

The Requirements for improving the quality of university higher education

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Abstract

University higher education institutions seek excellence and competition in the face of various challenges to achieve harmony and integration, and provide unity in the direction leading to the attainment of TQM “Total quality management” standards and their applications .

Therefore, it was imperative for the university to go towards adopting Total Quality Management by paying attention to the human element as a basic factor by applying the necessary requirements to ensure the improvement of the quality of university higher education.

The data imposed by modern institutions require the following of the comprehensive quality standards, which are based mainly on the good performance of the human resource in various fields. From this standpoint, this topic of our research aims to identify the most important requirements necessary to ensure the quality of the university and raiseit to the levels of total quality management, and the scientific proposals that contribute the development of educational and scientific research institutions.

Keywords: Total Quality Management, Quality Requirements, Ensuring the Promotion of the Univers.

Introduction

The outputs of educational systems are related to the control of performance, perfection and quality in the preparation, formation and graduation of human resources, so various educational standards have been adopted for teaching and evaluation methods and administrative and educational functions to improve these outputs and analyse and evaluate educational performance in the light of the services and information society, which has become full of scientific, technical and economic changes that have shifted the focus on intellectual flexibility instead of information. In other words, the focus is on achieving the adaptive ability to use creativity, communication and social communication skills, as well as in-depth problem solving, reflection and critical thinking skills. In addition, open global competition has led to a focus on quality and quality rather than quantity, which has led to an increased interest in improving educational quality and outcomes to raise and improve the educational product (the student).

Since the process of developing culture and community development is in essence a reflection of human orientations and abilities to adapt to the changes in community life, it is imperative for higher education institutions to provide education and training for their members and enable them to lead the development process, considering that the outputs of university education represent the human resource and the main driver of most production processes. Whenever the university succeeds in fulfilling its role, it has provided the community with useful services and strong support that enhances its excellence in achieving its goals in accordance with TQM standards.

The aim of this topic is to investigate how to improve the university in the light of the application of TQM standards, and to try to clarify the necessary requirements to ensure the improvement of the levels of the TQM system for university higher education institutions.

1. Adopting a Total Quality System (TQS)

Total Quality Management (TQM) is a modern management concept that aims to continuously improve and develop performance. It is a philosophical concept based on the application of a set of principles and guidelines with the aim of improving the quality of the service and product in the long term, in order to achieve the required effectiveness behind the application of these principles based on providing conformity to specifications or translation to the needs of interactors in the internal and external environment. Therefore, the application of quality is not only to achieve excellence but also to reach the degree to which explicit and implicit needs and expectations are satisfied.⁽¹⁾ Therefore, the quality process is related to design, production and performance.

One of the most important founders of quality is the American expert in the field of statistics, known as the father of quality, Edward Deming, who used statistical methods in quality control and developed fourteen principles for quality improvement, which are summarised in finding consistency and non-conflict between goals, orientation towards performance-based change instead of only profits, thus giving opportunities for participation in the transformation process, and eliminating various barriers by creating educational and training programmes for learning and self-improvement.⁽²⁾

Robert Bernhard defined it as creating a culture of performance excellence in which managers and workers combine their efforts to achieve work expectations, by focusing on the quality of performance in its early stages, in order to reach the required quality at the lowest cost in education.⁽³⁾ By analogy, university education with the concept of TQM is based on a set of guiding principles based on science and knowledge in a broader and deeper way, so that these principles represent a separate management system that forms the pillars of continuous improvement and development.

On this basis, the concept of total quality of university education falls within the policies of the Ministry of Higher Education, as it is a policy made by university education institutions through the permanent mobilisation of all its active parties, in order to achieve the quality of the planned work according to the strategic visions based on the essential pillars to achieve the total quality system.

These pillars are divided into four axes, one based on quality to ensure the survival of the organisation for as long as possible, one based on the human factor through training and creativity, encouraging team building and ensuring effective communication and all forms of change, development and commitment. The fourth axis is total quality itself as the task and responsibility of

¹ - Mohammed Abdulwahab Al-Azzawi: **Quality and Environmental Management Systems**, Dar Wael Publishing, Amman-Jordan, 2002, p.18.

