



**Arab American University**

**Faculty of Graduate Studies**

**The Reality of Quality in the Governmental Technical Colleges in West**

**Bank from the Viewpoint of Administrators and Teaching Staff**

By

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**Declaration:**

I understand the nature of plagiarism, and I am aware of the university's policy on this.

The work provided on this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted by others elsewhere for any other degree or qualification.

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**Dedication:**

To who taught me how to stand firmly on the ground

My beloved dad

To the source of love, altruism, and generosity

Venerable mom

To the honorable supervisors

To the Arab American University

To all those from whom I have received advice and support

I give you the summary of my effort

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May Allah reward them all the best

**Abstract:**

This thesis aimed to diagnose the reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff. This thesis is based on the analytical descriptive approach, where the researcher built a questionnaire that consisted of 90 items distributed over five criteria which were strategic planning quality, teaching staff quality, academic programs and curriculum quality, educational facilities quality, and students' quality. The thesis population consisted of all the teaching staff and administrators working in the governmental technical colleges in West Bank and which are Palestine Technical College-Al Aroub in Hebron, Palestine Technical College-Ramallah, Palestine Technical college-Khadouri in Tulkarm, and Al Ummah College in Jerusalem. The total number of teaching staff and administrators was 454, including 343 teaching staff and 111 administrators. The sample was a simple random sample with a 79 sample size, including 60 teaching staff and 19 administrators.

The value of reliability considering the Cronbach alpha parameter for all standards of quality is high and equal to (%98). Moreover, the internal consistency between all statements and dimensions is greater than (0.40).

On the other hand, the averages of the teaching staff and administrators' responses to all the considered criteria of quality were high, as the highest arithmetic mean is the standard of the teaching staff quality with a value of 3.877 considering the five-point Likert scale, and the lowest arithmetic mean is the strategic planning quality with a value of 3.710.

The results of this thesis showed that there were no statistically significant differences at the level ( $\alpha \leq 0.05$ ) between the mean of the respondents' answers attributed to gender, academic qualification, college, and years of experience variables. It also showed that there were statistically significant differences at the level ( $\alpha \leq 0.05$ ) between the mean of the respondents' answers attributed to the job title variable in the quality of strategic planning standard, the quality of educational facilities standard, the students' quality, and the quality as a whole in favor of administrators and head of academic department compared with the technician. However, there were no statistically significant differences in the quality standard of the faculty member and the quality of academic programs and curriculum. Also, the results of this thesis showed that there were statistically significant differences at the level of ( $\alpha \leq 0.05$ ) between the mean of the respondents' answers due to the variable of the number of times participating in quality training programs or courses in favor of 4 or more times compared with never a time in the standard of educational facilities quality and the quality as a whole.

The researcher recommended that colleges should conduct studies to find out the graduates' satisfaction with their academic degree, the faculty member should participate in solving community problems and the labor market should be involved in preparing programs and majors at the colleges.

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**Chapter One**  
**Research General Framework**

## Chapter One: Research General Framework

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### 1.1 Introduction:

The educational learning process is defined as an organized and coordinated set of activities and procedures aimed at meeting the educational needs within the conditions and objectives set by the higher education system in the country. The educational process includes a range of elements: teacher, curriculum, classroom, educational management, students, finance, and organization. The educational system consists of physical, human, and moral inputs, processes (planning, implementation, evaluation, and follow-up training), and physical, human, and moral outputs (Jaber, 2018).

The educational process is important in achieving the learning objectives. Researchers and academics are concerned with the quality of education because it provides integrated tools and methods that help educational institutions achieve satisfactory results. Therefore, education and quality are the most trustworthy nexus that is not separated. The integration of human and material elements, both of education and quality are two aspects that document and complement each other. The development and improvement processes of higher education institutions have received considerable attention in most countries of the world, the total quality has received a broader aspect of this interest to the extent that made the leaders of the educational institutions and universities call this era as the era of total quality (Nadawi & Abu Bakr, 2016).

The quality of education is one of the vital issues in the contemporary education system. Educational curricula and programs that have been implemented to improve the quality of education in the past have shown limited improvement in academic performance in schools and universities. The education system in many countries doesn't adequately

prepare students for the labor market and doesn't allow them to highlight their creations (Hamdan, 2013).

To match the specifications of the educational process outputs with the specifications of professional practice and its beneficiaries, it must control and monitor the dimensions of the educational process by providing outstanding education aimed to prepare and train students for professional practice and market requirements under specifications and standards for those professions that they will practice. This requires a total management system capable to keep abreast of developments and face future challenges (Haija, 2014).

Technical and Vocational Education (TVE) is important in ensuring the graduation of qualified cadres to contribute in filling the existing deficit in the labor market. In Palestine, as in the other countries, TVE results in a reduction of unemployment and contribution in the economic and social development in the case of harmonica of the system and its outputs with the requirements of the local labor market. Therefore, this thesis investigated the reality of quality in the governmental technical colleges in West Bank, identified the relevant strength and weakness points in this regard, and put recommendations that will benefit the stakeholders in the development of plans and programs to improve technical colleges in Palestine.

## **1.2 Research Problem:**

The researcher noticed through the review of previous studies and literature review, the lack of previous studies that deal with the issue of diagnosing the reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff. Also, the researcher noticed that the Ministry of Higher Education and Scientific Research didn't give enough attention to the quality of higher education, especially in technical colleges. Despite its positive impact on improving the performance of the educational institution as part, then improving the quality of educational outcomes in line with requirements of the labor market. This, in turn, contributes to reduce the problem of unemployment and poverty, improve self-employment and local industrial production.

Therefore, this thesis provided to diagnosis the reality of quality in the governmental technical colleges in West Bank, in investigating the reality of strategic planning quality, the faculty members' quality, the academic programs and curriculum quality, the educational facilities quality (the quality of classrooms, laboratories, workshops, and library) and the students' quality.

## **1.3 Research Questions:**

- 1- What is the reality of strategic planning quality, academic faculty members quality, design of academic programs and curriculum quality, educational facilities quality and students' quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff?
- 2- Is there a significant mean difference at the level of ( $\alpha \leq 0.05$ ) due to the reality of quality in the governmental technical colleges in West Bank from

the viewpoint of administrators and teaching staff according to the independent variables, including gender, academic qualification, job title, the college name, years of experience and participate in quality training programs or courses?

