

A PROPOSAL TO DEVELOP THE ROLE OF TEACHERS IN DEVELOPING LEARNERS' KNOWLEDGE ECONOMY SKILLS IN THE LIGHT OF CONTEMPORARY GLOBAL TRANSFORMATIONS

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Abstract

The study aimed to know the skills of Knowledge Economy and the role of teachers in developing them among learners through theoretical literature, studies and research issued by international organisations and institutions interested in education and the study of skills, beside through the literature of the study, therefore, setting a proposed conception to develop the teacher's role in developing such skills among learners in the light of contemporary global transformations. To achieve the study objectives, the descriptive method was used, which is based on describing, analysing, and interpreting the existent, in addition to attempting to foresee the future. Study results have shown that the education's three foundations: reading, writing, and mathematics are no longer sufficient to cope with contemporary global transformations, because learning the skills of Knowledge Economy requires the addition of the skills of the 21st century represented in: critical thinking, innovation and creativity, cooperation and participation, awareness of multi-cultures, effective communication, and the ability of effective employment of the tools of knowledge and electronic information, profession and self-reliance. This requires the development of the teacher's roles that he should play in developing the learners' skills of Knowledge Economy according to the proposed conception.

Keywords: Proposed conception. Development. Skills of knowledge economy. Global contemporary transformations

Introduction

Knowledge is increasingly important in the present era, which is full of successive, accelerating and uneven global changes and transformations in all fields, including, inter alia, cognitive explosion, information revolution and technology, and the explosion of an individual's mental potential in all fields, such as communications and the information network. (Internet), and in the electronics, aerospace and other fields until this era became dependent on knowledge and its economies as a result of which the era was called the era of knowledge-based economy or knowledge economics.

The transformations in the world illustrate the extent to which developed countries are able to attract wealth, science and knowledge, which constitute a real force, imposing their control and cultural, political and economic dominance on developing countries, which is required; The need to develop a creative, critical, open and flexible

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mindset that is constantly armed with knowledge and capable of generating, producing and optimizing knowledge in reality (Nassar, 2008).

A global interest has emerged in the concept of a knowledge economy, which emerged at the beginning of the twenty-first century from contemporary economic theories that view technology and knowledge as the basis of production; Knowledge is the fundamental form of capital development and contributes to the economy's development of innovations of high economic value that may take the form of technology, art or engineering (Tim, 2008). The concept of knowledge economy is based on a philosophical principle based on two main pillars: Rapid access, recruitment and production of knowledge with its information and communications technology services, and second: Linking new knowledge to the needs of the market (Mohammed, 2015), which is the delivery of new products and innovative and distinct services marketed globally, bringing huge profits (Agha, 2013)

Knowledge economics is a broad multidimensional concept that is difficult to recognize in all its aspects and dimensions. However, all definitions of past literature, studies and research meet that knowledge is its core component. The Organization for Economic Cooperation and Development (OECD, 1996, p.9) defines knowledge economics as: "economy directly dependent on the production, distribution and use of knowledge and information", also known as: "The economy that revolves around access to and innovation in knowledge with the aim of improving the quality of life through the use of a rich information service and sophisticated technological applications, the use of the human mind as a head of money, and the use of scientific research to bring about a range of strategic changes in the economic setting, to become more responsive and consistent with the challenges of globalization and information and communication technology." Hashemi and Azzawi (2007, p.26), and Qarni (2009) define it as: "An economy based on investment in intellectual capital, through the development and reform of the education, training and research and development system in an information technology environment that employs ICTs, and supports and promotes the acquisition, dissemination and production of knowledge, under a well-structured system of evaluation, accountability and community participation.

Al-Saiegh (2013) defines it as "an economy that revolves around the acquisition and use of knowledge with a view to improving life in all areas, through the use of the human mind and the use of scientific research", while Al-Hamoud (2011) defines it as: "The term 'focused economy' is used to obtain, participate in, produce, generate, manage, recruit and disseminate knowledge. It is also

defined as: "The economy that revolves around access to and participation in knowledge, To use, employ, innovate and produce them in order to improve the quality of life in all their fields through the use of a rich information service and advanced technological applications; The use of the human mind as valuable knowledge capital and the use of scientific research to bring about a series of strategic changes in the nature and organization of the economic environment so that it becomes more responsive and consistent with the challenges of globalization, ICT, the universality of knowledge and sustainable development in its integrative concept of " (Murad, 2008), defined by Dinmock & Goh (2011, p.219) as: "an educational system designed to enable individuals to access, participate in, produce and use knowledge in order to improve the quality of human life".

It can also be said that the knowledge economy is one that relies on the dissemination and investment of information, the use of ideas and the application of technology s knowledge-based economy requires a new kind of quality education and lifelong training in different formal and informal educational environments that are free from conservation and demonstration capable of application, analysis, installation and evaluation (Bank World Group, 2001).