² - Youssef Massadawi: **Fundamentals of Organisational Management**, Dar Homa for Printing, Publishing and Distribution, Algeria, 2013, p.341,342.

³-Yousef Hajim Al-Taie & others: **Total Quality Management in University Education**, Dar Al-Warraq for Publishing and Distribution, Amman-Jordan, 2008, p.179.

top management in the continuous adoption of developmental methods.⁽¹⁾ The fourth axis is total quality itself as the task and responsibility of top management in the continuous adoption of developmental methods.

Joseph Juran (1904-2000) is one of the early pioneers who contributed to the establishment of TQM through his focus on improvement, the intensity of training programmes and the presence of conscious and effective leadership. For Juran, quality is the appropriateness of use with no defects. His ideas were summarised by raising awareness of the importance of improvement processes, training, implementing problem-solving projects, encouraging implementation, and recognising the value of outstanding services.⁽²⁾

In the same direction, Armand Fegeinbaum developed the concept of TQM in his famous book Total quality control-1961, in which he clearly indicated that the responsibility for quality is a solidarity responsibility among those doing the work, meaning that every member of the organisation is responsible for performing his work with complete quality so that quality starts from the source.

Therefore, he focuses on the complementary relationship between quality and cost. He also paid attention to the administrative system and the technical-technological system as they are embodied in the quality assurance processes, so it is necessary to achieve harmony and integration between administrative systems and technical-technological systems to enhance innovative and creative capabilities.⁽³⁾

Accordingly, total quality has become a locomotive for change for the better and an essential criterion for differentiating between organisations in order to maintain survival in the competitive market.⁽⁴⁾ One of the most important reasons for adopting TQS is the pressures of globalisation and the need to innovate new management methods and techniques to cope with rapid and continuous changes.

2. Strategic Visions of the Total Quality System

One of the most important theoretical assumptions of TQM is the acceptance of change and dealing with variables by developing methods of dealing with the environment, absorbing new technology, and redesigning administrative methods, without losing sight of the importance of optimal investment of all available resources and recognising the importance of time as a key resource for management. This is done by adopting the concept of teamwork and recognising the importance of strategic planning in management, which is followed by the rejection of rigid patterns in structures, organisations and management methods.

This leads us to the use of the strategic management method for total quality, based on using strengths and avoiding risks, in order to achieve the quality of infrastructure, quality of service and quality of people.⁽⁵⁾ Through this, a performance comparison is achieved (from where you are to where you want to be), in order to set new goals and adopt best practices for the organisation.

In general, specialists distinguish between two levels of management, a higher level (General Directorate) that embodies strategic management and expresses decisions aimed at maintaining the continuity of the organisation, as it is concerned with an in-depth understanding of the new

¹- Youssef Massadawi: **op. cit**, p.349,350.

²- Salah Abbas Hadi: '**Total Quality Management -An Introduction to Outstanding Organisational Performance**', University of Ouargla-Algeria, International Scientific Forum on Outstanding Performance of Organisations and Governments, Faculty of Law and Economic Sciences, 8-9 March, 2008.

³- Youssef Massadawi: **op. cit**, p.361,362.

⁴ - Moore William, Moore Herbert: **Quality Circles - Changing People's Perceptions at Work**, translated by Zain Al-Abidin Abdul Rahman Al-Hafezi, Institute of Public Administration, Riyadh-Saudi Arabia, 1991, p.169.

⁵ - Jamal Laouissat: **Total Quality Management, Dar Houma for Printing**, Publishing and Distribution, Algeria, 2005, p.25.

relationships that the management develops in line with the surrounding environment, and with understanding the structural and organisational variables that serve to strengthen and develop these relationships. As for the intermediate level, the executive management emerges, which works to implement strategic decisions aimed at obtaining the results planned by the TQM level.⁽¹⁾

Among the most important models of strategic diagnosis, which determines the place of strategy within the general policy of organisations, is the Harvard University model, where at the end of the 1960s, a group of researchers at Harvard University, "Learned, Andrews, Foote", proposed the first model of strategic diagnosis, which is mainly directed at analysing the environment in order to identify possible strategic actions and confront them with management objectives. However, this strategic approach faced the difficulties of conducting internal and external evaluation of organisations, but the difficulty of the applied reality of this model did not lose the organisation's ability to maintain its ethics and standards for strategic management activities.⁽²⁾