#### **1.4 Objectives of the Research:**

This thesis aimed to achieve the following objectives:

- 1- Diagnose the reality of strategic planning quality, academic faculty members quality, design of academic programs and curriculum quality, educational facilities quality and students' quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff.
- 2- Knowing if there is a significant mean difference at the level of ( $\alpha \leq 0.05$ ) due to the reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff according to the independent variables, including gender, academic qualification, job title, the college name, years of experience and participate in quality training programs or courses.

#### **1.5 The Significance of the Research:**

The significance of this thesis illustrated through the following:

- 1- A scientific attempt with scientific tools to reach scientific results.
- 2- The findings would provide a solid education base for upcoming research on quality and strategic planning of TVE in Palestine.
- 3- The findings and recommendations of this thesis aimed to benefit the decision makers in the technical colleges and Ministry of Higher Education and Scientific

Research to know the strength and weakness points in the governmental technical colleges in West Bank to put developmental plans and programs to improve the education quality in them.

### **1.6 Research Limitations:**

- 1- Objective limitations, which are limited to reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff.
- 2- Human limitation, considering teaching staff and administrators.
- 3- Spatial limitations, where the governmental technical colleges in West Bank are considered.
- 4- Temporal limitations, considering 2019/2020
- 5- Procedure's limitations, related to the tool, validity, reliability.
- 6- Conceptual limitations, limited to the procedural definition of concepts presented in this thesis.

### **1.7 Definition of Terms:**

**Quality** is defined as the sum of the optimum specifications that higher education institutions should have in all their components (Degni, 2006).

**Quality Management (QM)** is defined as the process supported by policies and systems, used by an institution to maintain and enhance the quality of education experienced by its students and of the research undertaken by its staff. QM comprises interrelated structures such as quality policy, quality manuals and support structures (Martin & Shreya, 2017).

**Technical Colleges** are defined as colleges with a period of study is two years or four semesters in a minimum limit, and seven semesters in a high limit, the students can join the technical colleges after the general secondary school. The number of credit hours for different disciplines ranges from 66 to 78 credit hours, and these colleges include one or more different technical programs (Shuwaikh, 2007).

**Technical and Vocational Education (TVE)** is defined as a comprehensive term in the educational process involving, in addition to general education, the study of technologies and related sciences and acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life. Also, technical education is defined as a post-secondary vocational training program with the major purpose is the production of technicians (Okyoe & Arimonu, 2016).

## **Chapter Two**

### **Part One**

#### **Conceptual Framework**

## **2.1 Chapter Two: part One: Conceptual Framework**

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### **2.1.1 Introduction:**

Total quality is considered the third revolutionary wave, after the industrial and the computer revolution which emerged as a result of an intense global competition between Japanese on the one hand, and the US and European enterprises on the other, in order to obtain consumer satisfaction. The concept of Total Quality Management (TQM) has received great attention from leaders, academic researchers and managers, due to its important role in increasing productivity, improving the profitability rate, lower costs, enhance current performance and improving employee relations as well as rising the levels of job satisfaction (Dais, 2017).

As a result of the success which achieved by TQM in the economic, industrial, commercial and technological organizations in developed countries attention to quality began in educational institutions in general, and higher education institutions in particular during the 1980s which was firstly implemented by the American Edward Deming. Numerous studies have indicated the importance of applying a TQM system in academic education and its role in developing all aspects of administrative and academic levels.

Technical education is one of the most important pillars and ingredients for a successful country's economy, in fact, it reinforces the reliance of producing countries on it to drive economic growth. Where it prepares its human resources technically, and gives them the necessary skills to fit with available jobs in the labor market in various specialties. It is also one of the most successful areas for the development of human

resources that contribute to the technological development of any country, which is also an integral part of national development.

The United Nations has given attention to technical and vocational education in the 2030 agenda which was announced in the United Nations General Assembly Resolution on September 25, 2015, and on January 1, 2016, and was called sustainable development goals, where the fourth goal stated “to ensure quality education that is equitable and inclusive, and to enhance lifelong learning opportunities for all”. Also, the fourth sustainable development goal has included goals focused on vocational and technical education and training (Ministry of Education and Higher Education, 2017):

- 1- Goal number 3, stated “ensure equal opportunities for all women and men to obtain vocational education and good and affordable higher education including university education by 2030”.
- 2- Goal number 4, stated “achieve a significant increase in the number of youth and adults who have the appropriate skills including technical and professional skills to work and filled decent and entrepreneurial jobs, by 2030”.
- 3- Goal number 5, stated “eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for vulnerable groups including people with disabilities, indigenous peoples and children living in vulnerable situations by 2030”.
- 4- Goal number 7, stated “ensure that learners acquire all knowledge and skills necessary to support sustainable development, by 2030”.

What makes the attention to total quality in technical educational institutions -whether technical higher education institutions that grant bachelor's and diploma degrees or

public education institutions that grant a high school diploma or institutions that grant training certificates at a vocational and technical training center as an imperative necessity. In order to find decent work and provide self-production and projects to increase the income of families, which reduce unemployment and poverty rates in Palestine and to keep abreast of technical and technological developments and changes in the twenty-first century.

This part of the research is divided into three sections:

Section one; which discusses quality, total quality, and quality management in educational institutions in terms of concepts and crucial success factors to apply total quality, the benefits and obstacles of applying it in educational institutions, particularly in higher education and models for quality management in education such as ISO 9001, Deming model and Baldrige standards.

Section two; which discusses quality standards in educational institutions, that are divided into 11 criteria; strategic planning quality standard, academical faculty members quality standard, students quality standard, academic programs quality standard, curriculum quality standard, scientific research quality standard, infrastructure quality standard in terms of (quality of facilities, classrooms and the quality of laboratories), educational services quality standard, E-Learning quality standard, and quality management practices. This section also discusses academic accreditation as well as the National Authority for Accreditation and Quality in Palestinian higher education institutions (AQAC) in terms of their goals and functions.

Section three; which discusses technical education in terms of concepts, goals and difficulties, in addition to, the reality of the TVET sector in Palestine, and governmental technical colleges that have been studied.

### **2.1.2 Quality Concept and Definition:**

The word quality is derived from Latin word *quails*, which means “what kind of”. It connotes a variety of meanings and implies different things to different people. Each of the masters of the TQM like Deming, Crosby, Ishikawa and Feigenbaum, has a specific definition of quality, but they have the same of importance and soul and these concepts are presented below:

- Deming defines quality as “a predictable degree of uniformity and dependability at low cost and suited to market” (Ali & Shastri, 2010). “Deming also describes 14 fundamentals of quality management to boost project outputs and achievement of the organization” (In’airat & Al-Kassem, 2014).
- According to Juran “Quality is fitness for use or purpose” (Ali & Shastri, 2010). “According to him, each individual in the organization should participate in the exertion to make products or services that are fit for use” (In’airat & Al-Kassem, 2014).
- In’airat & Al-Kassem (2014) quoted from Evans & Dean, “Feigenbaum defined total quality as consistent work procedures, beginning with customer necessities and finalizing with the customer satisfaction”.
- Crosby considers it as “conformance to standards and correspondent to demands” (Ali & Shastri, 2010). He focalizes on zero defects and setting things straight by doing it correctly the first time” (In’airat & Al-Kassem, 2014).