The concept of a knowledge economy is also seen as synonymous with a shift to new high-performance skills and a flexible way of working in response to global pressures. (Cairney, 2002) which requires a focus on investing in the human resources of a qualified and specialized workforce capable of dealing with modern and sophisticated technologies, as intellectual and knowledge capital for the production of goods, knowledge service industry and information innovation (Alimat, 2008), the Organization for Economic Cooperation and Development (OECD) explains that knowledge economics skills refer to competencies complementary to the learning curricula acquired by knowledge workers and required to work in the light of knowledge economics, and also defines them as: A set of knowledge, behaviours and trends needed for students that enable them to apply, utilize, produce and disseminate knowledge to help them adapt to the knowledge economy community and keep abreast of its developments and challenges (Al-Anzi, 2015, p.9)

In order to move to a knowledge economy, knowledge gaps need to be addressed. The World Bank's 1998 Development Report emphasized that knowledge is the critical force for development. The report noted several factors that are essential requirements for societies to transition to a knowledge economy, including: The existence of infrastructure, an environment that

promotes development and creativity, the creation of manpower capable of making and employing knowledge, the ability to question, link and analyse, innovation, development and installation, and the recruitment of an actor for scientific research and development; In addition to attention to ICT technology, updating educational programs and plans (Kasem, 2011), as well as increasing numbers of students with high abilities and skills, capable of discovering, participating in, generating, producing and investing in knowledge on the ground, the role of education, which is the key to entering the age of knowledge and developing societies through human capital development; which is the focus of the educational process; Enables positive interaction with today's data. If the educational system is responsible for preparing students in an integrated manner and providing them with the information and expertise that qualifies them to cope with cognitive, informational and technological changes to be active members of the global economy, the nature of the economy with which they will coexist Molebash (1999) must be taken into account.

The knowledge economy has many characteristics that distinguish it from the traditional economy, and those interested in the knowledge economy have viewed it from different perspectives, depending on their different disciplines and scientific and practical backgrounds (Mahmoud, 2016), and their views on the characteristics of the knowledge economy can be summarized as follows: Al-Shammari and Al-Lithi, 2008; Alian, 2008; Al-Muharrar, 2009; 2013); It is an economy with an easy-to-navigate cognitive value plus, Do not deplete and fade due to their use as in the consumption of goods and materials. It is a high quality economy aimed at excellence knowledge-intensive", based on investing in human resources as knowledge and intellectual capital, Flexible, adaptable and adaptable _ the economy where knowledge achieves the most added value and relies on a qualified, trained and specialized workforce in modern technologies and employs them effectively to build a high-speed, accurate and responsive information system; an economy that aims to produce and manufacture knowledge services and employ them in production, research and development as an engine of change and development, Evolves to meet changing needs, characterized by openness and global competition; There are no barriers to entry into the knowledge economy, but a fully open economy -- one that has the potential to innovate, create and generate new intellectual cognitive products that markets did not know and is linked to intelligence, innovative capacity, imagination and cognitive awareness of the importance of invention, initiative and self-initiation and collective to achieve the best, and activate it all to produce larger in quantity, more in quality performance and better in achieving satisfaction to renew the need for it and the desire and demand for its knowledge products that go into every activity, into every work, into every job and upward to the point where it can be argued that an activity is impossible without knowledge, Which requires the development of scientific research in its theoretical and applied aspects and the provision of requirements for research and support and applying the overall quality and mastery of its management and the need for continuous education, and continuous training - It is a network economy, a digital economy and a virtual economy requiring qualified human resources with major advantages, notably: A high level of education and training, retraining according to developments, a high degree of empowerment, careful professional development and continuous self-learning, the ability to communicate and creativity, problem solving and decision making, as well as flexibility and ability to convert from one occupation to another, deal with computer and successfully employ development.

Several institutions and organizations interested in studying knowledge economy skills have identified the skills to be included in the educational process system to access knowledge economy. The Organization for Economic Cooperation and Development "OECD" (2001), has identified knowledge economy skills as follows: Communication skills, problem-solving skills, team capacity skills and ICT skills, while the World Bank identified (2003) A set of skills required for individuals in the light of the trends of the global economy, consisting of technical skills, personal skills and methodological skills, including reading and writing technical skills, foreign language, mathematics, science, problem solving and analytical skills, while life skills included: Teamwork, leadership and communication skills, methodological skills included: The ability to self-learn to pursue lifelong learning, addressing risks and variables, while Ivan, Petar & John, 2012 referred to the most needed skills in the coming years as: Critical thinking, problem solving, ICT application, teamwork, collaboration, creativity and innovation, and effectively dealing with knowledge diversity. The results of the study also indicated that the process of creating skills and knowledge is defined by an interactive relationship that can be illustrated in the following figure: (Figure 1)

While noting that there are six basic skills for applying the knowledge economy at the educational levels of general education: Basic skills such as reading, writing, computer use, communication skills effectively verbally and in writing, thinking, problem solving, investigating, scientific research and decision-making skills, collaborative teamwork skills with others, working in groups, information collection, organization and analysis skills, learning habits skills such as independence, responsibility and innovation in the production, use or dissemination of knowledge, and identify (Bates, 2014), cognitive economics

