

## **A Proposed Concept for Developing School Administration in Light of Edward Deming's Quality Standards**

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### **Abstract:**

The aim of this study was to present a proposed framework for the development and improvement of educational administration in light of the quality standards set by Edward Deming as a measure of quality. This is intended to enhance the educational level and work towards performance improvement by providing a set of strategies related to processes and organizational structures that lead to continuous improvement within educational institutions. This study relied on a descriptive approach through the presentation and analysis of concepts and key elements addressed in the analytical meta-analysis method. Finally, the researcher recommends the adoption of total quality management by educational institutions and emphasizes the support of administrative leadership for this philosophy, in order to create a new organizational culture based on standards that measure educational quality in various domains.

**Keywords:** educational administration, total quality management, Deming's quality standards, educational product.

### **Introduction / Problematic:**

Many governments focus heavily on their educational system, aiming to improve and develop it, as it serves as a true measure of civilization and progress in the modern era. Education is the ultimate choice in a world of diverse and rapidly changing variables, through which nations can shape the desired future and anticipate a qualified generation capable of interacting with the developments, data, and variables of the age. This generation should be capable of solving problems and overcoming obstacles in its environment. Many countries attempt to reform their educational systems by developing educational administration as one of the necessary pillars of reform. Educational administration is responsible for implementing educational programs to bring about change in educational outcomes while focusing on their quality, aligned with the nature of an era characterized by scientific, technological, and informational progress, as well as the needs of individuals and society.

Numerous modern administrative methods have emerged to bring about the necessary educational change in educational institutions, with one of these methods being Total Quality Management (TQM). TQM is considered one of the most modern administrative methods in the field of educational administration. Thus, the focus on the quality of the educational product has gained attention, with its mechanisms and concepts transitioning from the industrial sector to the educational field and the education sector. This transition aims to achieve the best results according to predetermined educational objectives, particularly when it comes to the fundamental administrative processes upon which educational administration relies.

The performance that can achieve the quality of the educational product necessitates attention to inputs, processes, and outputs within the educational institution through revisiting the goals, objectives, and strategies of educational work, as well as the standards and evaluation procedures implemented within the school administration, considering it as part of educational administration responsible for implementing the public education policy. It is primarily associated with the administrative philosophy it adopts. Total Quality Management (TQM) is one of the recently introduced methods in the field of education after proving its success and importance in industrial, economic, and service sectors. Comprehensive quality management in education strives to enhance the educational process, keep pace with developments, and address administrative issues.

School administration occupies a crucial position as the driver and organizer of the educational process, overseeing its paths and regulating its inputs and outputs. Therefore, it is impossible to imagine any

educational product without envisioning the administrative apparatus supporting it. Consequently, school administration is in dire need of adopting an approach that ensures obtaining educational outcomes that align with the evolving life developments, within the context of technological systems that facilitate administrative processes and their easy implementation in a supportive and evolving work environment. Good education requires the adoption of effective strategies and the establishment of flexible models and standards that achieve the quality of the educational product and satisfy the beneficiaries simultaneously.

Edward Deming is considered the pioneer of the concept of Total Quality Management (TQM) and the father of the TQM revolution in management. He developed principles that later became known as the Deming Model, which has been adapted in various fields, including the educational field. Given the importance of TQM standards in school administration, in particular, this study aims to shed light on these standards, explore their key principles, and examine their impact on school administration and their success in educational institutions. Consequently, this study attempts to develop a conceptual framework for enhancing school administration based on the Deming Model and its standards.

The problem of this study is defined in its pursuit to determine the feasibility of implementing Edward Deming's principles of quality in educational institutions by analyzing this model and applying its standards to school administration. Based on this, the researcher formulates the problem of the study in the following question:

"What is the proposed framework for implementing Total Quality Management in developing school administration based on Deming's standards?"

To answer this question, the study poses a set of sub-questions and provides answers to them, which are as follows:

- ✓ What is the concept and objectives of school administration?
- ✓ What is the concept of Total Quality Management and its objectives in the educational field?
- ✓ What is Deming's model for quality management and the included standards?
- ✓ What is the proposed framework, based on Deming's quality standards, to enhance the effectiveness of school administration?

### **Objective of the Study**

The objectives of the study are as follows:

1. To understand the concept of Total Quality Management (TQM) and its importance in the educational field.
2. To introduce the quality standards according to Deming's model and explore their applicability in educational institutions.
3. To highlight the concept of educational quality and the potential adoption of the TQM philosophy.
4. To identify mechanisms for implementing quality standards in educational institutions based on Deming's model.
5. To develop a framework for utilizing the principles of Total Quality Management according to Deming's standards.

### **Significance of the Study:**

The importance of this research lies in addressing the crucial topic of quality in education.

Education in Algeria does not rely on reference frameworks for measuring performance quality. The results of this study may be significant in drawing the attention of education stakeholders to the importance and necessity of implementing quality mechanisms in education.

1. The study contributes to the development of educational administration and provides a futuristic outlook for advanced management.
2. The educational administrative field is of particular interest to the researcher since it represents a unit of actors within school administration.

### **Study Methodology:**

In this study, we adopted a descriptive-analytical methodology that aligns with the research objectives. This methodology involves gathering information, describing, interpreting, and analyzing it to arrive at scientific and objective results.

### **Definition of Key Concepts in the Study:**

• **School Administration:** It refers to the coordinated efforts and activities within a legislative and organizational framework carried out by individuals working together to achieve predetermined educational objectives.

- **Quality:** According to Guran, it refers to the specifications of a product or service that meet the needs and satisfy the beneficiaries, obtaining their satisfaction (Alurthan, 2011, p20). In this study, the researcher sees quality as the pursuit of every educational institution and the extent to which educational goals are achieved in the product (learners) based on Deming's standards.