- “Ishikawa also accentuate on the relevance of the total quality control to boost organizational performance. According to him, quality doesn’t mean the quality of product only, but also of the quality of management, or the reputation of the company” (In’airat & Al-Kassem, 2014).

“Quality means meeting customers’ agreed requirements, formal and informal, at the lowest cost, first time every time” (Eryilmaz et al., 2016). “Quality is linked to the meaning of superiority and excellence, and quality is an assurance that there are fewer services or products with defects” (Papanthymou & Darra, 2017).

Thus, quality means to provide the service or product according to specific criteria to ensure a smaller number of defects in the products or services and to meet customer requirements at the lowest cost for the first time each time.

“On the other hand, QM is a management philosophy and practice that endeavors to maximize the competitive advantage of an organization via continuous improvement of the quality of its people, products, services and so on” (Eryilmaz et al., 2016).

Several empirical studies have emphasized several triggers for quality management such as organizational culture, planning behavior, climate, organizational size, feudal consciousness, national culture and culture values. Also, many studies have confirmed the positive effects of quality management on various variables such as employee job satisfaction, competitive advantage, corporate social responsibility behavior, customer satisfaction, work participation, organizational justice, organizational commitment, productivity, profitability, organizational performance and reduces employee conflict (Eryilmaz et al., 2016).

“Total Quality Management (TQM) or Continuous Improvement System (CIS) can be defined as a set of systematic activities carried by an institution to efficiently achieve institutional objectives that satisfy beneficiaries at the appropriate time and price” (Iyer, 2018). It defined as a framework based on the concepts of planning, participation and continuous improvement processes.

“TQM is a vision, which the educational institution can only achieve through long-term planning, by drawing up and implementation of annual quality plans, which gradually lead the firm towards the fulfillment of the vision” (Todorut, 2013).

TQM is defined as the process of integrating all activities, functions, and processes within the organization to achieve continuous improvement in cost, quality, function, and delivery of goods and services to satisfy customers.

There are five major steps to TQM, namely: commitment and understanding from employees, quality improvement culture, continuous improvement in process, focus on customer requirements and effective control (In'airat & Al-Kassem, 2014).

### **2.1.3 Quality in Higher Education Institutions:**

TQM principles have been applied in the manufacturing sector since long but its application in services, and Higher Education (HE) in particular, is relatively new. There are many conflicts in the literature on TQM usefulness in higher education. Some authors believe that values of TQM are compatible and equally applicable in HE. Whereas others argue that tools and techniques of TQM do not match with the nature of learning and teaching process because education environment is a dynamic and changing environment. A number of authors have noted difficulties in the implementation of TQM in HE. These difficulties include lack of agreement on defining

customer of HEIs, meaning of quality and academic freedom, and unique nature of academic processes (Asif et al., 2011).

However, Asif et al. (2011) in their study titled (A model for total quality management in higher education), divide the levels of quality in higher education into three levels they are Macro-level, Meso-level, Micro-level. They also identified special activities for each level as follows:

- 1- Macro-level: It includes quality activities for higher education and society as a whole, which are setting a trend for national higher education and implementing total quality management policies in higher education.
- 2- Meso-level: It includes the quality activities of the university as a whole which is the implementation of administrative systems such as ISO 9001 at the university level, and higher education policies to improve university coordination with other stakeholders such as accreditation and professional institutions and the university's internal cooperation with society and industry to ensure the quality of academic programs.
- 3- Micro-level: It includes quality activities for university departments and individuals, which are the professional accreditation of programs offered by higher education, implementing administrative systems such as ISO 9001 in the department or laboratory, training for faculty and staff, designing academic programs according to the quality assurance requirements, efficient feedback and continuous improvement of academic programs and quality assurance in daily operations in the quality of services provided by higher education.

“Traditionally, the HE services include the three fundamental functions, which are teaching, research, and extension. Teaching transmits knowledge and skills from the teacher to the taught ones. The purpose of the research is to explore new knowledge, whereas the function of extension focuses on developing the application of the developed knowledge for addressing the common problems of the society” (Ali & Shastri, 2010).

The quality of higher education is one of the most important aspects of creating knowledge, developing human resources and the social strength of any country. As quality management issues have become one of the basic components and fundamental strengths of higher education all over the world. “Providing quality services in Higher Education Institutions is the key to differentiate between competitors as well as ensuring sustainability for a long period” (Papanthymou & Darra, 2017).

Iyer (2018) defined educational quality as the degree of excellence concerning the totality of features and characteristics of educational services that bear on its ability and efficiency in terms of knowledge and character to satisfy a given or implied need while training the human mind. In addition, he defined TQM in education as a management approach of an educational institution centered on quality, based on the participation of all of its members and aiming at long term success through refinements in response to continuous feedback to achieve learner satisfaction and benefits to all members of the institution and society.

The TQM system in education consists of (Fatalawi, 2007):

- 1- Inputs: students’ characteristics, teacher’s scientific, educational and personal characteristics, administrative apparatus’ characteristics, general climate,

morale, facilities for material resources such as buildings, equipment, educational materials, methods, means, and educational programs.

- 2- Process: educational curriculum; teaching methods; self-learning methods; library and IT centers; administrative processes in planning, organizing and controlling; applying quality standards and specifications in the administrative; educational, teaching, research, and communication process; control over teaching and learning processes; books; educational resources; and information systems; performance and feedback.
- 3- Outputs: the educational outcomes of the students in various aspects of learning (cognitive, skilled and emotional); outputs of the student's characteristics from the side (health, psychological and mental); avoiding faults and mistakes; the extent achieved the satisfaction of the beneficiary (internal and external) and the extent matches the outputs with the specified criteria and characteristics.

**There are other terms related to quality such as** (Quality Assurance and Accreditation Council-Association of Arab Universities, 2017):

**First: Quality Monitoring:** This means discovering the problems and negative aspects of the workflow as well as identifying its causes and working to remove it and treat scientifically. It includes all components of the system to consist of inputs, processes, and outputs. Quality monitoring activities constitute an important link to the information feedback, which affects the planning process and related functions. In order for the institution to succeed in quality monitor, the following must be taken into consideration:

- 1- Determine the objectives and stages of performing the work.
- 2- Determine a time line for performing the work.