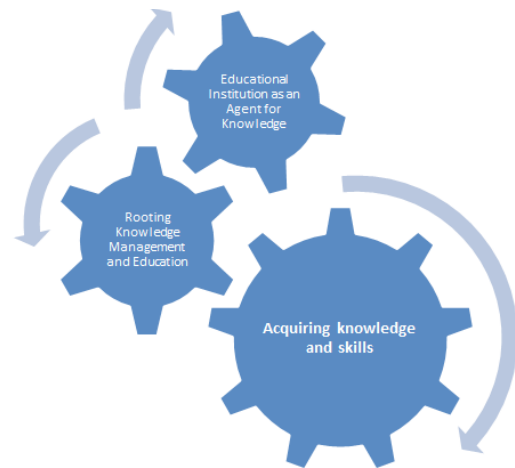


Figure 1: The interactive relationship for process of creating knowledge and skills.

skills in traditional communication skills such as clearly and expressly reading, speaking and writing through social media, self-learning skill and responsibility for knowledge transfer and in performing any new work and not relying on others, effective and positive teamwork and problem-solving capacity; In addition to thinking skills and digital skills based on knowledge, use of technology, and knowledge management, Aish has divided the skills that schools are required to focus on into two parts: part for the first, which includes: three basic skills (reading, writing and mathematics) and part for the second, which includes (resource waste, interaction with others, information management, systems and technology). (Kling, 2004) cognitive economy skills included technical skills such as reading, writing, mathematics and digital skills. General skills included: determining an individual's ability to work in the cognitive economy and included: cognitive skills, problem solving, effective communication and organizational skills.

At the level of educational systems in some countries of the world, Germany's Ministry of Education has issued a project to describe the basic competencies of the educational profession (1990), which included: Organizing and applying practical skills, communication skills, cooperation, responsibility, and ability to work and assume its pressures. The results of some studies in America indicated the importance of having three skills in different professions: Literary, intellectual, and personal quality skills, which are essential requirements for achieving general competencies are: In Australia, the General Education Council (1991) issued a document emphasizing the following competencies: Language proficiency, communication, scientific and technological knowledge, cultural knowledge, and problem-solving skill. In Malaysia, the Ministry of Education has built an educational system with a world-class knowledge economy that releases individual potential and realizes Malaysian nation's aspirations; To building Malaysia as a regional centre of academic excellence and transforming education into a high-quality export commodity (Al Qa 'rat, 2013).

In Jordan, the Ministry of Education implemented the educational development project towards the knowledge economy, which was implemented in 2003 in two phases, ending in 2015. human resources ", where the project aspired to become an IT hub by investing human resources and empowering them as knowledge capital, by initiating a change and transformation in Jordan's pre-university education system to create qualified graduates with the knowledge, skills and skills required for the knowledge society (Zeodi, 2012, p.89).

The Kingdom of Saudi Arabia has also devoted great attention to the topic of knowledge economy. It has developed many plans and strategies, including: The Ninth Development Plan (2010/2014), which adopted the objective of the knowledge economy, focusing on education that disseminates and produces knowledge, and establishing capacities capable of accessing, transmitting, generating, producing, investing and employing knowledge positively in various economic and social sectors (Ministry of Economy and Planning, 2010). The Strategy for Talent, Creativity and Support for Innovation was adopted; The Kingdom of Saudi Arabia aims to become by 2022 a creative society led by talented, creative and innovative young cadres at the highest level of education and training that supports the transition to a knowledge society and the achievement of comprehensive sustainable development (<http://www.un.org///archive.awsat.com>), and in 1432 AH launched the National Strategy for the Development of Public Education, which was based on five strategies, including: Supporting innovation, excellence and competitiveness in educational practices, supporting the educational process, enabling education departments and schools to provide opportunities for all students according to international standards and stimulus and competition determinants (Ministry

of Education, 1432:16), as launched in 1434H, the National Strategy for Transformation towards the Knowledge Society; To ensure the sustainability of the development process, and to build a modern and competitive economy, with knowledge content, away from the economy dependent on natural resources (Ministry of Economy and Planning, 1434:11). To this end, the Kingdom has launched a far-reaching forward-looking plan: By 2030, Saudi Arabia becomes a knowledge society in a knowledge and information-based economy of diverse sources and potential, led by the human capabilities of information and knowledge producers and the private sector. This depends, inter alia, on raising the spirit of creativity and innovation among segments of society, on the one hand, and on undertaking research and development in universities, public and private production bodies and institutions (Ministry of Economy and Planning, 1434H).

Given the importance of cognitive economics skills, many educational researchers prepared research and studies on cognitive economics skills such as Baluchi and Omari studies. (2020) which aimed to build a list of knowledge economy skills expected to be included in school education in the Sultanate of Oman using the Delphi method. The results showed that the knowledge economy skills on which future Omani education should focus are divided into five general skills: Basic knowledge skills, communication skills, knowledge production skills, digital skills, professional and life skills, and Zemiti study (2012) which aimed to monitor the most important requirements to be available for the modernization of Egypt's general secondary education in line with the knowledge society, and to know the availability of it in secondary schools, and to achieve the objectives of the study, the researcher used the analytical descriptive curriculum, the results of which were: Egypt's secondary education faces many problems that prevent it from achieving the goals for which it was established. The elements of the general secondary education system need to be developed and modernized to meet the requirements of the knowledge economy.