Thus, strategic planning is geared towards defining the formal process of strategic developments in achieving quality. In this context, Ansoff believes that the transition from planning to strategic management is an imperative necessity to ensure consistency between the strategy and the organisation's culture and structures. He defined the organisational and political dimensions of strategic management for the various internal and external actors, by answering the questions: Who are we? What are we doing? What are we going to do? This is part of a political process that focuses on identifying the capabilities, behaviours and actions of the various interacting parties in a bureaucratic nature that focuses on preventing strategic imbalances, especially in educational educational systems.

In order to prevent the occurrence of such imbalances, it is necessary to adopt the concept of participatory management, which plays an active and positive role in the quality of university higher education in particular. Participatory management embodies the appropriate combination of management on the one hand and participation on the other, going beyond traditional management practices.

Participatory management carries in its applied nature internal flexibility and the ability to mobilise resources to eliminate rigid procedures and passive control. This will inevitably lead to participation in the processes, means and results in terms of implementation, analysis, organisation, reporting and control, because management without participation is an explanation for frustration, lack of motivation of the various actors and errors in management decisions.⁽³⁾

What distinguishes participatory management is that it is not just management, but requires the integration of various technical and human organisational factors through a holistic approach to development, which includes a focus on working in multidisciplinary groups in order to value the role of the individual within the participatory paths of the quality circle, meaning ensuring the success of the total quality project based on the concepts of development and change to understand individual and collective behaviour, and trying to change this behaviour to serve the goals of the organisation.

This, in turn, is achieved by relying on problem solving through the exchange of opinions and discussion between interdisciplinary groups, in order to resolve conflicts and disputes within the framework of participation in confrontation meetings, where conflicting parties meet to present problems and explore appropriate solutions and to reach an executive programme for implementation, which in turn depends on the use of external consultants specialised in conflict management between groups.⁽⁴⁾

¹⁻ **ibid:** p.149.

²⁻ Rosander Arlyncuster: **the quest for quality in services**, quality ressources, New York, 1989, p.91,92

³ - Armond Feigenbaum: **A total Quality control cincinnati -association for quality-**, New york, 1961, p.82,83.

⁴ - Chang Richard: **Building A Dynamic team**, Irvine Richard chang Associates, New York,1994, p. 66,67.

On this basis, TQM becomes one of the most important qualitative transitions, from the old models of bureaucracy to the new models of TQM, which are based on openness, tolerance and the encouragement of the work of beneficial associations, and emphasises the importance of employee participation in the various strategic processes aimed at improving the quality of service delivery or production, by adopting progressive quality improvement through continuous training and educational experience.

Therefore, going down to the field of work and leaving the formal administrative upper levels based on issuing orders is a radical change in TQM in order to work on improvement, development and actual utilisation of capacities, to do the real work. Improving managerial performance is linked to maximising the power of human capital and highlighting its importance and effectiveness within work groups.

3. Ensuring the quality of university higher education

Quality assurance in university higher education institutions means achieving the functions of education and scientific research in an integrated framework that gives them sufficient flexibility to develop educational activities and services. Quality in higher education is fundamentally linked to the outputs represented by productivity. Therefore, the development of faculty members, changing educational curricula and adopting technological development in management and education is the essence of the strategic thinking of the concept of university quality, whose tasks are embodied in the commitment to carry out the basic scientific, research and cultural functions towards society.

The university strives to create a scientific and applied research environment that is compatible with its goals and objectives and is open in its interaction with all sectors, because the development of societies depends on the productivity and quality of higher education institutions, which is based on:

1- Developing a culture of scientific research

Scientific research is the systematic and rigorous inquiry and investigative method undertaken by the researcher for the purpose of uncovering, developing or correcting new relationships, data and information by applying the rigorous examination of the steps of the scientific method.⁽¹⁾ Scientific research remains a central pillar to reach scientific facts and put them in the framework of scientific rules, laws or theories that are reached through research in accordance with purposeful, accurate and organised scientific methods.

