A Framework for Investigating the Effect of Unlimited Improvement on Quality of Education

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Abstract: The research is focused on the use of continuous improvement in the educational process through procedure adjustments and improvements to teaching performance by excluding traditional means and replacing them with modern approaches, Such as the use of computer hardware, displays, laboratories and modern means of communication in a manner that leads to improvement. The efficiency of teaching performance in turn is reflected in the educational process and efficiency of the outputs of this process. The article proposes a theoretical framework for investigating the effects of adopting unlimited improvement principles on enhancing education quality. It is concluded that educational institutions should adopt modern methods of learning in order to ensure keeping abreast of the scientific developments that serve the educational process, thus contributing to the speed of communication between the student and the teacher helps to survive under technological developments. Moreover, unlimited improvement principles, which are based on total quality management, are expected to provide the necessary tools and techniques for managers of education to evaluate and drive quality of education.

Keywords: Planning, Implementation, Checking and reviewing the results, Correction, unlimited improvement, quality of education.

INTRODUCTION

The teaching profession is one of the humanitarian professions that aim to develop and raise students' mental capabilities. The research problem lies in the failure of educational and educational institutions to use modern learning methods necessary to advance the educational process in light of developments and developments and increase educational institutions, which affects their competitiveness, which requires with it to raise and improve the efficiency of education. University service, which enhances its viability, and studying the effect of implementing the concept of unlimited improvement on the enhancing service quality through the context of higher education. Unlimited improvement is a quality management concept that aims to ensure the continuity of quality enhancements, as well as extending quality management practices to all parts of the organization, its management, and stakeholders. Service quality is a concept that was developed in the 1980s to address the gaps between the perceptions and the expectations of the management, employees, and customers of the quality of the service provided by a business.

The importance of the research emerges from focusing on the neighboring area in the way it is necessary to identify the defects that accompany the educational process in the ways and how trade modern methods of education to keep up with the last developments, and developments as reflected in the progress of this process. Adopting the concept of continuous improvement in university services is one of the strategies that aims to provide high quality outputs have a competitive advantage that enables them to face the obstacles they face. The entry Continuous development in management, scientific and applied research, provides an innovative environment and an appropriate infrastructure for modern teaching aids and the use of ICTs in the service of the educational process as they contribute to improve the interactive relationship between the student and the teacher and the management of the educational institution and contribute to enhancing the effectiveness of learning and the flexibility of the educational process in a way that enables the student to communicate well, especially that the use of modern technologies in the educational process will lead to increasing the mental ability of students in the form It drives them to continue to innovate and innovate, and this requires the management of the educational institution to provide infrastructure.

DEVELOPMENT OF QUALITY

Parasuraman, Zeithaml, and Berry conducted a study that determined ten dimensions of the quality of service that can be generalized to any type of service, it includes these dimensions: realism, reliability, responsiveness, competence, access, courtesy,

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communication, credibility, Security, and understanding. In addition, these ten dimensions have been reorganized into the five dimensions known in the SERVQUAL Model, which include: security, empathy, reliability, responsiveness, and realism, Another study was conducted by Shank et al [1] to assess service expectations in higher education institutions from the point of view of the professional service provider and students indicated that students expected many faculty members compared to what their faculty expected. The researchers suggested that it is possible to manage student expectations; to reduce the gap that will lead to increased quality of educational services and student satisfaction [2]. Shago's study [3] aimed to measure students' perceptions of their learning experiences and needs in Tshwane University of Technology in terms of providing services to students, and how this information can be applied to improve the quality of teaching and learning at this university. The analysis focused on the areas that students rated as important, which they expressed satisfaction with, as well as those aspects that were of great importance, but were slightly satisfied with them [4].

The roots of continuous improvement (CI) or Kaizen (meaning change) are about by some industrial companies for the purpose of achieving continuous reduction in costs The best) to Japan as it was adopted Production through gradual improvements and minor repairs in activities The processes that the production units undergo, in particular And the amounts being spent during the year Perform continuous improvement Loss, damage and cuts can be made through contributes to the attempt to achieve the desired goals [5]. Unlimited Improvement is a philosophy developed by Taiichi Ohno to lead industrial enterprises and financial institutions, as well as their application in all aspects of life, based on analysis and process. In the field of business and industry, the word "Kaizen" usually refers to activities that continuously improve all aspects of work, such as industry and management, which improve standard activities and work methods.