Some studies focused on the availability of economics skills to students' knowledge such as Ramadan (2015) aimed at recognizing the degree of availability of cognitive economics skills among students of the Faculty of Social Sciences at Imam Mohammed bin Saud Islamic University from the point of view of faculty and students themselves and the objective was achieved using the survey descriptive curriculum and from the study's findings that the degree of availability of cognitive economy skills among students came at a moderate level on all axes of identification and college from the point of view of the faculty, While the degree of availability of skills was significant from the students' point of view and the focus of collaboration, teamwork and effective handling skills came in the first and second grades respectively from the perspective of the study sample, while the aim of Abd Lat (2009) study, that the degree to which secondary school students in Jordan possess the technological skills needed to learn the social studies curriculum developed towards cognitive economics from the students' point of view. The results indicated that students possess the technological skills needed to learn the social studies curriculum at an intermediate level.

At another level, the aim of the Al-Anzi study (2015) was to determine the degree of availability of cognitive economics skills in mathematics books for the third middle grade of Saudi Arabia and the skills required using the analytical descriptive curriculum through the content analysis tool, which included fifty-six skills distributed across seven main areas: Cognitive, technological, communication, mental growth, social, global and local economic, calendar, the results of which showed deficiencies and decreases in four areas: Technology, social, global and local economic spheres, while decision-making targets (2013) Survey of the economics skills of the chemistry book of the scientific secondary grade and the degree to which teachers possess them. The results indicated that the knowledge economics skills of the chemistry book were high, while in relation to teachers' knowledge economics skills they were generally estimated at an average level, while Al-Qaisi (2011) aimed to explore the features of the knowledge economy contained in the forensic science courses of the project for the development of secondary education in Saudi Arabia and the features that should be included therein. To achieve the goal, the researcher used a content analysis method and classified the features of the knowledge economy into seven main areas: Technology, communication, cognitive growth, social growth, mental, economic and national growth. The study found that the features of the cognitive economy came first at a repetition of (949), the area of mental development ranked fourth and has reached its repetition (512) followed by the economic and technological sphere, aimed at the study of Banna and Jalal (2010) Survey the availability of cognitive economics skills in mathematics books from the point of view of mathematics teachers in Jordan; In order to achieve the objectives of the study, two tools were developed, one to analyze content, and the other to identify teachers' perspectives. The results showed that the areas in the book were: exercise and issues, examples, training, auditing, and self-testing.

Some studies also focused on teachers' level of knowledge of cognitive economics skills and their role in their development among learners as rational studies (2015) aimed at preparing a list of criteria for evaluating teaching

practices of elementary science teachers in the light of trends based on Saudi Arabia's knowledge economy and to determine the level of practices against these criteria by using the observation card, the results of which, after their analysis, indicated that the level of practices of elementary science teachers in the light of trends based on the knowledge economy in general was high but did not reach the degree of mastery, Teachers' practices for their role also followed the requirements of the knowledge economy with a moderate degree, the aim of which was to study Khalidi (2013) Disclosure of the degree of ownership by Islamic education teachers and teachers in Jordan of the concepts of knowledge economy in the light of some demographic variables. In order to achieve the study's objectives, the analytical descriptive curriculum was used. The study's findings include: The degree of ownership of cognitive economics concepts by members of the study sample was low in the field of evaluation and educational means, medium in the field of classroom management and high in the field of teaching planning, while the study of Mustafa and Kilani (2011) The objective was to ascertain the degree of Islamic education teachers' exercise of knowledge economy in the light of the knowledge economy from the point of view of their supervisors. The objective was achieved using the survey descriptive curriculum. The study reached a number of results, including: The degree to which Islamic education teachers exercise teacher roles in the light of the knowledge economy from the point of view of their supervisors was moderate, while targeting (Bonal and Rambla, (2003) to know the role of the teacher in the formation of an educational society in the light of the cognitive economy on the sample of the study consisting of teachers at the secondary level in four schools to which interviews and a note card were applied as research tools in order to achieve the objectives of this study and the results showed that teachers were resisting change and integration into the knowledge economy because of the unclear idea of their knowledge economy. As a result, officials did not demonstrate the nature of the new teacher's role in the knowledge economy, which resulted in them not using any of the modern strategies.

At the end of all the above studies, research and reports by organizations, bodies and institutions interested in knowledge economy skills; In addition to the efforts of some educational systems in some countries of the world in the field of cognitive economy in their educational systems and the efforts of educational researchers, the knowledge economy skills to be acquired for learners have been shown to include the three basic 3Rs (Reading, Writing, and Arithmetic) skills; However, it is no longer enough alone, although it is necessary for everyone to have the opportunity to develop literacy and to use mathematics at the required level and thus to work. The lack of such skills affects the individual's position in employment, his or her ability to learn and his or her continuity in acquiring new and renewed skills, thus preventing him or her from keeping up with the times; It goes beyond its inability to contribute actively to the country's economic growth and productivity (Janssens and Jos, 2002, p.29). These three skills of education need knowledge economy skills in the light of the transformations of the twenty-first century and are called 7Cs; All of her words in English begin with the letter "C": critical thinking, creativity, participation, awareness of multiculturalism, communication, computing, profession and self-reliance and by combining both 3Rs with 7Cs, she produces knowledge economy skills (Trilling and Bernie, 2005, p.1) (Table 1).

Table 1: Knowledge economy skills in light of the transformations of the twenty-first century.