- 3- Determine the responsibilities of performing the work.
- 4- Setting measures and performance indicators for work quality.
- 5- Evaluating the measures and indicators used to overcome quality problems.

**Secondly :Quality Control:** This means the set of programs and procedures that are needed to ensure that operations, programs and systems will necessarily lead to providing services that conform to local or international quality standards.

**Third: Quality Assurance:** It is a system based on preventing error and ensuring good performance from the first time, as it is a preventive system to prevent errors from occurring, and not to correct them again and again. The Association of Arab Universities has defined it as satisfying the quality of all elements of the educational process, including curricula, facilities, students, faculty members and various activities related to the educational process, according to specific criteria.

#### **2.1.4 Critical Success Factors (CSFs) of QM Practices in HEIs:**

There is no consensus over the critical success factors of TQM, in particular, in higher education (HE) and developing countries to scarcity of previous studies that talked about critical success factors in higher education institutions, and the following is a presentation of studies that addressed critical success factors in educational institutions:

- According to several studies in Arabic countries, there are seven CSFs to a successful TQM Pushpa L, (2016): vision and plan statement, employee involvement, customer focus, reward and recognition, education and training, the commitment of top management and quality management supplier.
- Asif et al. (2011) in their studies with title “A model for total quality management in higher education” identified six critical success factors of TQM

in Pakistani universities including, leadership, vision of HEI, program design, process control and improvement, measurement and evaluation, and stakeholder focused approach.

**How to Implement TQM in HEIs (Proposed Model) (Pushpa L, 2016):**

**First Step:** understanding/Identifying what TQM is by the top management of higher education institutions.

**Second Step:** the top management must make decisions for bringing the change to motivate other employees and faculties to adapt the change.

**Third Step:** the institution must prepare for implementing changes including determining the requirements of all stakeholders; identify the goals and vision to be achieved and prepare strategies to facilitate the flow of communication between the different models of the organization.

**Fourth Step:** training the faculties/employees and development programs to educate them.

**Fifth Step:** the leader must give a new assignment to motivate other staff members for quality performance. Benchmarking may also be regarded as one of the effective tools for the successful implementation of TQM.

**Sixth Step:** the HEI must evaluate its performance annually to identify any problem/obstacle that is responsible for not achieving TQM and may take measures for overcoming such obstacles.

**Seventh Step:** monetary or non-monetary rewards may be awarded to employees to motivate them and make them feel committed to their job.

**Eighth Step:** the TQM process should be reviewed and communicated to all levels of employees regularly.

**Principles of TQM in HEIs** (Pushpa L, 2016):

- 1- **Putting the Customer First:** customer in case of HEI's is students. The TQM in HEI's is giving importance for meeting the needs of the students' community and making them compatible with the age of technology.
- 2- **Management by Fact:** Make decisions based on facts, not opinions or ideas of employees.
- 3- **Principle of PDCA Cycle:** the TQM is an unending process of improvement start with Plan then Do then Check and end with Act. This PDCA cycle was first proposed by Deming. It is also called Deming's Cycle.
- 4- **Focus on Prevention:** trying to prevent any cause is better than correction. Whenever a problem has arisen in an HEI; the management must focus on finding out the root cause of the problem and solve such causes so that such problems do not occur in the future.
- 5- **Principle of Employee Involvement:** the HEIs must respect the employee's views, opinions and suggestions to become his work-oriented to an institution.

**Benefits of QM Implementation:**

There are many benefits of QM, where Papanthymou & Darra (2017) revealed in the area of benefits by their study that QM is appropriate to the purpose of HEIs, QM meets the expectations of customers and the implementation of QM practices can solve problems and propose solutions.

### **The Identification of Components of TQM for Technical Education:**

- 1- Leadership and Top Management Commitment:** Sapra (2017) discussed that leadership with vision, effective allocation and financial management play a critical role in setting up a management system for higher education, leading to the overall improvement of quality.
- 2- Accreditation:** The institution obtains accreditation by a national government quality agency to implement the quality accreditation standards of higher education. Self-evaluation is important for the institution to obtain accreditation (Sapra, 2017). Accreditation in higher education institutions includes the programmatic and institutional accreditation. The programmatic accreditation which is to ensure that the educational institution's programs comply with the declared and approved standards. Whereas, the institutional accreditation is the accreditation of the institution as a whole in accordance with specific criteria on the adequacy of facilities and resources and employees of the institution, (Quality Assurance and Accreditation Council Arab Universities Association, 2017).
- 3- Stakeholder Focus:** Quality from a stakeholder perspective means achieving the highest degree of stakeholder satisfaction, namely, parents, students, faculty and employers by aligning its activities with the stakeholders' requirements using quality standards and achieving synergy between stakeholders. So, that the technical colleges and universities must focus on innovation in curriculum development through a dynamic curriculum that is continuously upgraded based on new developments in the field, training and practical skills, motivating faculties, personality development of students, continuous improvement,

feedback mechanisms, industry interaction, consultancy, and research. In addition to focusing on student experience, for example, the student's withdrawal from the educational institution shows the failure of it. Quality from a marketing perspective includes an input (selection of students and entry requirements), process (teaching and learning, content, delivery, lectures), professor's knowledge and curriculum) and output (financially rewarding job, placement, and academic performance).

- 4- Industry Interaction:** Interaction between technical colleges and factories by developing educational curricula for these colleges in a manner commensurate with the current development in the industries to enable the student to obtain employment inside and outside his country. Sapra (2017) quoted from Murthy recommended in his study the following interaction modes- Student (Visits, interactions, internships & projects), Teachers (deputation & expert lectures), Industry (depute personnel for higher education, assign consulting jobs, sponsor research and development projects, get industry experts to be resource people and adjunct faculty), joint actions (consortiums in mission mode, technology transfers, prototyping, field trials, international linkages).

#### **Obstacles to QM Practices in HEIs:**

The major barriers or obstacles to a successful implementation of QM such as TQM, mainly: lack of management commitment, poor vision and plan statement, the government influence, a lack of highly qualified professionals, lack of knowledge about the self-assessment mechanisms, the resistance of institutional assessment change, poor coordination between employees and departments, lack interest in training, an expectation of immediate results; instability of leaders and department, rigid

organizational structures, lack of clarity about the role and responsibilities and lack of employees 'commitment (Papanthymou & Darra, 2017).