- **Standards:** They are normative rules, reference frameworks, or conditions used to assess individual or group behaviors, actions, and thinking patterns. (Shehata and Alnajjar, 2003, p 285)

- **Quality Standards:** It refers to the ideal state of expected performance, designed to help educational institutions form a comprehensive perspective on managing their organizational performance to achieve continuous effectiveness and efficiency in line with the expectations of service beneficiaries. It is the model used to measure the degree of completion or efficiency of something. (Al-Rashidi, 2013).

- Set of conditions and rules that form the basis for quantitative and qualitative judgment by comparing these conditions with the existing situation, thereby identifying strengths and weaknesses. (Morad, Youcef, 2018).

- **Quality Standards by Deming:**

They are a set of principles, methods, analyses, and developments for any activity related to production processes and services, developed by Deming in the late 1970s. They have become a significant aspect of Total Quality Management.

In this study, the focus will be on Deming's quality cycle and the fourteen quality standards.

- **Educational Product:** Refers to the students or learners.

- **Proposed Framework:** The proposed framework, procedurally, refers to the set of suggested practical determinants for the development of school administration based on the analysis of Deming's quality standards. It can be considered as recommendations for the study.

## **I- Conceptual Elaboration of Study Variables:**

### **First: School Administration:**

#### **1- Concept of School Administration:**

Ahmed Ibrahim Ahmed defines school administration as "the organized system that interacts positively within and outside the school according to a general policy and educational philosophy classified by the state's desire to prepare young people in line with the goals of society and the public interest of the state. This requires carrying out a coherent set of tasks and activities while providing a suitable climate for their successful completion."

The concept of school administration has multiple interpretations, including that it is an integrated system that aims to plan, manage, and evaluate the human and material resources available to the school, leading to a set of decisions that effectively achieve the desired goals (Zahran, 1995, p. 12).

The framing body of the National Institute for the Training and Improvement of Education Staff (Lakhdar, Kamal, 2009, p. 168) provided a comprehensive definition, defining it as "a set of functional processes (planning, coordination, guidance) that interact positively within and outside the school according to a general policy made by the state in line with the goals of society and the state."

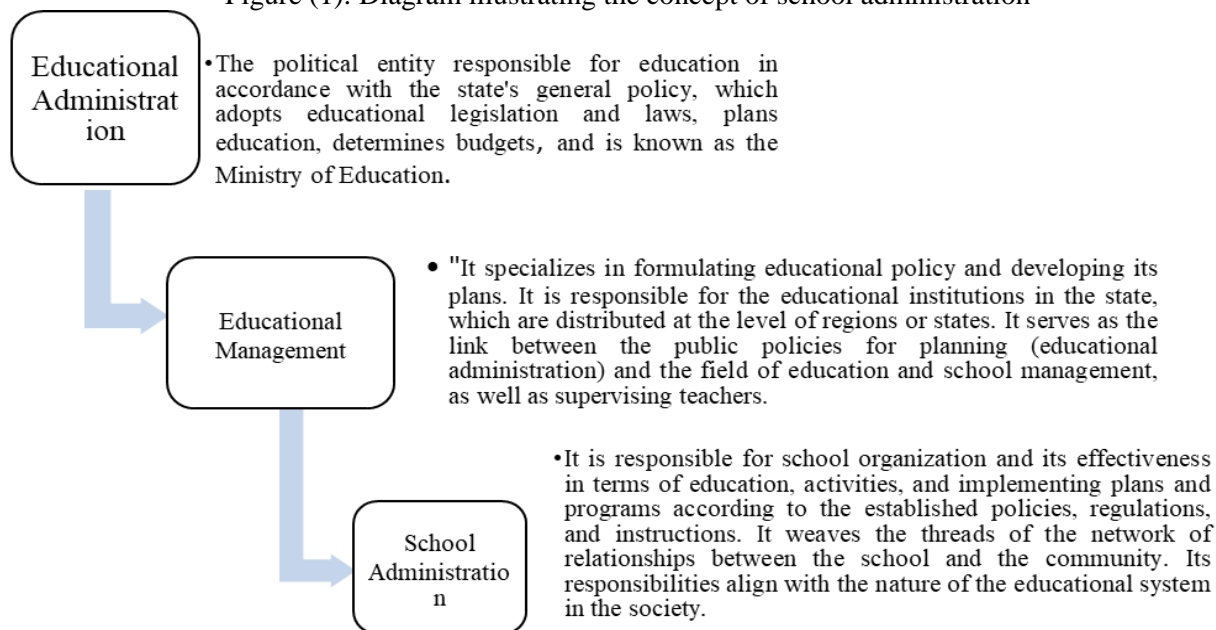
There is a difference in defining the concept of school administration, which is attributed to the diversity of opinions about the nature of school administration. Atawi (2014) pointed out that administration is the organizational climate where healthy human relationships, modern concepts, tools, and methods in education and administration are available to achieve the best results with the least effort and cost. Therefore, school administration is considered a branch of educational administration that aims to organize the various activities performed by the staff in the school to achieve specific goals in the shortest time and with the best outcome. What is noticeable is that school administration, like other organizational administrations, has been influenced by multidimensional developments and has kept pace with contemporary challenges by using modern technological means and new management approaches. As a result, it has transformed from merely managing school affairs according to specific rules and instructions, limited to administrative aspects (Atawi, 2014), into a conscious administration that aims to improve the educational process and enhance performance through raising awareness and enlightening school staff about their responsibilities and guiding them in the proper educational manner.

The concept of school administration is closely linked in the educational field to the concept of educational institutions. These institutions are considered the collective organizational structures through which school administration is practiced, and they are based on the application of its principles and the achievement of its goals. Thus, educational institutions can be considered as the framework that reflects the performance and administrative management accomplished within the educational organization.