The Kaizen philosophy primarily works to prevent wasted energy, time and energy. The theory was applied in several fields during the re-reform of Japan after the Second World War and since then has spread in the fields of business all over the world, The process of unlimited improvement is the essence of TQM. It is the blood that is carried out in the veins of TQM. Its methodology is based on "continuous improvements in all areas of work in the organization, in order to adapt permanently to the changes that occur in the internal and external environment of the organization. Quality management, it aims to reach "full agreement through continuous improvement in the production processes of the organization [5].

While the process of continuous improvement of quality management is "to come up with the new and the better permanently, the new and better are the symbol of excellence and therefore survival and continuity, to stay on the old means the disappearance" [6]. Many researchers and writers have gone on a statement unlimited improvement Kaplan & Atkinson [7] defined continual improvement as "the technology that draws the attention of senior management to think about how it can motivate readers and their staff at all levels to find ways to reduce costs for the product or service". Weetman [8] defined it as "the process of short-term improvements in small, repetitive items compared to large-scale long-term fundamental change events by reducing variable costs at certain rates". Continuous improvement is also defined as "a method of continuously improving improvements in the cost profile through the process of manufacturing the product in such a way as to reduce the cost of the unit produced or The offered service" [9].

Quality thinking was accompanied by the proposal of a set of mechanisms and pillars that would improve the status of the educational system and overcome the various obstacles that have made the level of education in our Arab countries low. Any reform should therefore proceed from the following entries: Change curricula and educational programs: In this regard, we must work on adopting a new strategy in the building of decisions based on competencies instead of goals and on how to compensate for quantity and diversity and diversity instead of unilateralism. Improving the educational supply in cities and villages: In accordance with the principle of equal opportunities, the educational offer should be expanded and improved in villages as well as in cities in order to allow everyone to complete the study in the best conditions.

The roles assigned to it and provide services of high quality, Care for human resources: In view of the role of the human resource in upgrading the educational system, attention must be paid to the frameworks working in the sector, both at the material level and working conditions or at the level of basic and continuous training, governance and decentralization in management and management: through the establishment of good governance mechanisms and the establishment of a policy of decentralization and decentralization, which aims to share tasks and adopt a policy of proximity and the adaptation of educational directives and policies with the specificities of each region [10]. Adequate funding and rationalization of expenditures: Any reform project that requires improvement and development needs sufficient funding to achieve the desired, but this does not mean the disbursement of large sums of money in useless matters, as the quality is not measured by the amount of funds and funds allocated for the project, but what can be achieved from Results on the ground with minimal costs, taking advantage of foreign expertise.

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Due to the universality of the quality system, it is necessary to use foreign experiences and experiences, especially from the leading and pioneering countries, to adopt this approach and to undertake adequate sociological and historical studies before introducing any amendments to the educational system in order to ensure their conformity with the principles of quality system [11].

UNLIMITED IMPROVEMENT AND QUALITY OF EDUCATION

The following elements should be considered when implementing Continuous Improvement in Quality in higher education level [12]:

- Planning: The objectives should be based on accurate data and information from inside and outside the institution. This information includes all the technical and marketing elements. Financial and other data. These data are categorized and analyzed in a manner conducive to policy development. The appropriate information is channeled to the appropriate section in a timely manner. Policies should not be determined based on personal attitudes and emotions for the full implementation and must specify the necessary procedures to achieve the goals by setting standards for the operation and other technical and organization of cadres and personnel training on the required tasks.
- Implementation: The planned work is carried out.
- Checking and reviewing the results: Check the extent to which the results match the objectives and instructions and use the scheme of cause and impact in the work of review and verification to study all the factors affecting the results and uses of distributions and control maps and the results of the review of the previous queues should be considered.
- Correction: Based on the results of the review and verification, an appropriate reaction is taken in the event of any deviation from the specifications and intervention to remove the causes that are discovered, and the information derived from the study should be passed back accurately and as quickly as possible the right person.