Therefore, the culture of research in terms of construction and development requires the formation of research institutions that contain research competencies within the expectations of teaching and research, so that these institutions work to secure various sources and resources to sponsor, for example, scholarships and train and develop the skills of their employees. As well as the creation of continuing education classes to develop research and teaching expertise. This is often done in coordination with central research units or specialised centres.

The development of a research culture also requires the establishment of open and multiple relationships between researchers themselves, due to the power of the interaction of intellectual homogeneity and its implications for the success of research programmes in order to promote the establishment of a research culture based on effective personal relationships. This, in turn, is related to the extent of cultural changes that require university education institutions to take into account some indicators and variables that drive the best results, such as taking into account the incentives,

¹ - Ahmed Badr: **Fundamentals and Methods of Scientific Research**, Publications Agency, Kuwait, 1973, p.18.

abilities and capabilities of employees, which in turn requires continuous funding and the development of partnerships.⁽¹⁾

In order to develop research productivity, a set of distinctive characteristics of this productivity must be available, the most important of which are as follows:

- Understanding the values and standards that establish academic freedom within the framework of a social circle whose members are in solidarity to develop scientific research.
- Encouraging intellectual discoveries and creations and incentivising them by providing job opportunities and contributing to building a knowledge society.
- Conducting surveys to reveal the knowledge base of the main research carried out within the framework of the so-called knowledge containment.
- Designing field studies based on adequate statistical analysis of data collection methods as part of acquiring basic research skills.
- Diversifying research and not limiting it to a specific field to ensure the continuity of synchronised research.
- Commitment to external and internal scientific events and demonstrations.
- Academic freedom in committing and recognising the role of the researcher in the university.⁽²⁾

From the above, we conclude that the basis of the quality of university higher education is the intellectual capital industry, which is based on the strategy of the type of knowledge that the university wishes to obtain, through building the intellectual fabric and dealing with intelligent human resources, and through performance evaluation for scientific excellence and immediate appreciation of the positive results achieved, with encouraging and motivational support to value the efforts of the university culture.⁽³⁾

On this basis, the university contributes to finding appropriate scientific solutions to the problems posed, setting the objectives on which scientific research is based, which is particularly the development of the human base and the continuous evaluation of the acquired scientific and technological capital, in order to disseminate general and technical culture and support scientific subjects at the levels of the educational system, without losing sight of the main pillar, which is the interest in the field of human and social sciences, given the solutions, treatments and suggestions offered by these sciences to various societal issues.⁽⁴⁾

2- Focusing on the productive student (enabling strategy)

The natural beginning of a productive student is the achievement of success and excellence in studies, which obliges the university to pay attention to the products of this student, by providing a social and cultural environment that encourages work and production and is supported by various means and tools to help motivate and encourage creativity, excellence and excellence. In other words, building a productive platform to create a positive atmosphere and a suitable climate for the exploitation of competencies and abilities.

Therefore, caring for the productive student does not only mean focusing on study and continuous research interaction, as the productive student needs a break from the academic

¹ - Hammam Abdul Khaliq Abdul Ghafour & Mohammed Abdul Wahab Al-Azzawi: **The Productive University-Strategic Visions and Means of Implementation-** ,Dar Alayam for Publishing and Distribution, Amman-Jordan, 2019, p.15,16.

² - **ibid:** p.20,21.

³ - Janine Nahapiet & Sumantra Goshalas: **Social Capital -Intellectual capital and the organizational advantage-**, Academy of management Review, 1999, p.195,196.

⁴ - Hashemi Bregel: **The University and Social Development -A Theoretical Study-**, Dar Alayam for Publishing and Distribution, Amman-Jordan, DS, p.190,191..

atmosphere to upgrade his preparations and identify his creative energies, thereby achieving diversity in his personality, which is the basis for building a positive interactive personality. He needs to engage in associations that are consistent with his aspirations, future prospects, personal desires and inclinations, because such engagements add new acquisitions and distinct technical skills in building his personality and his sense of responsibility towards the work to be carried out, which develops his leadership spirit and sense of the importance and value of cooperative teamwork, and how to manage dialogue, discussion and interaction with others. In addition, he gains experience and activities that support his CV, through which the university student aspires to deepen and expand its content throughout his formative path and reach the achievement of his future self.