## 2- School Administration and Other Concepts:

Many people use the terms educational administration and school administration interchangeably, while in reality there are differences between them, as illustrated in the following diagram:

Figure (1): Diagram illustrating the concept of school administration



**The source:** Mohammed Abdel Qader Aabidin, 2001, p. 94

Based on the above, we can say that school administration is a part of the whole and shares in its components. It is a branch of general administration. If "educational administration is a reflection of general administration in society, then school administration is considered a part of educational administration, and both share in the components and elements of administration" (Abu Al-Wafa, 2000, p. 10).

### 3. Objectives of school administration:

Modern school administration has several objectives, including:

- Building the student's personality holistically, academically, physically, socially, and psychologically.
- Organizing and coordinating artistic and administrative activities in the school.
- Developing necessary plans for the school's growth and progress and working towards achieving the set objectives.
- Focusing on achieving social objectives by understanding community issues and contributing to their resolution.

If we want to summarize the role of school administration, Atawi (2014) beautifully articulated it based on its primary purpose, which is the achievement of specific objectives through the execution of tasks by individuals in four fundamental processes: planning, organizing, directing, and controlling. These processes involve stages of goal setting, decision-making, implementation, and evaluation after monitoring to ensure the smooth running of the educational process according to predetermined schedules, aligned with the modern concept that places the learner at the center of the educational process (Sadek Issa Al-Shafi'i, Ali Turki Al-Futlawi, 2015, p. 77).

Presenting the concept of school administration and its objectives from this perspective makes one of its most important priorities the search for defining mechanisms and their implementation in order to improve administrative performance and enhance the efficiency and effectiveness of the educational product in educational institutions, thereby achieving the objectives pursued by the educational system.

### Secondly - Total Quality Management:

#### 1. Concept of Total Quality Management:

Total Quality Management can be defined as "an administrative approach that ensures the delivery of value to internal and external beneficiaries through continuous improvement and development of administrative processes correctly from the first time, relying on the needs and requirements of the beneficiary" (Vujovic et al., 2012:4).

It can also be defined as "the continuous development of administrative processes through reviewing, analyzing, and searching for the necessary means for the customer or the process, in order to reduce costs and raise the level of quality, based on the development of customer requirements and needs at all stages" (Lifvergren & Bergman, 2012:24).

The British Quality Organization has provided the first definition of Total Quality Management, stating that Total Quality Management is the management philosophy of the institution through which it realizes the fulfillment of both consumer needs and project goals together ([www.bqf.org.uk](http://www.bqf.org.uk)).

It is also known as a managerial approach to improve the organization's competitiveness, efficiency, and flexibility as a whole. It is a method to know all activities and relies on all individuals at all levels. It is more than just administrative processes; it is considered a culture and a way of life through which organizations and institutions aim to make fundamental changes in the methods of all individuals and proper conduct within the organization.

From the above, we can conclude that Total Quality Management is a comprehensive and integrated managerial approach based on several foundations, including:

1. Teamwork and the participation of all employees.
2. Continuous improvement of different processes.
3. Optimal utilization of available resources.

The concepts of Total Quality Management have varied and diversified with the intellectual background and vision of each thinker regarding the subject. However, there is a common factor among them, which is the attempt to satisfy the beneficiary and meet their needs while continuously improving the product.

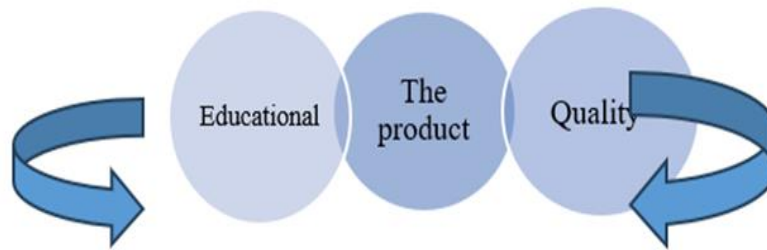
## **2. Objectives of Total Quality Management in the educational field:**

Total Quality Management in education, as defined by Rhodes, is an administrative process based on a set of values that derives its energy from information, employs the talents of employees, and creatively invests their intellectual abilities at various organizational levels to ensure continuous improvement of the institution (Ahmed Said Mustafa, 1997, p. 367).

If the goal of implementing quality in various fields is to improve and develop the product and gain beneficiary satisfaction, the same applies to the educational and learning field. Quality in education means that the outputs are good and aligned with the system's objectives in terms of the needs of the society as a whole in its development and growth, as well as the needs of the individual as a building unit of this society (Ahmed, 2003, p. 166).

Al-Ajmi (2007) pointed out the objectives that can be achieved through the implementation of Total Quality Management (TQM) program in education. Through TQM, each individual in the educational institution recognizes their required role and strives diligently to excel and improve their work, ensuring the attainment of objectives while emphasizing the necessity of continuous collaboration among all employees in the educational institution to achieve the desired product quality, satisfaction, progress, and continuous development. These objectives can be summarized as follows:

1. Emphasizing that quality and work excellence are characteristic of the era we live in, and they are functional requirements that should encompass all aspects of the educational process.
2. Developing the performance of all employees through fostering a sense of collective educational work and enhancing collaborative skills to benefit from all potentials and employees.
3. Establishing the concepts of comprehensive quality or those based on effectiveness and efficiency.
4. Achieving a qualitative leap in the guidance and educational process, based on documenting programs, procedures, activating systems and regulations, and elevating the levels of students.
5. Ensuring proper performance of the roles provided in the educational process from the first instance, while continuously working on improvement and development.
6. Understanding the needs and desires of internal beneficiaries (students) and external beneficiaries (parents and the community) to achieve their desired outcomes.
7. Enhancing the organizational effectiveness of the human resources working in educational institutions.
8. Increasing the competitiveness and efficiency of educational institutions through enhanced collaboration between school administrations and encouragement of teamwork.
9. Planning quality control processes through inspection and follow-up to enable educational institutions to grow and achieve stability.