There are various reasons why do higher education institutions in Palestine, need quality assurance, which is (Basir, 2012):

- 1- Quality assurance is essential as a driving force for higher education reform. It is a way to rank universities and colleges on the national level and has an impact on competition between universities.
- 2- It is also considered to be a process of gathering information about the level of higher education in universities or colleges to design a suitable and accurate improvement plan.
- 3- Globalization, where the open labor market and the internationalization of HEIs have led to the need to produce the quality that is compatible with other counties.
- 4- To enhance and improve students learning and ensure that HEIs fulfill their mission and are in line with national, regional or international standards.
- 5- Quality assurance is needed to control and improve rapidly growing private institutions.

### **2.1.5 Models for Quality Management at Educational Institutions:**

In the past two decades, many attempts have been made to implement a quality management system in schools, institutes and universities. Below is a review of the most important of these models:

### 2.1.5.1 TQM Model for Higher Education (Deming Cycle-PDCA):

The Deming cycle includes 4 steps, namely: the planning, do, check, act, it is shown as follows (Pashpa L, 2016):

- I. **The Planning Step** in the Deming cycle includes identifying and doing research to study of what TQM is. Top management should change its objectives for accomplishing their plan. This involves defining vision, mission, values, tools, and objectives.
- II. **Do Step** in Deming cycle concerning start implementing solutions including:
  - Training to all faculties/employees about terms like quality, TQM, core values, methodologies, and tools.
  - Quality assessment cell must be established for assessment and improvement of quality in HEI's.
  - Some measures must be established to perform a benchmarking to recognize and reward improvements.
- III. **The Check Step** in the Deming cycle has been regarded as the evaluation step. In this step, actual performance is evaluated with expected performance through performance measure indicators, to find out whether faculties and employees at all levels are working to meet the requirements of all stakeholders.
- IV. **Acts Step** in the Deming cycle involves taking measures and implementing changes in the system for the problems identified in the previous step.

### 2.1.5.2 International Organization for Standardization (ISO, 9001):

ISO is an institution has set international standards for the quality management system in any institution, whether productive or service and includes international quality specifications (ISO, 9001) developed by ISO as a series of standards in the form of

certificates each of them with its own number. Therefore, the ISO is a certificate granted to institutions that have a set of standards related to a specific quality level. The ISO requires an institution that seeks to obtain an (ISO, 9001) to maintain a quality record of (17) records, in order to demonstrate that its quality system works efficiently and these records include as follows: the quality record, the contract audit record, the quality audit record and the training record (Abu-Al Haija, 2014).

The following is a set of criteria that institutions must adhere to it, in order to implement TQM properly and successfully, which helps the institution obtain high-quality outputs of education quality by set its inputs, controlling on its processes, improving and developing continuously. The ISO system contains 20 standards, and 12 of them can be applied directly to the educational system and its educational institutions. These standards are as follows (Abu-Al Haija, 2014):

- 1- Management responsibility for setting the quality policy: The quality policy includes setting educational goals, vision and mission based on a study of its educational environment and comparison with other institutions.
- 2- Quality system: ISO 900 is part of the quality system, and therefore it is the responsibility of the administration to renew the system and take into account the documentation process that accompanies it.
- 3- Review the contract: Ensure that the requirements of educational service beneficiaries are sufficiently determined and documented, verify that the institution has the necessary resources to fulfill the contract.
- 4- Design Control: The design process represented in education and training, with course planning, curriculum preparation and educational programs including pre-course planning.

- 5- Purchase: Among the most important things that apply to the concept of purchasing in the field of education are the following: education resources, consultants, examiners or residents from abroad, the services of qualification granting organizations.
- 6- The product that is supplied by the importer: It represents the scientific and educational supplies and the supply of devices. For example, it may apply to the following: Books and scientific references provided by the university administration.
- 7- Control of operations: It represents the educational process, this includes a numerous number of activities that include teaching and presentation of educational material, special education, assistance to individual students who have learning difficulties, feedback to students
- 8- Control of incompatible director: here students were classified as outputs, thus include students who failed exams and measurements, damaged or old books, teaching material that does not match the course, and wrong measurement paragraphs.
- 9- Internal Quality Review: Regular reviews are made in a specific and institutionalized way to determine whether there is an obligation to proceed or not, which is to conduct personal interviews with people who perform the work.
- 10- Quality records: The clear review depends on the availability of evidence that indicates that the procedure was or has not been followed, and anything used to record compliance is called (quality record). Examples of quality records include: records for students, especially with regard to the decisions that were studied, the tests that were taken, the results obtained.

11- Corrective research: Since the review is not sufficient to ensure the success of the total quality system, the next step should be reformed research, i.e. correcting what has been ignored or incorrectly done.

12- Training: What the ISO 9000 system requires is that the faculty be properly selected in relation to those activities that affect quality and training needs of faculty members must be identified, training provided, and training records maintained.

### **2.1.5.3 Baldrige Standards:**

This framework consists of four basic elements: Supreme executive leadership, system, clear goals and progress-measurement tools. The system presents a set of organized activities in the areas of (planning, participating and improving the process) as well as these last three elements are supported by Deming, Juran, and Crosby. As for the progress-measurement tools, they are quantitative indicators of the quality of the process that is followed in the system, or the degree of students and community satisfaction about the educational institution which may be measured through a questionnaire distributed to students and employers or students' marks at certain time periods. As for the goals of the system activities which pursued by the whole system, present in improving the user's conviction and satisfaction. Leaders who make organizational efforts to achieve long-term improvement are considered to be senior executives committed to making changes. Since total change requires leadership commitment, a Baldrige framework puts leaders as organizational and jointly responsible for the change process, accordingly senior leadership innovates values, goals, systems and leads to achieving quality and achieving goals for good performance (Abu Al Haija, 2014).

### **2.1.6 Standards and Quality Fields in Higher Education**

Total quality system in university education works to develop all aspects of administrative and academic work at the university level in terms of students, faculty, staff, administration, curricula, programs, etc, to bring a comprehensive and integrated change in the educational institution. Many countries have resorted to applying programs to improve the university education quality toward obtain better quality through the use of accreditation and quality assurance, which is carried out by some qualified and trained bodies by setting a clear and specific criteria for evaluating and measuring the performance of educational institutions, in order to develop their educational performance, obtain a certificate that qualifies it to continue its work and to receive acceptance and satisfaction from the commission as well as the local community.