It is also the responsibility of the teaching staff to guide the student to read books that work to develop himself, develop his thinking and upgrade his skills away from fictional readings that lose his focus on his reality and affect the building and formation of his personality. The professor's task remains continuous in giving support, encouragement and motivation to the distinguished and outstanding student to achieve university quality in producing positive and effective outputs and achieving sustainable development.⁽¹⁾

In this context, university quality can only be achieved by providing its requirements and focusing on its performance standards and measurements. Therefore, the productive student is considered one of the most important of these requirements that must be taken care of and work to increase their productivity in order to achieve the overall quality of university education. One of the things that work to increase this productivity is to make the student in the process of scientific events, meaning the programming of formative scientific events in which he highlights his scientific activities and gets out of the routine scope of lectures and applications, taking into account and choosing the method of time management, in order to maintain the educational process and implement it according to the plans drawn, without neglecting the promotion of sports activities that give the student the energy of renewed activity.

On this basis, the university remains of great importance in the various changes related to the formation of highly skilled and specialised manpower qualified to employ knowledge and serve societal needs and requirements. Because the university is the first nucleus in the formation of a qualified labour force that is in line with the requirements of the local market, and contributes to the creation of university outputs with in-depth achievement and diverse scientific and cultural knowledge, as well as the acquisition of theoretical and applied methods of work related to the specialisation. Thus, the university has contributed to opening the student's horizons towards the outside world and aspiring towards the stakes and challenges that they come into contact with in the outside world.

Therefore, we should not view higher education as merely obtaining a recognised scientific qualification, but rather the role of the university should be to prepare the individual to carry diverse internal ideals and values and productive knowledge that will make him an active and productive member of his society.⁽²⁾

University education is the basis of growth and mental advancement and the goal of all successful professional growth, and in order for this to materialise, the university must create the appropriate climate for the student and provide him with the means to reach the goal of achieving parity and balance between the university and the labour market.⁽³⁾

¹ - Teaching in room 6, **classroom management** refried from. <http://www.techinginroom6.com> /07/2012.

² - Hashemi Bregel: **op. cit**, p.17,18

³ - Ministry of Information and Culture: **Higher Education -Perspectives on Algeria-**, Department of Documents and Publications, Madrid-Spain, October 1973, p. 60.

Through this argument, the process of developing the student's personality becomes one of the developmental plans followed to advance the university in order to achieve the quality of its outputs based primarily on developing the student's moral values and providing various means of health and social care.

3- Adopting the virtual university model

Virtual university education represents a new educational model, based on the use of e-learning methods through the Internet and its applications on the World Wide Web. As an academic institution, the virtual university is committed to offering educational models with innovative technology to students' residences, as it relies on a remote communication network. Arafah defines it as being based on reaching the student wherever he is, and providing him with educational services with various possibilities available remotely in the light of an integrated virtual campus environment, and by all possible technological means with credibility and effectiveness.⁽¹⁾

The virtual university eliminates the boundaries and barriers of time and space due to the various technological technologies, especially the Internet, which works to transfer information and provide knowledge to students, linking them to each other using many electronic media, where students can access the activities of the virtual university and educational presentations through the Internet, using computers and communication technology.⁽²⁾

The virtual university is an educational institution that directly provides educational opportunities to support teaching and learning processes, as well as its use in administration, production, distribution and delivery of educational materials, and supervision, guidance and evaluation services.⁽³⁾ This virtual approach to higher education has given our university institutions the character of comprehensive quality in performing their functions and tasks remotely, especially when they are not possible through classical methods. They are university institutions that provide distance education through modern electronic media to disseminate lectures, programmes, courses and student assessment, and to achieve strategic management that achieves the objectives of the total quality system in education.