Objective of Total Quality Management

Objective of School Administration

Figure (2): Planning for the intersection of Total Quality Management objectives with those of school administration.

Prepared by the researcher.

Through Figure 2, we can deduce that the primary objective of Total Quality Management (TQM) is to enhance the quality of the product, regardless of its nature. The educational institution has its product, indicated by the educational output, which is the learners, aiming to deliver it to the beneficiary society in accordance with its values and specifications. This succinctly summarizes the reasons and justifications for the necessity of adopting the principles of Total Quality Management in educational administrative processes within educational institutions. It utilizes human resources and all available means within interactive activities that highlight their effectiveness through the conviction of the importance of implementing these principles to satisfy the beneficiaries of the educational process while continuing to develop and achieve the set objectives, ultimately attaining efficiency and competitiveness.

### **3-Justifications for implementing Total Quality Management in school administration:**

Total Quality Management (TQM) is considered one of the key pillars of the modern management model, which aligns with global changes and aims to adapt to them. On one hand, the philosophy, standards, and principles of quality lead to improvement and development in the performance of employees in school administration. On the other hand, TQM has become an essential requirement, especially in the era of comprehensive information revolution (digitalization of the education sector) in our institutions. Therefore, there are several justifications for implementing Total Quality Management in the educational field, specifically in school administration, with the most important ones being:

1. Cost reduction resulting from fewer errors.
2. Increased productivity of personnel and improved performance.
3. Boosting employee morale, creating a sense of active participation in decision-making concerning work and its development, thereby enhancing job satisfaction.
4. Achieving learner quality in terms of cognitive, performance, and ethical aspects.
5. Enhancing the reputation of the educational institution in the eyes of teachers, students, and individuals.

### **4-Importance of defining and setting standards for educational quality:**

Defining quality standards for educational institutions is considered the true gateway to achieving quality and reforming the educational system. It serves as a benchmark for assessing the quality of their educational output and ensures the continuous process of improvement. The importance of defining quality standards can be summarized in the following points:

1. It forms the basis for educational reform by determining quality specifications for individuals and educational institutions of all types. It defines appropriate educational programs and ensures the quality of their outcomes.
2. It ensures the principle of equal opportunities for learners at various levels of education. If all educational institutions adopt quality standards in pre-university education, it allows for a certain degree of fairness for all learners. It also enables an objective and genuine evaluation of institutional performance.
3. It serves as a reference framework for faculty members, educational leaders, and decision-makers.
4. It directs efforts in curriculum development, particularly teaching practices.
5. It provides learners and faculty members with clarifications and benchmarks. Learners, according to these standards, can determine their expected learning outcomes, while teachers can identify the skills and content to be taught at each educational level.
6. It effectively supports and empowers teachers in their work, enabling them to evaluate their performance and driving them to strive for continuous improvement and development.

7. It provides opportunities for all stakeholders involved in the educational processes to contribute to improving educational outcomes.

8. It helps identify roles and responsibilities for all human resources within the educational system and reveals strengths and weaknesses in the educational institution.

By reviewing the literature on administrative and educational thinking, it becomes clear that there are three essential areas that any model for implementing total quality in education focuses on (Mohammed Al-Khatib, 2007, p.17). These areas are:

1. Customer concerns (students and their parents/guardians).
2. The educational institution itself.
3. Educational leadership.

In order to achieve quality in educational institutions, it is necessary to consider developing management approaches that move away from traditional methods. These methods primarily rely on hierarchical authority, prioritizing control and issuing formal orders, assigning tasks that do not match employees' capabilities, depriving them of taking responsibility, and lacking the ability to innovate and renew. They also emphasize performance monitoring without focusing on the quality of outcomes. Unfortunately, these negative factors are prevalent in most of our institutions today.

Therefore, educational institutions must seriously consider implementing comprehensive quality models.

#### **5-For Total Quality Management: Deming's Model**

Deming introduced a statistical model for quality control, developing his ideas about quality after migrating to Japan. His philosophy revolved around placing the concept of quality within a human framework. The simple yet powerful idea that drove all his work was that if the workforce in a factory is fully committed to excelling in their work and has sound management processes in place, quality will naturally result. This model is based on the notion that total quality is a collaborative effort, and Deming established that every individual should contribute to the production or service process while striving to achieve the set objectives and satisfy the beneficiaries. According to Deming's perspective, quality is not absolute but relative, as it reflects productivity. Deming's approach relied on using statistical techniques to achieve continuous improvement. Through these techniques, managers can identify and eliminate problems in a continuous and flowing process during production, rather than after it.

#### **II- Designing the Proposed Framework in Light of Deming's Model for Educational Quality:**

For quality in the educational field, Deming's principles of total quality must be incorporated into the design of any quality approach to be implemented in an institution. It is considered one of the fundamental requirements for applying the concept of total quality management in educational institutions. Deming defined the criteria that reflect quality within educational institutions as follows:

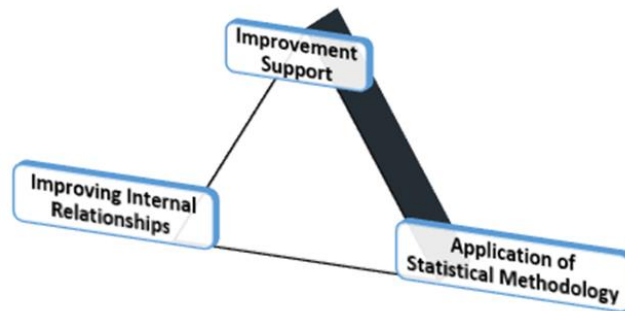
1. Leadership: Demonstrates how management develops and facilitates achievements.
2. Policy and Strategy: Reflects how the educational institution applies its mission and vision.
3. Resource Management: Planning and managing the institution's resources to achieve the most beneficial outcomes.
4. Management Processes: Reflects how the institution is designed, managed, and improves its processes to implement its policies.
5. Stakeholder Satisfaction: Illustrates how the institution achieves satisfaction among its members and the community as a whole.
6. Impact on Society: Measures how the educational institution accomplishes local and international needs and expectations.