Several tools are used for the implementation of unlimited improvement [13]:

- Flow Charts. Flowchart is a diagram to represent process steps and determine Decision-making points and appropriate corrective actions.
- Check Sheets. Through the organization of these data, these data can be easily analyzed and facilitated Which helps to solve the problems of the process and make improvements to the product or service.
- Pareto Diagram. Is a graphical representation of the problems in the production process or service and through this technology can be sorted problems from the most frequent to the least.
- Histogram. A graphical representation that allows a simplified way to analyze the data collected from the production and service processes in order to determine the quality of their outputs or detect their defects
- Cause and Effect Diagram. At this stage, the causes of the differences and the changes we observe in the process are examined, as well as the reasons for the appearance of those defects in the product or service.
- Scatter Diagram. It is used to analyze process data in a graphical way by which to search for a potential or expected relationship between two variables. It is possible to search for and uncover the relationship of cause and effect between two variables and to clarify the type of relationship between the two variables and to know the strength of the link between them.
- Control Charts. A continuous statistical analysis of changes in the process is made to monitor and control the quality of the product or service and improve the process.

Principles of Total Quality in Higher Education to implement a comprehensive quality system, the institution must develop its own principles and pillars by planning and agreeing with partners. These principles are:

- Supporting senior management through improving quality as it affects the methods through which management works.
- Formulating the quality policy in a clear and understandable manner, through which the objectives that the institution seeks to achieve are determined.
- Engaging all employees in achieving quality cannot rely on one individual. Strategic planning of the institution, to identify the challenges and changes that may be faced and the extent of acclimatization and response to these changes.

PROPOSED FRAMEWORK AND APPLICATION

The focus of this research will be on the of the Unlimited improvement on the reality of educational services in Iraqi universities because the student has a teaching experience at the University of Baghdad where she worked for two years at the University of Baghdad. The research will include some concepts to improve the quality of education by measuring the impact of Unlimited

improvement on Increase the output of these services, while the second aspect will be in the education sector [14], stated that sample mass determination very sampling should be performed within systematic steps. The commonly known sampling process consists of five steps which are:

- Definition of the main mass,
- Sample frame,
- Determination of sample size,
- Determination of sampling method
- Selection of sample.

The basic type of probability sample is the random sample in which every item in the relevant world has an equal opportunity of being selected. The research relies on the use of inductive and deductive methodology, and both approaches are considered. In an integrated approach, the inductive approach starts from the molecules to reach accredited colleges. The first is the observation of the phenomenon, to development of scientific hypotheses, and then the final stage of the curriculum. The extrapolation is a test of hypotheses, relying on the methodological deductive Stages. Note the phenomenon under study, where the researcher will extrapolate and review studies scientific research and periodicals related to research, which will help to form a scientific background for different aspects of research.

The development of scientific hypotheses was development of scientific hypotheses for research in light of the framework and the necessary data were identified through interviews with the company's officials, and the survey list was drawn up, and testing hypotheses. The hypotheses will be tested using statistical programs to reach search results and validation test to achieve and evaluate the research objectives, and to determine the possibility dissemination of research results to the study population. Data collection is the systematic approach to gathering and measuring information from a variety of sources to get a complete and accurate picture of an area of interest. Data collection enables a person or organization to answer relevant questions, evaluate outcomes and make predictions about future probabilities and trends. Data were obtained to achieve the objectives of the study based on two sources of data collection Secondary source.

Based on the elements studied for unlimited improvement and quality of education, in addition to their tools, techniques, and prerequisites. A theoretical framework is proposed for studying the effect of unlimited improvement on quality of education, as shown in Figure 1.

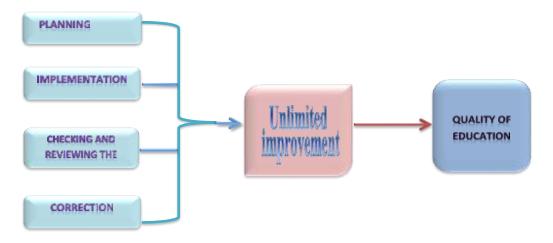


FIGURE 1. Proposed framework for studying the effect of unlimited improvement on quality of education.

Based on the framework, the following hypotheses are tested through implementation on students and staff at Baghdad College of Economic Sciences University (Private University) and Faculty of Management and Economics – University Baghdad (Evening Studies):

- H1: Planning of quality management through unlimited improvement has a positive effect on quality of education.
- H2: Implementation of unlimited improvement has a positive effect on quality of education.
- H3: Checking and reviewing results of unlimited improvement has a positive effect on quality of education.