Among the most important criteria controlling the quality of university higher education are the following:

- The availability of an integrated environment with integrated dimensions and temporal and spatial boundaries, through dealing with a secure electronic portal and a custodian of data and information sites.⁴

- The availability of websites that include classified data about the structure of academic departments, names of faculty members, their scientific specialisations and other categories associated with virtual education, so that communication and permanent correspondence is required through electronically available communication channels, without losing sight of the process of electronic registration and electronic payment of fees.⁽⁵⁾

Among the overall quality of performance achieved by virtual university education is the virtual library, which has become one of the requirements of the virtual university, whether in the design of

¹ - Al-Zaidi Asmaa bint Mohammed bin Khalaf: **A proposed model for a virtual university in Saudi university education**, Phd thesis, Department of Educational Administration and Planning, Riyadh-Saudi Arabia, 2009, p.93.

² - Said Hamdan Mohammed: **International and Arab experiences in the field of university** ,e-learning, research presented at the third annual conference -Distance Education and Knowledge Society-, Quality Requirements and Development Strategies, p. 6.

³ - Nabil Nawfal Mohammed: The University and Society in the 21st Century, **Arab Journal of Education**, Tunis, Arab League Educational, Cultural and Scientific Organisation. Vol. 22, No. 01, 2002, p.165.

⁴ - Nasreddin Graf & Noura Lakhwaider: **From Information Technology to Knowledge Societies**, Dar Alayam for Publishing and Distribution, Amman-Jordan, 2019, p.172.

⁵ - Nasreddine Graf & Noura Lakhwaider, **op cit.**, p.175.

educational content or the conduct of the educational process. It has become a major source of educational resources.

One of the most important activities applied in the total quality system for university higher education is the Learning Management System (LMS). Through this system, educational content is displayed, students are registered, performance is monitored, and educational content elements are analysed within the management of virtual educational processes, and there are many virtual multi-programme systems, which have added a comprehensive quality to the virtual university to reflect on the quality of university higher education.

One of the most important technological innovations of the virtual university is the video conferencing technology, which has provided a new dimension of interactive learning, so that it works to deliver distance education and improve communication between the elements of the educational system, where the professor and the student are linked in a positive interaction.

J. Reed & Hyman define video conferencing as a simultaneous audio-visual communication between interacting parties in different locations, through the capabilities of audio-visual computers and digital video cameras, where questions and comments are directed to the main site and receive the required answers and clarifications.⁽¹⁾

4. Turning to the mainstream

The management of e-learning has become an important part of university education, as it has established new patterns, strategies and objectives to achieve educational quality and international differentiation in light of the shift from traditional methods to electronic methods, which attracts new skills and achieves the processes of development and cultural change in the provision of services by modern technological means. In light of the shift from traditional methods to electronic methods, which work to attract new skills and achieve development and cultural change in the provision of services by modern technological means. The application of e-business will change the traditional paths and orientations of the university in its work style, and make quality and excellence one of its most important slogans to re-engineer its work, so that the focus is on providing services to all educational actors benefiting from its work electronically in light of the application of the market economy and the re-engineering of work, management, study and teaching systems, leading to the construction of an information society and economy and integration into the global community.

After the emergence of e-commerce, e-business is an attempt to express new systems, tools, applications and activities that go beyond the limits of e-commerce to extend to the digital technology space of business networks and the Internet. It is an advanced stage in the development of knowledge, its applied techniques and professional skills, and the point of convergence of information systems resources, Internet technologies and websites. E-business systems are a synergistic combination of activities and processes that utilise information technology tools and techniques, allowing the university to manage its relationships with the internal and external environment.⁽²⁾

One of the most important characteristics of e-business is achieving coordination between university higher education institutions through the Internet, which allows information exchange within a framework of security and confidentiality, with the aim of achieving protection of the content of the means or data against attempts to change, modify or erase, during all stages of the exchange, enabling openness to the outside world and learning about the latest technologies in providing services, especially educational ones.

Therefore, the knowledge age is the one that focuses on the best exploitation of modern technologies in various aspects of contemporary life. Therefore, information and communication

¹⁻ **ibid:** p.42.

²⁻ Bilal Khalaf Al-Sakarneh: **Contemporary Management Studies**, Dar Al-Masirah, Amman-Jordan, 2017, p.311-313.

technologies have become a means of life and benefit and not just a tool for entertainment, as societies realise the importance of learning and training to achieve a change in the pattern of thinking. In this scientific, knowledge and information context, the efforts of most countries have focused on establishing a new knowledge education system that adopts modern technologies under the concept of e-learning, which is considered one of the means of distance education by correspondence.