The results of the work indicate performance development and planning (Reusser Buther, 2007, p.107). Deming's principles focus on a set of foundations that institutions must adopt in order to achieve their goals, structured in a hierarchical form.

(Figure 3): Represents Deming's Triangle

Source: (Deming, 1986, pp. 97-98)



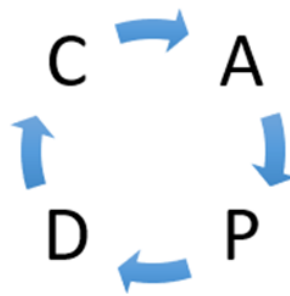


Based on the previous discussion, we can deduce that the most important criteria for total quality in educational institutions, which impact institutional performance and administrative processes in light of Deming's principles, can be summarized as follows: leadership, planning and strategy, personnel and resource management, processes, and partnership, with a focus on internal (learners) and external (community) stakeholder satisfaction. This aligns with the proposed framework's underlying principles. In this study, the researcher will rely on four principles from Deming's model to build her framework:

**1. Quality according to Deming's wheel or PDCA cycle:**

This approach emphasizes "the importance of integrating administrative work in the Plan-Do-Check-Act (PDCA) cycles." Deming developed his famous cycle, where each phase reinforces the others to ensure the achievement of objectives (Al-Sarayfi, 2003, p. 320).

From the figure, we observe that the application of quality management must occur in a circular system rather than a linear one.



(Figure 4): Represents the Deming Wheel "PDCA"

Each of these elements in this cycle includes the following:

1. Planning for the educational process (long-term and short-term plans).
2. Initial implementation of the quality strategic plan.
3. Monitoring the progress compared to the set objectives.
4. Implementing the established action plan if indicators of success are observed, and repeating the cycle for continuous improvement (Deming, 1986, p. 101).




In the context of total quality management, Deming emphasizes that the application of the quality system in educational institutions, following the PDCA cycle, should include an organized framework that is continuously reviewed to provide effective guidance for managing the institution in achieving its goals.

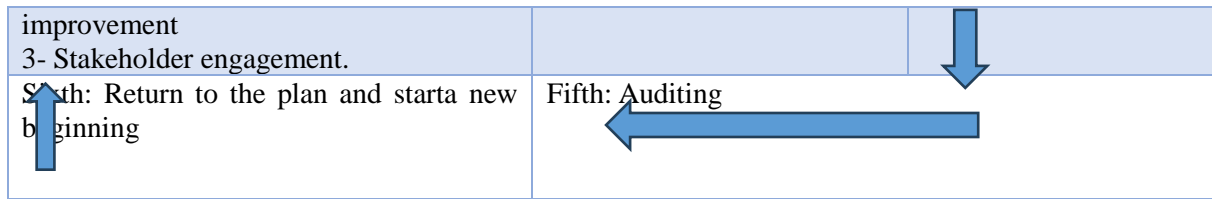
As the researcher has practical experience in school administration, this experience has allowed her to develop a proposed framework based on Deming's cycle. It is evident that the success of educational institutions in fulfilling their role and adopting the philosophy of quality depends primarily on adhering to these criteria, which are as follows:

1. Respect and responsibility, meaning the institution's respect for the internal environment (staff) and the external environment of the community (customs and traditions).
2. Support and assistance.
3. Commitment to aligning the institution's product with the environment, in terms of aligning societal values with the outputs of educational institutions that embrace quality.

The application of the educational quality system according to Deming's cycle signifies the institution's approach to total quality as part of its strategic goals and comprehensive approach. While the four stages can be translated into six key steps, as illustrated in the following table:



Work verification	Define tasks	Stage
How?	The what?	What time?
1- Establishment of the work team 2- Developing a practical definition of educational quality 3- Presentation of the organization's documents, processes and basic activities 4. Identify key stakeholders and involve them in the process.	Comprehensive assessment of the current state of the educational institution with regard to the philosophy of quality	First: Planning Phase  
1- Get support from senior management and staff 2- Studying the experiences of other institutions. Une matrice3-matrix setting For Procedures & Suggestions 4- Brainstorming ideas and points 5- Making a decision regarding determining the direction, approach or method of work and the points that should be focused on	Develop a strategy for educational quality	
1- Conducting a survey of current commitments related to quality. 2. Open channels of dialogue with key stakeholders. 3- Preparing an initial version of the plan. 4- Review the plan and commitments in a final manner and work with its publication	Proposing and preparing educational quality commitments that must be implemented	Second: Implementation Phase  
1- Developing an integrated organizational and legal structure for the decision-making mechanism with regard to quality. 2- Implementation of the action plan. 3- Setting measurable goals and determining performance measures. 4- Encouraging employees and others who apply to the participation plan. 5 - Training on the implementation of the plan for quality. 6- Develop mechanisms to address the problems of change-resisters. 7- Activating internal and external communications.	Implementation of obligations	
1- Measuring and verifying performance. 2- Preparing and evaluating the performance report.	Investigate progress after starting and submit a special report	Third: Investigation Phase: 
1. Performance Evaluation 2. Improve opportunities for	Evaluation and improvement	Fourth: Improvement Phase