The Skill	The items of each skill
The Three Skills 3Rs	
Reading	Being able to read, understand and be aware of words and symbols
Writing	Enabling the skill of writing in clear terms
Arithmetic	Enabling different calculations
The Seven talented Skills	
Critical thinking and doing	Enable problem solving, research, analysis and project management
Creativity	Innovate new knowledge and design solutions
Collaboration	Enabling cooperation, community building
Cross-Cultural Understanding	Access to cognitive and cultural diversity
Communication	Enable the formulation of messages and the effective use of means
Computing	Enabling effective use of electronic knowledge and information tools
Career & Learning Self reliance	Professional ability to manage change, self-reliance to achieve lifelong learning

SOURCE: Trilling, Bernie : Toward Learning Societies and the Global Challenges for Learning - With ICT, California, 2005
<http://www.techlearning.com/telelearning/pdf/events/techforum/ny05/Toward-Learning-Societies.Pdf1-12-2012.p1-2>

The table above shows the skills and competencies that individuals must acquire so that they can make progress and succeed in education and work and are associated with science, technology and mathematics (STEM), in addition to the soft competencies needed for professional and personal success: To learn how to learn, leadership and teamwork skills, communication skills, problem-solving skills, resilience and adaptability skills, coping skills, critical thinking skills, motivation and creativity skills, and lifelong learning follow-up skills that enable individuals to work more effectively in the knowledge economy era (World Bank, 2008)

These skills are interrelated and interconnected with each other, and each adequacy supports each other. Language, reading, numeracy and ICT skills are essential for learning and for supporting learning skills to learn. These skills appear within a general framework of knowledge, skills and trends that should be characterized by an individual such as: Critical thinking, problem solving, creativity, initiative and ability to play different roles and work in the team (Jamal-Din, 2013).

Some studies and research summarized the learner's qualities in the light of the age of knowledge economy in the following (Mohammed, 2007; Andraus, 2009; Abdelshafi, 2013; Zayed, 2013): They have an awareness of the value of knowledge and its circulation, he can apply what he learns and is able to deal with the challenges of reality and adapt to variables, Able to reproduce and disseminate knowledge and advocate for its use and good use in educational attitudes He has critical thinking skills about information, problem solving, communication and collaboration, He has the ability to express his oral opinion and write in an accurate, without prejudice to the meaning of capable of working in a diverse team of knowledge and skills for modernization, development and creativity, He has the skills of thinking and planning and has the ability to initiate in decision-making Computer and Internet skills in the educational process, reading and scientific research skills, He has a realistic and forward-looking scientific vision to work towards by using knowledge positively and activating current potential armed with consciousness and knowledge, he has the ability to deal with ICT and to use it well and to employ it through his value balance on which he was founded with his awareness of the dimensions of his Islamic identity valued the value of time and sought to invest in research, learning and knowledge generation, Has an awareness of the value of human scientific and intellectual interaction and its importance in producing knowledge and ideas towards an issue of science and technology ", which is willing to possess the foundations of science and technology and to pursue its scientific journey successfully by using scientific and technological developments to further advance him and his nation, He possesses a scientific imagination to usher in a freer and wealthier world in possibilities where ideas flow and science grows in unprecedented ways capability for active participation and constructive dialogue, capability for identifying, collecting, analysing, organizing and presenting information.

In order to achieve these features of the learner, the objectives and content of the curriculum must be built in the light of the skills of scientific thinking, problem solving and investigation. Achieving students' acquisition of the skills needed to keep pace with contemporary transformations is crucial in shaping their future abilities and potential. Their acquisition of the concepts of scientific culture also increases their ability to maintain their health and to cope positively with the environment in which they live and supports the possibility of exploiting their abilities in the development of society (Ghanem, 2007).

Enabling a learner to master and practise knowledge economy skills requires a review of the elements of the educational process, but the teacher and curriculum are the most influential. On the part of the teacher, the teacher is one of the fundamental pillars in the educational system and in the development of all aspects of the learner's personality, the key to allowing public education institutions to reach their goals; Being the leader of the educational process, the teacher according to the view of human development scientists is the primary source of the cultural, economic and social construction of nations through his role in building intellectual and knowledge capital; The more a teacher succeeds in increasing students' educational levels, the higher the levels of knowledge, The overall level of production in society has thus increased, which in turn is reflected in the increase in the income of members of society and their social and economic well-being (Qurni, 2009).

Based on the above, some of the teacher's roles in developing the knowledge economy skills of learners can be summarized in the following (Al Ahmadi, 2014; Kandili, 2012; Mahmoud, 2016) to help students organize their knowledge and link seemingly uncoordinated experiences to help learners access knowledge and discover principles as if they were discovering them for the first time, Create appropriate educational attitudes to give learners the skills to communicate, learn collaboratively and treat them as effective partners in the learning and education process s role from the source of knowledge to the stimulus of the learning process, It encourages learners to learn, guide learning and create a learning environment development of learners' higher mental skills such as understanding, application and conclusion, analysis, installation, evaluation, classification, forecasting and conclusion; This is

because it is necessary to acquire the capabilities to deal with the knowledge revolution in the light of the evolution of informatics and provide them with modern learning methods, and help them to use the information revolution to generate and produce knowledge and develop their abilities to think about its different forms, such as critical thinking, innovative thinking, and creative thinking, developing communication and scientific communication skills and working with others to move to the investigative or constructive curve that focuses on teaching learners how to communicate with electronic knowledge sources and convert theoretical concepts into an area of application in the use of information technology through the use of e-learning, virtual and distance education and thus the learner has the ability to gather, compile, compare, analyse and apply information in the scientific field, thereby playing the role of the teacher:

Guide, guide, organizer and blueprint for the educational process, while critically and creatively educating learners, Develop their capabilities to innovate new solutions, methods and problem solving capabilities education, skills for self-learning and continuous education, teaching students how to respond to change and principles of dialogue and communication to prepare them to enter the advanced technology track, help them choose references and sources and design statistical tables and graphs Its role as an intermediary between students and knowledge sources, helping them master the use of modern technology such as computers and applications Knowledge resources management by teaching research methods and strategies in open databases and data, etc., and training students on how to use knowledge in the different attitudes that he guides in his daily life, prepare them for tomorrow's world and desire to learn.

Problem statement and study questions

Based on the above, it is noteworthy that despite the efforts of the Arab States in developing their educational systems to keep abreast of the knowledge economy, the UNESCO report in 2004 showed the depth of the gap between what Arab States have achieved in the preparation and qualification of educational outputs and those of East Asia: South Korea and Malaysia, indicating weak public education outcomes in Arab countries, weak competitiveness at the level of domestic economic output. The World Bank's 2008 report noted gaps between what educational systems have achieved in the Arab world and what the region needs; To achieve its current and future development goals, and to the existence of many problems and shortcomings in education: such as the lack of compatibility between secondary education outcomes and labour market needs, the low internal and external efficiency of the secondary education system, and the poor preparation of students to continue university education optimally (Al-Qa'ra, 2013, p.8). The second Arab Human Development Report (2003) also noted that the hope for traditional reform methodologies in Arab States is minimal unless real and realistic reform methodologies that meet their current and future needs and strengthen the relationship between educational institutions and the community are relied upon. (Al-Obaidi, 2004), and the results of some studies confirm that the traditional educational system has failed to respond to the challenges of the stage, which is linear to the industrial era; Students study the same at the same time as the factory's assembly line, the knowledge in this system is fragmented and fragmented and does not relate to reality, its production is weak incentive to learn, and it is difficult to convey life attitudes (Mahmoud, 2016).

There have also been public calls for answers on the readiness of Arab States to emulate the requirements of the knowledge economy. The World Bank's report, in cooperation with the Islamic Educational, Scientific and Cultural Organization "ISESCO" (2013), noted that engaging in the knowledge economy model requires Arab States to implement a number of key reforms in various sectors, the most important of which are more skilled labour support, improved innovation and research capacity, and expansion of ICT and its applications (Ramadan, 2015). In this context, Gee (2004) indicates that the age of knowledge economy has led the individual to learn in new and innovative ways for future goals which calls for school and teachers to react positively to this fact; In the sense that an individual seeks to develop his or her abilities and skills and experiences to create himself or herself for new opportunities, and both (Edward & Usher, 2008) add that the global transformations currently taking place in the world require the development of new skills, experiences and knowledge of the individual, which requires that the teacher play an important role in this regard.

Some studies such as (Mohammed (2007) study, who also emphasized the need to arm an individual graduating from an educational system, including: Attention to obtaining knowledge from its primary sources, producing it through human or electronic sources, disseminating it and advocating its utilization, being able to communicate with others and work on a team in addition to a number of educational skills; The student must acquire them: the ability to make decisions and solve problems to be able to keep up with the age of knowledge economy.

Although education is important in strengthening the requirements of the

knowledge economy, the results of some studies have shown that it has a lower role to play at this stage; The results of Al-Ghamdi (1420) indicated that the specializations of secondary education in Saudi Arabia do not comply with the requirements of the labour market and do not work to prepare the student to work in various fields of life. The study of Al-Zimti (2011) also affirmed that the components of Egypt's general secondary education system face many problems in achieving its objectives and needs to be modernized and developed in line with the requirements of the knowledge economy era. Ramadan (2014) also found that the degree of availability of cognitive economics skills among students came at a moderate level on all axes of identification and college from the faculty's point of view. The 2010 study of the National Centre for Manpower Development confirmed that students do not possess sufficient scientific and mathematical skills and suffer from poor scientific thinking skills required for this stage.

In view of the pursuit by public education institutions of the objectives of the National Strategy for the Development of Public Education; Teachers must adopt roles that contribute to the development of human wealth in line with the world of informatics and develop their minds and capacities for scientific thinking, critical thinking, innovation and creativity and through access to pedagogical literature, the researcher did not find a study to her knowledge aimed at building a proposed conception to develop the role of the teacher in developing the knowledge economy skills of learners in the light of global transformations, despite the importance of this; It is one of the standards of the school of the future.