Quality assurance institutions work to build standards based on the quality assurance standards set by the Association of Arab Universities and academic accreditation standards, where standards of the Association of Arab Universities are divided into 12 criteria: (the vision and mission of the university, educational programs and their effectiveness, students and students services, faculty members, scientific research and creativity, the library and information sources, governance and administration, financial resources, material resources, institutional integrity, community service, quality assurance management), as for academic accreditation standards, they are divided into 8 criteria: (Students Standard, Graduate Qualification Standard, Teaching Standard, postgraduate Standard, Scientific Research Standard, Community Service Standard, Library and Information Resources standard, Curriculum and its Development Standard) (Nasser, 2012).

**Definition of Standards:**

Standards: plural of the word standard, and it defines as "a specific level of performance excellence or a specific degree of quality, and it is seen as a predetermined goal for the educational issue, or as a measure of what is required to achieve for some purpose" (Abboudi, 2015). By following a set of specific and clear standards in the work, it helps to reveal the real level of the component to avoid problems and reduce errors, effort and waste of money, leading to the best results.

Academic standards are defined as "They are the global requirements and conditions that the educational institution must provide and apply to ensure that graduates obtain a certain amount of professional knowledge and skills required by the global and local labor market in accordance with scientific and global standards" (Hamdan, 2013).

Where the procedural definition of academic standards is a level, model, or means of measurement built by accreditation and quality institutions accredited and authorized by the state, in order to evaluate, measure and reveal shortcomings and weaknesses in the educational institution in terms of (the faculty member's performance's quality, the students' quality, the academic programs' quality, the curriculum's quality, the quality assurance management, the strategic planning's quality, the quality of policies and legislation inside and outside the educational institution, the e-learning's quality, the scientific research's quality, the infrastructure's quality includes the laboratories and classrooms' quality, the educational services' quality, and the outputs' quality). In addition, the following is an explanation of the fields and standards of quality in higher education institutions:

### **2.1.6.1 Strategic Planning Quality Standard:**

The strategic planning for total quality management is considered the first and fundamental task of the organization's management because the management of educational institutions includes four interrelated integrated elements that start with strategic planning. Strategic planning defines the vision, mission, goals and strategies of the institution, followed by the implementation process, which means to move from the stage of visualization and thinking to the stage of practice, action and decision-making, and the transformation of the strategic plan into programs and budgets, then, the evaluation process that monitors deficiencies and weaknesses in the plan or in the implementation process by comparing the previously planned performance with the actual performance and identifying deviations. And finally, the correction process which is the process of correcting, repairing and overcoming weaknesses in the plan or performance. This is what Hajj (2015) demonstrated that there is an impact relationship of the factors of strategic planning represented by clarity of strategic vision - and clarity of strategic message - and clarity of goals and objectives on the quality of performance of the Science and Technology University in Aden.

Regard to the concept of strategic planning's quality, it includes the strategic planning elements and operations' quality. The following is an explanation of strategic planning's quality standards (Baz, 2016):

**First: Vision:** It should be clear, meaningful and significant to the organization's market, look at the future and take the past into account, be characterized by relative stability and challenging, aim to motivate workers as well as customers, and are characterized by brevity, challenge and continuous achievement in the labor market.

**Second: Mission:** It must define the current and future scope of the organization's work, as well as define the gap between them.

**Third: Goals and Objectives:** It must be specific, measurable, challenging and achievable, and be accomplished according to a timetable.

**Fourth: Values of the Organization:** It must reflect the fundamental beliefs, values, and priorities that strategic decision makers adhere to within the organization.

**Fifth: Process of Analyzing the External Environment:** By dividing external forces into six groups which are environmental, economic, political, cultural, demographic, technical, and global, dividing the business environment into three levels which are international, national, and higher education.

**Sixth: Process of Analyzing the Internal Environment:** By defining the internal environment entries which are, the value chain analysis entrance, the resource reliability entry, and the financial ratios' analysis entry.

**Seventh: Formulation and Preparation of the Strategy (Strategic Choice):** Means the extent of the proposed strategy's ability to deal with the strategic factors presented by analyzing opportunities and threats, aspects of strength and weakness, the extent of the strategy's ability to achieve the agreed goals with the least number of resources and negative effects.

**Eighth: Strategy Implementation:** It includes developing projects and determining the necessary policies and procedures to implement projects and their budget.

**Ninth: Strategy Implementation Monitoring:** Through monitoring tools, including strategic monitor systems, which include setting target performance, setting up

measurement systems, comparing actual and target performance, taking corrective action, and measuring and comparing.

**Tenth: The Efficiency of the Academic and Administrative System:** Who oversees the implementation of the plan, collective participation method in the preparation of the plan and decision-making, and the validity and accuracy of data, information and statistics related to the educational process are success factors of strategic planning in improving the quality of operations performance (Hajj, 2015).

#### **2.1.6.2 Faculty Members' Quality Standard:**

The faculty members' quality standard is defined procedurally as the effort exerted by the faculty member and the cognitive, skills, and emotional capabilities that they possess in terms of planning to teach courses, implement teaching, evaluation, adequacy of classroom communication and interaction, scientific research requirements, community service, administrative and technical development, and professional and ethical aspects. All the previous aspects are factors, standards and indicators for accreditation and quality institutions in the Arab and developed countries, so if the educational institution did well to choose a faculty member and has all these criteria and factors, this will affect the quality of the educational learning process. The faculty members' quality is one of the most important inputs in university educational institutions, as follows an explanation of these standards:

- 1- Planning for teaching courses requirements standards: in the sense of what the faculty members are doing and planning to prepare for the lecture in terms of collecting multiple references on the subject of the lecture, defining the general and special goals of the course in light of the needs of students, defining the

- skillful and emotional goals, providing the curriculum plan, goals, vocabulary, references and requirements at the beginning of the semester to the students (Badrakhan, 2018).
- 2- Teaching implementation's Requirements Standards: meaning of what the faculty members do inside the lecture to achieve educational and learning goals in terms of employing the innovations of educational technology and computer technology (visual and audio) in facilitating students learning (Badrakhan, 2018).
  - 3- Teaching evaluation standards: it means the questions, diagnostic tests, and statistical processes necessary to efficiently analyze the test results performed by the lecturer. It includes diversity in assessment methods and to measure all aspects of students learning (cognitive, skill, self-mobility, and sentimental) (Tarawneh, 2019).
  - 4- Scientific Research's Requirements Standards: which means the effort made by the faculty members to develop their performance in scientific research, which include publishing researches in specialized periodicals on the global level, attending training courses and scientific conferences regularly, and implementing innovative scientific researches in the field of specialization, and in environmental specializations related to their specialization (Badrakhan, 2018).
  - 5- Community service's requirements standards: the effort made by the faculty members to serve the community, participating in solving societal problems and community development programs, and investing the results of scientific researches in developing community institutions (Badrakhan, 2018).