- ✓ Modulation ○ Standard

<ul style="list-style-type: none"> <li>✓ The school should have a common vision of achieving quality and securing an educational climate for each individual in which he is valued and respected.</li> <li>✓ To have a long-term strategic plan that guides all business.</li> </ul>	<ul style="list-style-type: none"> <li>○ 1 Determine the goal of product improvement</li> </ul>
<ul style="list-style-type: none"> <li>✓ Leaders must believe in the process of change in light of the challenges faced by society.</li> <li>✓ Decisions should be based on data, information and facts.</li> <li>✓ Delegate authority to teams of students and teachers</li> </ul>	<ul style="list-style-type: none"> <li>○ 2. Adapting to the new philosophy</li> </ul>
<ul style="list-style-type: none"> <li>✓ Quality must be based on inspection, quality is achieved by enhancing and improving what individuals do, not by examining the outputs of the activities they have carried out .</li> <li>✓ The tests should be diagnostic indicators for the learning process, and the learner should not be evaluated based on the results of the tests only, but the use of multiple methods such as observation networks, self-evaluation, educational projects, revealing the tendencies and interest of students and investing them in the educational process.</li> </ul>	<ul style="list-style-type: none"> <li>○ 3 Reduce reliance on screening</li> </ul>
<ul style="list-style-type: none"> <li>✓ The consideration of the quality criterion is more important than the criterion of low price with regard to the purchase of supplies, means and equipment needed by the educational process.</li> <li>✓ Building a strong and equal relationship between the school and the community as both a resource and a beneficiary.</li> <li>✓ The policy of relying on the lowest price will have repercussions at the level of educational outputs or product.</li> </ul>	<ul style="list-style-type: none"> <li>○ 4 Use of statistical methods in control</li> </ul>
<ul style="list-style-type: none"> <li>✓ Granting the educational team broad powers to achieve the quality of the educational process</li> <li>✓ Building quality committees to ensure that all employees contribute to decisions that affect them.</li> <li>✓ Continuous coordination between members and giving</li> <li>✓ Sufficient time for discussion and careful analysis of each process will affect the outputs.</li> <li>✓ Constant strengthening of the service system and student development programs to achieve quality for both himself and his community.</li> </ul>	<ul style="list-style-type: none"> <li>○ 5 Stop looking at the project by price</li> </ul>
<ul style="list-style-type: none"> <li>✓ Preparing the new teacher with regard to the school's culture and expectations from him, and guiding him with regard to the continuous improvement policy by monitoring his training needs first and then participating in vocational training so that he can have the required skills and become efficient in his performances.</li> <li>✓ Quality training is a necessity for all in-service workers.</li> </ul>	<ul style="list-style-type: none"> <li>○ 6. Continuous improvement of the production process of goods and services</li> </ul>
<ul style="list-style-type: none"> <li>✓ The role of the leader and his main task is to help everyone to perform their work well, by creating the appropriate climate for them, modifying his behavior</li> </ul>	<ul style="list-style-type: none"> <li>○ 7 Finding integration between modern methods</li> </ul>

<ul style="list-style-type: none"> <li>to make them feel that he is trained and accompanying them, and to make them feel proud of their profession.</li> <li>✓ Achieving security and moral and physical safety in the school environment for both the teacher and the student.</li> <li>✓ Real change must clearly reflect shared power, shared responsibilities, and shared returns and rewards.</li> </ul>	<ul style="list-style-type: none"> <li>and training</li> <li>○ 8. Achieving consistency between supervision and management:</li> </ul>
<ul style="list-style-type: none"> <li>✓ Remove obstacles between teachers, administration, guardianship and those responsible for building and developing curricula and working in a team.</li> <li>✓ Emphasis on teamwork and elimination of competition</li> <li>✓ Removing obstacles between the educational stages: primary, intermediate and secondary.</li> </ul>	<ul style="list-style-type: none"> <li>○ 9 Banishing fear</li> </ul>
<ul style="list-style-type: none"> <li>✓ The abolition of slogans because they reinforce the assumption that problems are caused by individuals and not by order, they also create frustration, prevent teamwork, and negatively transform the individual's enjoyment and pride in his profession.</li> </ul>	<ul style="list-style-type: none"> <li>○ 10. Remove barriers between departments</li> </ul>
<ul style="list-style-type: none"> <li>✓ The need to emphasize quality and not quantity in educational institutions.</li> </ul>	<ul style="list-style-type: none"> <li>○ 11. Reduce slogans</li> </ul>
<ul style="list-style-type: none"> <li>✓ Devote collective efforts to remove all organizational factors that may cause the failure of the student or teacher.</li> <li>✓ Encouraging teachers to use their innovative skills and competencies instead of controlling them in every small and large, and considering teachers as active partners in achieving quality.</li> <li>✓ Providing all educational tools and aids for the teacher, and preparing the school environment materially and morally for improvement efforts.</li> </ul>	<ul style="list-style-type: none"> <li>○ 12. Accreditation of work teams</li> </ul>
<ul style="list-style-type: none"> <li>✓ Establish strong educational programs that can achieve self-growth for all</li> </ul>	<ul style="list-style-type: none"> <li>○ 13 Removing obstacles in communications</li> </ul>
<ul style="list-style-type: none"> <li>✓ At all levels of the school, including pupils, put this philosophy into practice.</li> <li>✓ Teachers and students alone will not be able to implement the new philosophy unless there is support, encouragement and commitment from the administration.</li> </ul>	<ul style="list-style-type: none"> <li>○ 14 Establishment of development programs</li> </ul>

Prepared by the researcher

**Source:** Based on several previous studies

As we read the table, we can conclude that the application of comprehensive quality standards to enhance educational quality has gone through the following four stages:

1. The planning stage involves conducting a future study on the educational institution's plans regarding the implementation of the principles of total quality. This is followed by
2. The execution stage, which represents the embodiment of the previous plan.
3. The checking stage ensures the implementation of the plan and its adherence to the established framework.
4. Finally, the improvement stage focuses on correcting any deviations and provides an opportunity to develop more effective methods for implementing comprehensive quality in the future.