H4: Correction practices of unlimited improvement has a positive effect on quality of education.

DISCUSSION

The necessity of having a clear and specific educational policy and setting goals for basic jobs in light of those policies Educational are increasingly urging. It is also necessary to define prior goals for the quality of outputs and to activate the communication system between the various levels and functions Related to student numbers. The continuous review of inputs is performed through evaluating performance and granting powers to solve problems of decline Scientific level and making recommendations. Moreover, improvements in the educational process should take place in an organized manner and considering individual needs and social to open new specialties. Other challenges are required to be dealt with, such as essential training courses that can form the edge and knowledge for educators, adaptation with current technological advancements, attending to students' needs, complaints, and issues, and the importance of commitment to continuous improvements in higher education.

While taking all the abovementioned challenges into consideration, it is essential to adopt a quality driver to ensure that quality of education is planned for, advanced, and monitored. Therefore, unlimited improvement is a beneficial concept to embrace as it provides the necessary elements, techniques, and tools for the achievement of this goal. The proposed framework focuses on four important aspects of unlimited improvement that can provide quality of education of enough impact to strengthen the educational process.

CONCLUSION

Setting pre-set goals for the quality of outputs and activating the communication system between the various levels and functions Related to the numbers of the student helps in directing the teaching work and qualifying the student for the required level of quality. The efficiency of teaching performance in turn is reflected in the educational process and efficiency of the outputs of this process. The article proposes a theoretical framework for investigating the effects of adopting unlimited improvement principles on enhancing education quality. It is concluded that educational institutions should adopt modern methods of learning in order to ensure keeping abreast of the scientific developments that serve the educational process, thus contributing to the speed of communication between the student and the teacher helps to survive under technological developments. Moreover, unlimited improvement principles, which are based on total quality management, are expected to provide the necessary tools and techniques for managers of education to evaluate and drive quality of education.

REFERENCES

- 1. M. D. Shank, M. Walker and T. Hayes, "Understanding professional service expectations: do we know what our students expect in a quality education", Journal of Professional Services Marketing 13(1), 71-83 (1995).
- 2. K. N. Dervitsiotis, "The pursuit of sustainable business excellence: guiding transformation for effective organizational change", Total Quality Management & Business Excellence 14(3), 251-267 (2003).
- 3. N. E. Shago, "Student satisfaction survey as a quality improvement tool at Tshwane University of Technology (A dissertation from Faculty of Education, Tshwane University of Technology, 2005).
- 4. T. R. Evans and J. W. Dean, "Total quality management, Organization and strategy" (USA: Thompson Learning, 2003).
- 5. R. W. Hilton, "Managerial Accounting" (6th edition, McGraw-Hill, 2005).
- 6. C. L. Tung and L. Hsienyao, "Two-dimensional quality model and important performance analysis in the student dormitory in Taiwan" (American Academy of Business, 2006).
- 7. R. S. Kaplan and A. A. Atkinson, "Advanced management accounting" (3rd Edition, Prentice Hall, 1998).
- 8. P. Weetman, "Management accounting" (1st Edition, Pearson Education, 2006).
- 9. E. Mclancy and P. Atrill, "Management accounting for decision makers" (5th Edition, Prentice Hall, 2007).
- 10. B. G. Dale, "Managing quality" (Prentice Hall, 1994).
- 11. L. Low, "College students satisfied? A national analysis of changing expectations" (The USA Group Foundation New Agenda Series, 2000).
- 12. R. Mosahab, O. Mahamad and T. Ramayah, "Comparison of service quality gaps among teachers and students as internal and external customers", International Journal of Marketing Studies 2(2), 13-20 (2010).

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Vol. 5 Issue 8, August - 2021, Pages: 21-26

- 13. M. Aichouni and A. I. Al-Ghonamy, "Towards a simple approach based on process improvement to measure quality indicators in higher education institutions" (Third Conference on Quality in University Education in the Islamic World, 2010), pp. 127-146.
- 14. O. Kucuk, "Scientific research methods Translated from: Bilimsel Araştırma Yöntemleri" (Bursa, Ekin Publishing, 2016).