- 6- Administrative aspects and professional and technical development standards: It include management skills, successful leadership, professional development responsibilities, and mastery of technical skills (Dais, 2017).
- 7- Professional and Ethical Aspects Standards: Respecting lecture times, positive cooperation with colleagues to make work successful, dealing objectively with students, adhering to scientific honesty (Dais, 2017).
- 8- The size and adequacy of faculty members to the extent that they cover all the methodological aspects of the major. “The authors of the Arab strategy project for the development of higher education also stressed that the percentage of PhD holders at the university should not be less than 80% of the total teaching staff, and that the percentage of the master’s holders not exceed 20%, and work to reduce the last percentage in favor of the first percentage continuously” (Abdullah, 2017).
- 9- The presence of a sufficient number of auxiliary frameworks (teaching assistants, technical trainers, employees, and the rest of the workers in various scientific disciplines and administrative components). The foundation works to evaluate their performance and qualify them to perform their jobs efficiently and effectively (Abdullah, 2017).

#### **2.1.6.3 Students’ Quality Standard:**

The students' quality is one of the main determinants of the quality of higher education, as students constitute its raw material. In Diab's study (2009), identified the quality indicators related to students, and they are as follows:

- 1- The standards for selecting and accepting students present the first step in the university education quality, for example, determining a specific average in the

general secondary school for admission to the educational institution or determining specific skills or capacity measurement test.

- 2- Average student cost: quality is measured by the rate of spending on each student. If the rate of a university's spending on a student is more than another university, it is expected that the first university will be higher quality than the other.
- 3- Services provided to students: health services, accommodation, financial aid, and guidance and counseling services are important indicators of quality in university education.
- 4- Student motivation and willingness to learn, the quality of education depends on the availability of motivation and willingness to learn, and students' enthusiastic about education, so there is no learned without desire.
- 5- The ratio of graduates from a college, and the ratio of those who enrolled in postgraduate programs to the ratio of graduates from the same college.
- 6- The structure of graduates according to colleges and majors is linked to the needs of society. That should be planned in a way that ensures the flow of graduates in a timely manner with the required numbers and the necessary majors.
- 7- University graduate level: the graduate is the final output of all university education activities, according to this level, the quality of university education and its institutions can be judged.

#### **2.1.6.4 Academic Programs' Quality Standard:**

Academic programs' quality standard includes the process of designing academic programs and their quality. Academic programs must be designed based on specific

criteria and indicators within the major axes of accreditation to obtain academic accreditation. The following is a presentation of these standards:

1. The design process includes all elements of design process, and its functions that begin with planning to the educational program, defining the goals of the program, defining educational outcomes, identifying courses and educational curricula, identifying tasks and duties in each activity or program, and measuring and evaluating the educational outcomes of the program to find out the advantages and disadvantages of each stage of the program (A'raji & Mona, 2012).
2. The design quality of the academic accreditation programs is achieved through securing the following inputs: the requirements of the educational product characteristics, the requirements of the beneficiaries, the requirements of the educational organization specified in the vision and mission, the requirements of the administrative system, the requirements of the international donor body for the accreditation certificate represented by external auditing according to the criteria set for this (A'raji & Mona, 2012).
3. Academic accreditation programs should be built on the basis of the administrative matrix of the system. An educational organization that builds its programs to rely on a discreet management system firstly and in accordance with ISO 9001 is safer, more fit and faster in obtaining a certificate of conformity in academic accreditation than an educational organization that does not build its programs on a quality management system (A'raji & Mona, 2012).
4. The design process includes academic accreditation programs and courses design, where each faculty member must make a course design form that will be

taught at the beginning of each semester which includes: the introduction as it contains a clear, accurate, brief and useful picture of the course contents. It also contains the objectives of the course, which are cognitive, skill and sentimental goals, from which measured the outputs. Also, it contains the contents of the course in terms of the units to be taught and the approved teaching methods for teaching the course, and the distribution of course grades in terms of (exams, participation, article writing, research, case study, conducting an experiment, project individual or group), the sources and references. A copy of it is sent to the Quality Management Division. Another copy is also distributed to students as a guideline for the courses they take.

5. The academic programs be related to the needs of the labor market, the needs of society and the requirements of development and pacing with local and global changes (Abdullah, 2017).

#### **2.1.6.5 Curriculum's Quality Standard:**

The quality of education including the quality of the offered curricula. It is an essential requirement, and an urgent need in light of recent developments and the great challenges that we live in daily. The academic curriculum is a tool for building a person who is able to play an active role at present and in the future (Abboudi, 2015).

In Abboudi Study (2015), designed a questionnaire to measure the quality of university curricula, as he built standards for university curriculum quality according to the curriculum areas (goals - content - teaching methods - activities - evaluation) and according to the global elements of curriculum quality standards (design and construction - practical training - accompanying and developing - its suitability with students' abilities - its suitability for the labor market (society)), and the criteria are:

**First: Curriculum Objectives' Standards:**

- 1- Curriculum objectives are linked to the standards of the global goals (theoretical and practical).
- 2- Planning in advance to prepare educational and learning goals periodically according to the changes of the times and the requirements of the labor market (society).
- 3- The goals are subject to development and improvement by teachers and specialists.
- 4- The goals of the curriculum are in harmony with the philosophy of society and meets its aspirations.
- 5- The goals are realistic and feasible.
- 6- The objectives are comprehensive, broad and diverse.

**Second: Content (Book) and Practical Training's Standards:**

- 1- The course material information is based on discreet and modern books and research.
- 2- Content information promotes creativity and scientific and practical thinking.
- 3- The amount of information appropriate for the time of the study plan according to the university calendar.
- 4- Content information contributes to achieving the objectives of the subject.

**Third: Teaching Methods' Standards:**

- 1- Adopting more than one modern teaching method in addition to the lecture.
- 2- Teaching methods are followed to urge students to acquire information practically.

- 3- The methods used contribute to developing cooperative and group learning.
- 4- Teaching methods achieve a balance between the theoretical and practical aspects.

**Fourth: Educational Activities and Means Standards:**

- 1- Provides a sufficient percentage of activities facing professional problems.
- 2- The available activities should be suitable with the lesson time.
- 3- The activities contribute to developing students' self-cooperative learning.
- 4- The diversity of activities and means of education and their integration according to contemporary development.

**Fifth: The Evaluation Standards:**

- 1- Students' assessment methods are modern and appropriate.
- 2- The test questions measure the learning outcome of students objectively to work on enriching aspects of strength and treating weaknesses.
- 3- The diversity of the evaluation methods used (objective - essay - verbal) according to the different education strategies.
- 4- The evaluation gives an honest and consistent picture of the extent to which the objectives are achieved.