From here, educational institutions can adopt a practical methodology that integrates various financial and organizational factors and establishes a long-term strategy while minimizing risks and uncertainties in achieving their objectives.

## 2. Quality according to Deming's Fourteen Points:

According to Deming's fourteen points, his philosophy is based on the necessity for an institution to commit to implementing these principles, which serve as the cornerstone of the total quality management philosophy.

It is not necessary to apply them sequentially or in a specific order. These points can be applied to the processes within educational institutions as follows:

The integration of these fourteen standards, according to Deming's perspective, lies under the primary goal of supporting the continuous improvement process of all operations through the following elements:

1. Implementation of statistical methodology.
2. Enhancing internal relationships through collaborative work.
3. Self-evaluation and debunking the principle of "zero defects."
4. Creating an organizational environment that facilitates change and eradicates fear from employees' minds.
5. Moving away from slogans and establishing a system of continuous processes.

**3-The seven deadly diseases that hinder the implementation of total quality management**, as identified by Deming, they are factors that have a negative impact on the organization's future. They represent obstacles to the application of quality principles that should be avoided or overcome. These diseases are as follows:

1. Lack of constancy of purpose.
2. Short-term focus on objectives.
3. Annual performance evaluations, merit ratings, and systems that inefficiently assess individuals' performance and instill fear in employees regarding their future.
4. Excessive changes in management.
5. Management based on known models without considering unknown models.
6. Management based solely on quantity.
7. Excessive and unnecessary costs in product assurance and legal matters.

Deming's system of deep knowledge emphasizes the importance of training school administrators in human resource management and empowering them in the field of psychology and its branches, whether individual psychology or social psychology. This is crucial for improving their ability to manage the administrative system effectively. It involves managing the human element based on scientific foundations and sound decisions that take into account individual differences, satisfaction, desires, gaining trust, eliminating fear, and fostering stability within the organization (Nima, Abdulhadi, 2005).

#### **4- Deming's System of Profound Knowledge:**

The Deming system of deep knowledge can be summarized in the following elements:

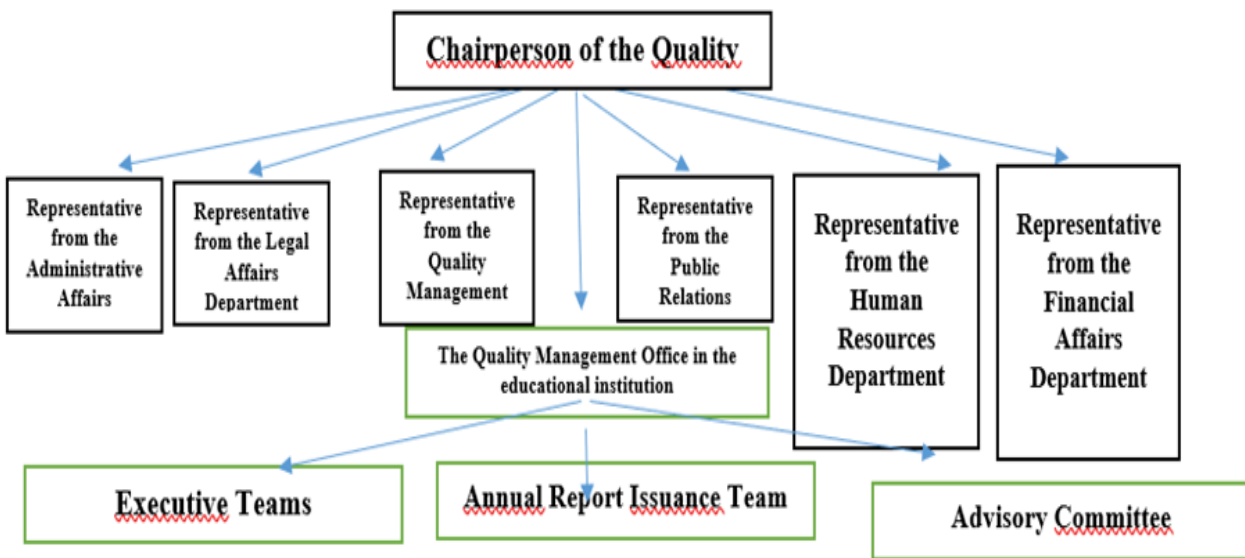
1. Understanding the true meaning of individuals and the nature of interactions between people.
2. The manager's understanding of individual needs and the recognition that individuals are different, with an understanding of performance through the system and management responsibility.
3. Teachers treating students in peaceful ways, removing fear, and relying on reports and statistics.
4. Working towards using performance standards and addressing processes.

Furthermore, Total Quality Management (TQM) in educational institutions is a methodology that aims to create an organizational culture where school administrators, teachers, staff, and students are enthusiastic about embracing new ideas. It encourages the utilization of their talents and capabilities, promotes teamwork, participation in decision-making, and process improvement. This brings about a clear change for the better in the graduates of these institutions (Al-Shafi'i & colleagues, 2000, p. 80).

Adopting these foundations and standards enables educational institutions to operate according to a flexible and changeable approach. The commitment of school administration to implement them can change the behaviors of individuals towards the concept of quality, increase their interest in teamwork and team spirit, and enhance their commitment and belonging to the educational institution. It also assists in developing an integrated strategy for process improvement, with a focus on continuous improvement and achieving the highest level of educational outcomes to fulfill the objectives of the educational process, benefiting both teachers, learners, and the community.