Recognizing the developmental role that a teacher should play in achieving the strategic objectives of the development of general education in all educational systems in the world, and emphasizing the importance of the teacher's teaching function in preparing human capital in accordance with the requirements of the age of knowledge economy, the present study came; in response to the recommendation of some studies; The Ramadan Study (2014) recommended the need for further field studies in the field of cognitive economics skills for students, as well as in response to the research recommendations of the Arab Teacher's Role in the Age of Knowledge Flow Conference held at the University of Jerash in 2009 and the Knowledge Society Conference: "Social, cultural and linguistic challenges in the Arab world present", held at Sultan Qaboos University (2007) and other conferences. Based on the above, the study's problem can be elaborated in the following questions:

1. What knowledge economy skills are needed for learners in light of today's global transformations?
2. What is the role of teachers in providing learners with knowledge economy skills?
3. What is the proposed vision for developing a teacher's role in developing the knowledge economy skills of learners in the light of contemporary global transformations?

Aims and objectives of the study

The objective of the study was to identify the knowledge economy skills to be gained for learners in the light of contemporary global transformations, to demonstrate the role of the teacher in the acquisition of knowledge economy skills by learners, and to build a proposed perception to develop his/her role in the skills development of learners.

The study significance

This study is a future and prespective vision of what a teacher's role should be in developing the knowledge economy skills of learners in the light of contemporary global transformations and thus can assist those responsible for planning and developing public education in educational systems, Through the development of plans to familiarize teachers with their role in developing learners' skills, training them to carry out and enable them.

The study design

This study was limited to knowledge of knowledge economy skills to be acquired for learners through theoretical literature, studies and research from international organizations and institutions interested in education and skills study and to monitor the realities of the teacher's role in earning them through the results of previous studies and research, A proposed vision for developing the teacher's role in developing those skills for learners is therefore developed in the light of contemporary global transformations.

Study terminology

Cognitive Economy Skills: The current study adopts the definition of cognitive economy skills (2015) as "a set of knowledge, behaviors and trends needed for students to apply, employ, produce and disseminate knowledge to help them adapt to the cognitive economy community and keep abreast of its developments and challenges.

Methodology

The nature of the study mandates the use of the descriptive curriculum based on the description, analysis and interpretation of an object, and the nature of the forward-looking study used Delphi Technique; To learn the views and suggestions of some education experts on the development of the teacher's role in developing the knowledge economy skills of learners in the light of contemporary global transformations.

A proposal to develop the role of teachers in developing learners' knowledge economy skills in the light of contemporary global transformations.

According to the study, knowledge of knowledge economy skills must be acquired for learners through theoretical literature, studies and research from international organizations and institutions interested in education and skills study and to monitor the realities of the teacher's role in earning them through the results of previous studies and research, It can be said that in the light of contemporary global transformations, scientific progress and cognitive explosion and technological progress and speed of means of communication, in the light of the features of the new educational system and the aims of education in the light of the age of the knowledge economy professional restructuring of the twenty-first century teacher; to ensure that they possess knowledge economy skills; So it can be earned it for learners.

Hypothesized scenarios

- a. The need for the teacher to possess the requirements of the profession that are in line with the features of this era, the era of change and development.
- b. There is an urgent need to upgrade the role of the teacher in line with the requirements of the world's stage of information, technological and digital transformations and developments.

Huge cognitive accumulation and emergence of market economics.

The need for complementarity of roles between ministries of education, education departments, universities and training centres abroad in order to qualify and train teachers according to their hoped roles to keep abreast of the age of knowledge economy.

- e. Results of previous studies presented, which confirmed that there is a lack of ownership of knowledge economy skills by some teachers and learners.

2. Objectives of the proposed scenario

The proposed scenario's objective is:

- a. To provide teachers with knowledge economy skills by preparing them according to the requirements of the age of knowledge economy.
- b. Development of educational and training systems in universities' colleges of education; To ensure the graduation of teachers capable of keeping up with the age of knowledge economy in the process of teaching and learning.
- c. Emphasize the training needs of teachers in light of the requirements of the age of knowledge economy.

3. The basis of the proposed scenario

The perception is that the achievement of education's objectives in the light of the knowledge economy will be achieved only through a review of the elements of the educational process, primarily the teacher; Therefore, vocational restructuring organizations of the knowledge economy era, in partnership with faculties of education at universities and training centres within and outside universities, should provide opportunities for teachers' rehabilitation and training in the light of the requirements of the knowledge economy; To enable them to achieve the objectives of education created by scientific and technological transformations and to contribute effectively to the realization of the vision of future societies by providing society with qualified scientific capabilities to play its role in sustainable development in society.

Components and mechanisms for achieving the proposed vision of this study

The proposed scenario consists of the following axis:

1. Preparing and training teachers in line with the age of knowledge economy.
- 2- Preparing cadres of highly trained teachers in the field of knowledge economy requirements.
3. To provide teachers with a culture of knowledge economy, skills and requirements so that they can effectively play their roles in the student's mental development in accordance with the requirements of knowledge economy.