E-learning is one of the most important educational methods distinguished by the total quality system in university higher education in order to use modern communication mechanisms and multimedia technologies, whether remotely or in the classroom. Because the essence of its application is the use of technology of all kinds to deliver information to the learner in the shortest time and the least effort, where the educational process moves from mere indoctrination by the professor and storage by the student, to the interactive dialogue process between the two parties.⁽¹⁾ Hinchlife pointed out that the technical capabilities of the Internet can be used to expand the boundaries of the classroom and enrich educational experiences.⁽²⁾

E-learning has achieved a distinctive quality for the university in integrating technology within the educational system, and within the framework of achieving the democratisation of education, as it works to take into account individual differences and achieve self-learning that creates bridges of communication for continuous learning, in order to upgrade the learner and help him deal with educational software and develop his intellectual abilities, thus opening new horizons for outstanding and talented students. On the other hand, e-learning has provided training processes to translate scientific concepts into a tangible reality that the learner realises, through solving some educational issues and the possibility of interacting dynamically and participatively.

Among the most important issues addressed by e-learning are overcrowding and absences that end in exclusions, as well as the issue of framing and the opening of post-secondary education. The final outcome of this type of education is the use of social networking sites in education and the positive feedback to the student in particular.

In general, electronics has allowed the process of intensifying reform and the use of science and technology available from all distances, which helped form a favourable ground for the growth of the knowledge society and the creation of a knowledge society that seeks to prepare citizens capable of using information and technology pedagogically, research and experimentation. On the educational level, the individual learns and expands his cognitive awareness, on the research level, he discovers laws and uses concepts, and experimentally, he transforms information into knowledge and knowledge into innovation.⁽³⁾

On this basis, we reach the integration of the knowledge society and the achievement of comprehensive educational quality, in order to develop an educational system and support scientific research and development. This is achieved by re-engineering the educational process in line with contemporary changes and challenges, working on using technology to establish basic infrastructure for communications, software and other means of technology, and expanding e-learning.⁽⁴⁾

From the above, we conclude that improving the quality of higher education requires effective mechanisms to keep pace with global changes, in which technology has become the main factor for the development of e-learning, thus creating a qualitative leap in terms of knowledge and information, which in turn contributes to issuing high-quality scientific studies and research that raises the value of scientific research and aims to serve the individual and society.

¹ - Nasreddine Graf & Noura Lekhwaider: **op. cit.**, p.190.

² - Hinchlife .L. G: **helping early child teacher education students learn about the internet**, Eric Digest, Visitea on 14-02-2014, avaibleat : http://ericae.net/edo/ED_395714.

³ - Mohammed Abdulwahab al-Azzawi: **op. cit.**, p.25-65.

⁴ - Traditional Arab Centre for Media Studies for Population, **Development and Environment, Freedom of Opinion and Expression and Freedom of Information, the main pillar of the knowledge society**, Media Studies, Cairo-Egypt, No:113, DS, p.117.

Conclusion

University higher education is linked to the total quality system aimed at mastering the knowledge industry and employing science socially, economically and politically. This linkage has made the university occupy the most important socio-educational centres within the framework of providing useful services and strong support that enhances the efforts made in providing scientific community services, thanks to the effective effects of scientific research, and the extent to which members of society are directed towards benefiting from opportunities for progress and rising in the ladder of excellence, creativity, innovation, renewal and modernisation.

Therefore, the university is considered a social institution that influences and is affected by society and one of its driving aspects, and the university's adherence to total quality standards is within the framework of comprehensive planning that identifies the needs of society from university education and scientific research to face societal problems and work to address them and provide suggestions and possible solutions to continue performing its scientific, technological and intellectual functions, which has forced the university to face the reality of various challenges driving excellence and competition in a rapidly changing, complex and ambiguous environment.

