualitative education to all (Stuttgart Conference, 2002, on the role of the knowledge economy in life-long education).

Jammal and AL-Rameety (2006) mentioned that the teachers' future roles in light of the current challenges lie in mastery of the skills of relationship, communication, self co-operative and group learning, critical thinking, understanding current sciences and their developed technologies, the acquisition of the skills of applying in instructional strategies, the ability to present the scientific material in a distinctive way, efficient classroom management, providing a good classroom environment, and using continuous evaluation and feedback.

Darling (2006, p. 10) said that the skills of the teacher in the twenty-first century will be as follows: familiarity with knowledge content, various teaching experiences, language fluency, scientific and behavioral rehabilitation, continuous development in the in structural process, enthusiasm and motivation to the educational process, wide knowledge, and cultural openness, team-work, self confidence, critical thinking and creativity, and distinction in job and teaching.

Jordan has taken serious steps in the attempt toward the application of knowledge economy in education because of the belief that qualitative education is the basic for enhancement, prosperity, and civilization. It leads to the achievement of development gains, equal educational opportunities and elimination of all kinds of illiteracy, contribution in solving the problems of poverty and unemployment and entering the world with an open intellectual mind. The Forum of Education (2002) in Jordan, discussed the prospects of the educational system and determined the teacher's competencies and roles in the age of the knowledge economy as follows: facilitating education, being unique and not an imitator, practicing the skills of critical thinking, capable of comprehensive durable self-learning, permanent friend, brilliant leader, creative and inventor, teaching guide, example and advisor, enjoying highly affective characteristics, having the skills of creativity and distinction and having the skills of controlling the classroom with democracy, justice and equality. The project of educational development (ERFKE) is a leading one in the field of applying the knowledge economy in all educational stages, which will be carried out in two stages; the period of each one is five years (Mu'tamin, 2004).

It appears from the previous studies that the extent of seriousness and the concentration on the educational process in light of the political, economic, social challenges, and crises that encounter the world. These have changed many expectations and imposed a strange life, culture, and education types on individuals. This led to the attempt to get rid of these crises. The teacher has got the biggest share of these studies which dealt with most aspects related to his/her personality, preparation, rehabilitation, behavior, profession, active, and organized role in the educational process to enhance it and improve its performance to obtain high quality outputs that satisfy the needs of individuals, people, and society and be in harmony with the spirit of age and current stage requirements.

### **Suggested Educational Competencies for School Teachers In Light Of the Global Tendencies towards a Knowledge Economy**

Upon what has previously been discussed, the clear characteristic of the beginning of third millennium is the fast change and alternation, which has no limits or stability at all aspects. It is natural that the educational process, with all its inputs, is influenced by these changes, which caused countries to reconsider their educational systems, their policies, and their aims in harmony with the current stage requirements. As the teacher is one of the main pillars of the educational, personal, and professional competencies that enable him/her to proceed well in the course of the educational process, these competencies are as follows.

#### ***Personal Competences***

- Respect for heavenly religions and international charters which support and reinforce education principles
- Mastery of Arabic in reading, writing, speaking, and little English
- Enjoying an open-minded personality and interest in cultural change and scientific progress
- The quality of good manners and conduct
- Perseverance, initiative, motivation, and an earnest desire in work
- Self-confidence, self-control, and self-reliance
- Scientific honesty, moral courage, and eloquence
- Continuous self-assessment to reinforce the teacher's status and personality

#### ***The Teacher's Professional Competences***

- Academic and behavioral preparation (theoretical and practical) in accordance with the educational stage
- Belongingness and complete dedication to profession
- Acquisition of cultural affairs, specified skills, and technical experience, which help to enrich the educational process

- Wide Knowledge and familiarity with every new aspect in the fields of education in general and specialization in particular
- Desire in continuous rehabilitation and training to keep up with the innovation of the teaching process
- Mastery of the use of different assessment methods and their employment in the diagnosis of student's education and achievement in the diagnosis of student's education and achievement problems

#### ***Professional Competences of the Educational Process***

- Respect for the teaching profession and compliance with its rules
- Respect for time, its exploitation, and its management and preservation in a purposeful, effective way
- Confirming democratic principles, justice, equality, and respect for individuals' rights
- Co-operation with colleges, managers, and supervisors and belief in team work
- Linking the teaching profession with society-related professions to get mutual benefit

#### ***The Competences of Learning and Teaching***

- Familiarity with modern basics, methods, and strategies of instruction
- Successful management and leadership of educational situation requirements
- Designing the educational activities that stimulate students to get involved in dialogue, thinking, invention, knowledge production, and its employment
- Designing the educational situations that enhance the student's skills of observation, prediction, measurement, and problem-solving method
- Helping student to be aware of the international issues related to population, the environment, water, economy, etc.
- Supporting the concept of life-long learning and linking it to the requirements of job market and the individual's needs
- Mastery of the use of technology and different instructional resources in educational situations, such as electronic education and internet, etc.
- Providing opportunities for students to use types of learning, such as self-learning, collaborative learning, group learning, etc.

#### ***Social and Communicative Competences in the Educational Process***

- Mastery of the modern skills of communication in all educational situations
- Activating all communicative and social channels with students in fulfillment of their desires and aims
- Confirming the importance of some communication means and their employment for ultimate educational and cultural purposes
- Confirming the importance of relationship between various communication means and the individual's senses
- Activating the use of some communication means and the openness to international cultures with general benefit

#### ***Student-Related Competences***

- Knowing the student's characteristics of knowledge, skills, and affection
- Determining the student's educational and training needs according to their capabilities, attitudes, and skills
- Stimulating students and increasing their motivation and participation according to individual differences

- Exploring talented and creative students and enhancing their abilities
- Confirming the student's respect and reinforcing his/her role in the educational process

### ***Competences Related to the Skills of Knowledge Economy***

- Complete reliance in education on the mind and brain rather than on imitation
- Being a counselor, a guide, and a strategic mediator to facilitate getting at various sources of knowledge
- Capability of exploring, producing, and employing knowledge in all educational situations
- Being a researcher and a learner, besides being a teacher
- Having skills of critical thinking, analysis, investigation, creativity, and distinction
- Having full knowledge of facts, concepts, generalization, principles, and theories related to educational sciences
- Understanding modern sciences and their advanced technologies

### **Recommendations**

In light of this knowledge and information explosion and its present and future effects, especially educational fields, this technological tide and its challenges need to be faced by:

- Adopting a purposeful educational policy that is mature, developed, and supportive of the government's attitudes toward the application of the knowledge economy program in education, which started in 2003.
- Leading management awareness of changing requirements, purposeful rational planning which is applicable and measurable in limited timeframes, and place boundaries.
- Enhancing a teacher's thinking using creative educational methods that are combined with science and technology, free opinion, purposeful dialogue, and hope in the future.
- Adopting a purposeful, open media policy that reflects the picture of the country and its future aspirations in order to solve its educational problems with all objectivity and transparency.
- Taking care of teachers, limiting their migration, promoting their competencies, gaining their satisfaction, providing opportunities for them to work, develop, invent, socially communicate and professionally interact through the circumstances and potential of the environments in which people live.
- Adopting a teacher's continuous assessment and benefiting from self-assessment directories issued by Arab common-work organizations and international organizations in order to achieve the requirements of the knowledge economy program and comprehensive excellence of the whole educational process.
- Deepening the concept of change and development of culture in society, starting from the learner, the teacher and school, and convincing people that change and development are a current national requirement and not something luxurious or temporary.
- Practicing these competencies in the educational process.
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