To implement this proposed approach, it is necessary to have an organizational structure that aligns with its capabilities to work and achieve positive results in various stages and processes, while assigning specific tasks to each entity within this structure.

**A proposed model for the organizational structure of a quality team**



(Figure 5) Represents a proposed organizational structure diagram for implementing quality standards in educational institutions.

**Source:** Based on several previous studies

Each committee forms a cell that is linked to its work in terms of implementing various activities and processes. It diligently evaluates them periodically, comparing these assessments against established standards, enabling it to correct errors and address deviations.

Where	Planning		Work and occupation		Supervision, Investigation, and Audit	Continuous Development		Continuation of the Programme
What	"Evaluating the Quality Activities in Educational Institutions"	Developing Quality Strategy in Educational Institutions	Determining Quality Commitments	Implementing Quality Plan	Verifying the ongoing progress and providing a detailed report.	Evaluation and Improvement		Considering a policy of the institution
How	-Establishing Quality Work Teams -Developing and refining a quality methodology aligned with the institution's objectives after		-Ensuring commitment from senior management and employees	-Defining and disseminating the concept of quality among employees and senior	"Documenting the decision related to quality." "Implementing the educational quality	-Measuring, monitoring, and reviewing the programs being worked on. -Continuous Development	- Evaluation of performance -Making appropriate modifications	-Ambition for further achievements and raising the bar of quality. - Communication,

	analyzing its strengths, weaknesses, and threats. -Reviewing all previous plans, activities, and processes in the field of quality. -Identifying and engaging stakeholders.	Reviewing other experiences. - Determining needs and preparing a list of activities. - Determining priorities and directions that need to be pursued.	management. - Determining the financial commitments regarding quality, student demand, curriculum, structures, etc. -Accepting all ideas and perception - Establishing a team work	action plan. "Encouraging employees and all those involved in this process.	t -Preparing regular reports related to quality and delivering them to the relevant parties. - Documenting recommendations related to modifying any deviation from the plan.	ons and improvements according to circumstances and changes. -Taking advantage of good opportunities.	cooperation, and exchanging experiences between the public and private sectors. "Promoting the experience to enhance future financing sources. "Returning to the starting point and beginning anew.
Who	A task force composed of senior management members nominated for vested interests.	Senior management and the quality committee.			Senior management and the quality committee and all employees		

(Figure 6) Illustrative diagram for the implementation of various activities and processes encompassing quality standards in the educational institution.

**Source:** Based on several previous studies.

**Secondly- the key pillars for the success of Total Quality Management (TQM) according to Deming's standards in educational institutions are as follows:**

In order for these institutions to succeed in implementing Deming's standards, several key factors must be prepared and organized before embarking on the implementation plan. These factors include:

- ✓ The institution must believe in the inevitability of quality, and there should be conviction from all participating parties and stakeholders in the importance of this role or change, starting from educational administration, managers, and extending to employees.
- ✓ The institution and its management should establish and define a clear vision regarding the main issue to be addressed and worked on.
- ✓ The educational institution should allocate a dedicated team responsible for this activity, with defined objectives and required plans. This team should have a central and active role within the educational institution.
- ✓ Goals, changes, or improvements should be defined in alignment with the financial and human capabilities of the educational institutions.
- ✓ This activity should become an integral part of the institution's activities, monitored by managers, with the ultimate goal always being continuous improvement and maintaining sustainability.
- ✓ Regular review of the outputs of educational institutions should be conducted to evaluate them, identify strengths and weaknesses, and implement necessary corrections.

**Thirdly- the means to assist in applying Deming's quality standards for Total Quality Management in educational institutions:**

1. **Attention to Human Resource Management:** Human resources play a vital role in embodying the meaning of quality in educational institutions and also in the application of Deming's standards. This is evident through the involvement of human resources in making strategic decisions for the institution, which helps in providing a stable social climate among employees, fostering a collaborative environment to achieve the institution's goals. This contributes to improving its services and products. In achieving coherence between human resource policies and commitment to the quality philosophy, models have been developed, most notably the (Michel Crozich, Sowt) model, which serves as a guide enabling control over financial and human practices, thus applying Deming's standards for Total Quality Management to enhance educational quality.

2. **Development of Sustainable Modern Technology:** Technological innovations aim to reduce sources of disturbance and pollution and minimize harm during the improvement process, particularly with regard to additive technology.

Alternative Technological Innovations: Aimed at replacing and improving the service process, tools, and means used, especially concerning integrated technology.

If this process is based on a logical sequence of successive improvements to processes and outputs or quality improvement, it pertains to progressive innovation.

If these innovations represent a radical change in processes and services, it relates to radical innovation.

From the above, it becomes evident that the application of appropriate technological innovation in educational institutions contributes to embodying the meaning of educational quality according to the philosophy of Total Quality Management in general and Deming's standards in particular.

#### **Conclusion:**

The proposed concept is to construct new ideas for transforming the educational institution into a new state in the future, with the aim of achieving quality in all aspects of its operations. This is done in light of the standards set by Edward Deming in his model, which all experts have relied upon in defining the principles of Total Quality Management, particularly in the educational field. Although these principles are applicable in the industrial sector, they do not differ significantly when applied in the educational, industrial, commercial, and other fields.

Through the presented and discussed importance of applying the principles of Total Quality Management in educational institutions, especially concerning administrative processes, it is evident that they become more effective when based on Deming's standards. Specifically, the Deming Wheel approach, the Fourteen Points, the Seven Deadly Diseases, and the System of Profound Knowledge, encompassing elements aimed at continuous improvement, inevitably lead to a good educational outcome. However, their implementation requires alignment with the educational environment, including learners, teachers, school management, their available resources, encountered challenges, as well as the conviction and support of the educational administration (Ministry of Education) in adopting the philosophy of Total Quality Management.

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