On this basis, quality is no longer a matter of choice, but has become one of the imperatives and necessities of the management of university higher education institutions, which is why most universities seek to apply it, because the slogan of quality is that it is everyone's responsibility. This is why the total quality system falls within the holistic philosophies that require the participation of everyone to achieve the goal of inclusiveness and participation.

Attention to the human element remains the most valuable wealth possessed by university higher education institutions, and its first means of achieving quality and excellence in the scientific method based on the selection of effective policies to select competencies according to the specifications and standards that serve the purposes of total quality.

List of references

- 1- Ahmed Badr: **Fundamentals and Methods of Scientific Research**, Publications Agency, Kuwait, 1973.
- 2- Al-Zaidi Asmaa bint Mohammed bin Khalaf: **A proposed model for a virtual university in Saudi university education**, Phd thesis, Department of Educational Administration and Planning, Riyadh-Saudi Arabia, 2009.
- 3- Armond Feigenbaum: **A total Quality control cincnnati, association for quality**, New york, 1961.
- 4- Bilal Khalaf Al-Sakarneh: **Contemporary Management Studies**, Dar Al-Masirah, Amman-Jordan, 2017.
- 5- Chang Richard: **Building A Dynamic team**, Irvine Richard chang Associates New York,1994.

6- Hashemi Bregel: The University and Social Development -A Theoretical Study-, Dar Alayam for Publishing and Distribution, Amman-Jordan, DS.

7- Hammam Abdul Khalil Abdul Ghafour & Mohammed Abdul Wahab Al-Azzawi, The Productive University- Strategic Visions and Means of Implementation-, Dar Alayam for Publishing and Distribution, Amman-Jordan, 2019.

8- Hinchlife. L. G, helping early child teacher education students learn about the internet, Eric Digest, Visitea on 14-02-2014, avaibleat: http://ericae.net/edo/ED_395714.

9- Jamal Laouissat: Total Quality Management, Dar Houma for Printing, Publishing and Distribution, Algeria, 2005.

10- Janine Nahapiet & Sumantra Goshalas: Social Capital-Intellectual capital and the organizational advantage, Academy of management Review 1999.

11- Ministry of Information and Culture: Higher Education -Perspectives on Algeria-, Department of Documents and Publications, Madrid-Spain, October 1973.

12- Mohammed Abdulwahab Al-Azzawi: Quality and Environmental Management Systems, Dar Wael Publishing, Amman-Jordan, 2002.

13- Moore William & Moore Herbert: Quality Circles -Changing People's Perceptions at Work, translated by Zain Al-Abidin Abdul Rahman Al-Hafezi, Institute of Public Administration, Riyadh-Saudi Arabia, 1991.

14- Nabil Nawfal Mohammed: The University and Society in the 21st Century, Arab Journal of Education, Tunis, Arab League Educational, Cultural and Scientific Organisation. Vol. 22, No. 01, 2002.

15- Nasreddin Graf & Noura Lakhwaider: From Information Technology to Knowledge Societies, Dar Al Alayam for Publishing and Distribution, Amman, Jordan, 2019.

16- Rosander Arlyncuster, the quest for quality in services, quality ressources New York, 1989.

17- Said Hamdan Mohammed: International and Arab experiences in the field of university, e-learning, research presented at the third annual conference -Distance Education and Knowledge Society, Quality Requirements and Development Strategies.

18- Salah Abbas Hadi: 'Total Quality Management -An Introduction to Outstanding Organisational Performance', University of Ouargla-Algeria, International Scientific Forum on Outstanding Performance of Organisations and Governments, Faculty of Law and Economic Sciences, 8-9 March, 2008.

19- Traditional Arab Centre for Media Studies for Population: Development and Environment, Freedom of Opinion and Expression and Freedom of Information, the main pillar of the knowledge society, Media Studies, Cairo, Egypt, No. 113, DS.

20- Youssef Massadawi: Fundamentals of Organisational Management, Dar Homa for Printing, Publishing and Distribution, Algeria, 2013.

21- Teaching in room 6, classroom management refrived from. <http://www.techinginroom6.com/07/2012>.

22-Yousef Hajim Al-Taie & others: Total Quality Management in University Education, Dar Al-Warraq for Publishing and Distribution, Amman-Jordan, 2008.