This is achieved through the following mechanisms:

a. The faculties of education of universities should eliminate their traditional role in the preparation of teachers, take into account contemporary changes and developments as information, digital and technological breakthroughs, and work to bridge the gap between their programmes and educational realities.

b. The diversity of aspects of teacher preparation should not be limited to theories and knowledge, but should include skills and trends and combine the theoretical and applied aspects needed by the age of knowledge economy, provided that the duration of application is sufficient during the years of preparation

c. That the teacher training programmes in the faculties of education of universities include vocational education and training programmes aimed at giving the teacher a culture of knowledge economy, his/her requirements and skills, and promoting the concept of his/her future role in the light of the knowledge economy

d. All educational programmes offered by Saudi universities' faculties of education should include 21st century skills identified by the Organization for Learning and Measurement (ATC 21s) and shall be summarized in the following categories (Abdul Shafi, 2013):

1. Ways of thinking (creativity and renewal, critical thinking, problem solving, decision making)
2. Working methods (contact, participation).
3. Means of work (information literacy, information and communication technology literacy).
4. Living in the world (local and international citizenship, life and occupation, individual and social responsibility include: cultural awareness and competencies).

h- The ministries of education, in cooperation with the faculties of education and the training centres of universities and in the community, shall endeavour to develop partnerships by identifying their training needs and promoting their competence and professional, scientific and cultural academic capacities; To keep abreast of developments in teaching strategies, teaching techniques and their good employment in the educational situation and knowledge economy skills, while emphasizing the need to upgrade training programmes to attract teachers to attend and interact with them and benefit from their contents.

Development of the curriculum in line with the age of knowledge economy so that it adopts the pivotal curriculum and is built in a functional manner that takes into account the nature of the subject and the characteristics of the learner, combines the theoretical and applied aspects, and incorporates the skills and requirements of the modern economy to ensure that students are prepared for and adapted to current and future transformations and changes (Hashemi, Al azawi, 2007).

e. The teacher understands his roles in the knowledge economy (Mahmoud, 2016):

1. His role as a mediator between pupils and sources of knowledge.
- 2- Its role in embodying the principles of democracy and human rights.
- 3- His role as a performer of students, to serve the environment and the community and to contribute effectively to the development of the community.
- 4- His role as a good user of technology in facilitating the learning process, as a guide in collaborative learning, and as a guide in critical and creative thinking.
- 5- His role as an educational guide for students

It should also strive to develop its capabilities and skills to the status of a distinguished and inspiring teacher.

z. that the ministries of education provide the necessary budgets for the provision of information and communication technology in general education schools, provide the Internet point of contact in classrooms and train teachers in their effective use and employment in the educational process.

i. Enabling teachers to attend and participate in international and local conferences related to knowledge economy skills.

Establishing an electronic library containing all research and references in the field of knowledge economy skills and requirements, and teachers' future roles in the light of the knowledge economy, through agreements with some international digital libraries, with access to teachers from home; In order for him to develop himself in this area.

u. The Educational Development Committee of the Ministries of Education shall determine the characteristics of the teacher in the light of the requirements of the knowledge economy and provide the faculties of education of universities

with those characteristics to qualify teachers and provide the training centres in the faculties of education of universities and the private sector with those characteristics in order to prepare training programmes to renew the training and rehabilitation of teachers in line with the requirements of the age of the knowledge economy.

k. To build the objectives of the curriculum for all scientific and theoretical disciplines in light of the requirements of the knowledge economy to ensure that students acquire the necessary skills that are crucial in shaping their future abilities and potential, Their acquisition of the concepts of scientific and cognitive culture increases their ability to maintain their health and to cope positively with the environment in which they live. s development potential (Ghanem, 2007).

Impediments to conceptual implementation

- a. Lack of real vision of knowledge economy requirements and skills of many teachers.
- b. Some teachers' resistance to change and development; This requires him to develop himself, his abilities, skills and traditional and stereotypical teaching methods, which he has been accustomed to for many years.
- c. Rented school buildings.
- d. Weak financial resources and allocations to equip schools with information technology.

Suggestions to develop that proposal

1. To overcome those constraints.
2. Adopt some distinguished teachers in the field of knowledge economy skills for a group of teachers in each school in order to educate them on the subject of knowledge economy and its requirements and skills.
3. To solve the problem of weak resources for school equipping at present, ministries can localize education technology in all classrooms by equipping a class in each school that serves as a knowledge centre equipped with modern technical means (computers, DataShow, Internet hotspot... etc.).
4. Promotion of the principle of encouragement for distinguished, creative and innovative teachers, the principle of accounting for the shortened teacher stipulated in the strategy, and implementation of the plan to link the annual allowance to the teacher's level of competence, excellence and attendance at training courses.
5. Operationalizing the proposed vision may help teachers to fulfil their required roles in the light of contemporary global transformations, thus positively reflecting on learners and preparing them well to keep abreast of the age of knowledge economy, prepare them for university study, work life and play their positive role in the development of society and confront its development challenges.

Recommendations

In the light of the study's objectives and results, the following recommendations may be proposed:

1. Learning systems benefit from the proposed perception of working to develop teacher performance in line with the age of knowledge economy.
2. Teachers need to understand the roles they should play in developing learners' cognitive economy skills, which are included in the proposed vision.
3. The need to establish criteria to describe knowledge economy skills, the teacher may have knowledge of those skills, but does not possess the criteria for their application and therefore cannot develop appropriate methods and methods to achieve them.
4. Teachers should participate in global networks for vocational training in the field of competencies and skills and draw on their experiences in ways and methods of achieving learners' skills.

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