**2.1.6.6 Scientific Research's Quality Standard:**

The scientific research's quality is a measure and an indicator of the quality of education in higher education institutions. It is also essential in the evaluation of universities and their academic classification. The research performance's quality of universities is measured by the rate of scientific citations and articles published in international scientific journals. "The time's classification assigned the equivalent of

30% of its evaluation of universities to the publication rate of each faculty member and the extent of the excellence of universities in their research in the sense of the extent of research seriousness and modernity and its connection to a modern problem and finding solutions to it, and the financial benefits of the research" (Qahtani, 2019).

Scientific research represents the backbone of technology and a base for the progress of societies and development. The development of advanced industrialized countries occurred because they contain centers of applied research of inventions and technologies and the allocation of financial resources and the provision of infrastructure from organs and researchers with a high degree of knowledge, "For example, in France 2014, we find that the rates of financing scientific research from within universities have been set at 30%, labor and production institutions by 20%, and from localities by 10%, and from the state by 40%. In fact, the state's spending on scientific research is one of the most important quality indicators in it." (Saudi & Mujahid, 2019).

Qahtani's study (2019) also aimed to identify appropriate mechanisms that can contribute to achieving the quality of scientific research at King Khalid University. These mechanisms are indicators of the scientific research's quality in higher education institutions, and the researcher section of the mechanisms / indicators that contribute to achieving the scientific research's quality into four sections, as follows:

- 1- **Mechanisms Related to a Faculty Member:** reducing the administrative burdens and committees of a faculty member, and to set hours for scientific research within the teaching burden, and participating in research with graduate students at the rate of two studies each academic year, and facilitating the procedures for participation in seminars and conferences.

- 2- **Mechanisms Related to the Department and the College:** the availability of devices to search for information vessels to facilitate access to them, contracting experts in the field of scientific research for each program and specialty, and promoting knowledge and research exchange between the various disciplines at the college, and the establishment of a unit to translate Arabic research at the college.
- 3- **Mechanisms Related to University Administration:** increasing spending on scientific research, supporting research groups, allocating an award for the best scientific research at the university level, paying fees for scientific journals.
- 4- **Mechanisms Related to the External Community:** making partnerships with the private sector in support of scientific research, promotion of intellectual investment outside the university and registration in international classifications.

#### **2.1.6.7 Infrastructure Quality Standard:**

In Radi & Al-Sardi's study (2018), designed standards to measure the level of infrastructure's quality in terms of (buildings, classrooms, and the quality of laboratories and workshops) in technical colleges, and the following is a presentation of these standards:

##### **First: Buildings and Classrooms' Quality Standards:**

- 1- Buildings and classrooms are characterized by appropriate lighting (natural-industrial).
- 2- Buildings and classrooms suitable for the success of academic programs are available.

- 3- The size of the classrooms is proportional to the numbers of students in one division.
- 4- The buildings and classrooms are modern.
- 5- The classrooms are equipped with educational means (LCD - computer - projector transparencies - etc).
- 6- Those with special needs are taken into account in the design of buildings and classrooms.

**Second: Laboratories' Quality Standards:**

- 1- The raw materials cover the necessary practical applications.
- 2- Infrastructure is appropriate for the infrastructure of laboratories and workshops (water, electricity, gas, lighting, ventilation, etc.) and the nature of the laboratories and their objectives.
- 3- Keep devices and equipment properly, preventing them from being damaged.
- 4- The devices and tools inside the laboratories and workshops are updated periodically and in line with the technical development, and the curricula are updated.
- 5- Safety and security components are available in laboratories and workshops.
- 6- There is an instruction manual for the proper use of tools, equipments and devices in laboratories and workshops.
- 7- First aid kit is available in laboratories and workshops.
- 8- The department administration provides open times for students to use laboratories and workshops to carry out activities and supervise the specialized technician.

### **2.1.6.8 Educational Services' Quality Standard:**

The educational services' quality is defined as the effort made by professors, administrators and employees to achieve educational goals and achieve educational outcomes that suit the needs of society and individuals, thus achieving satisfaction with the institution, and raising the reputation and fame of the institution.

The educational services' quality includes several concrete dimensions such as classrooms, computer labs, parking lots, sports clubs, rest houses and canteens. Reliability in the sense of performing the required service from the service provider with a high degree of accuracy and mastery (non-occurrence of errors), and in the specified dates. Responding in the sense of the desire of the service providers to help customers. Safety in the sense of absence of risks such as preventing thefts, and adopting an integrated health program that provides students health insurance and postal services (Farhan, 2019).

Al-Radi & Al-Sardi (2018) added indicators to indicate the educational services' quality:

- 1- The educational institution provides a guide for students that contains the most important laws and guidelines pertaining to students (study instructions - scholarships - distribution of degrees - etc.).
- 2- The educational institution website provides a distinguished service for students (registration - lectures schedule - grades - e-learning - etc).
- 3- Support services are sufficient and appropriate (student affairs - admission and registration - accounting - etc.).

- 4- The educational institution supervises the various students' activities (methodology and extracurricular).
- 5- Arabic and foreign books, periodicals, references, and various electronic sources related to academic programs are available in the library.
- 6- The educational institution provides facilities such as (games and entertainment halls - an integrated medical clinic - a cafeteria - etc.).
- 7- Academic counseling is done periodically and systematically to solve problems facing students.
- 8- The library's holdings are constantly updated.
- 9- The college relies on studying the characteristics of students (gender-age-region-income-etc) to determine their non-academic needs.
- 10- The college adopts documented programs to identify and motivate outstanding and creative students, and it supports the defaulting students.

#### **2.1.6.9 E-Learning's Quality Standard:**

One of the fields and standards for measuring and knowing the quality in colleges, universities and higher education institutions knows the quality of electronic management and electronic education in; given that electronic management and electronic education is an indication of the extent of the educational institution's development and its compliance with the requirements of the era of technologies and information technology, and is also an indication of the educational institution's ability to providing its students with the twenty-first century skills represented in learning and innovation skills, information, media and technological culture, and life and work skills.

The procedural definition of e-learning as education based on the use of various technological technologies such as computers, electronic libraries, internet portals, and

the use of different media such as sound, pictures, and video. It can also take the form of electronic courses or programs, and this e-learning occurs either remotely or within the classroom (face to face). E-learning includes several aspects: electronic registration and admission, electronic classrooms, electronic laboratories, electronic tests and evaluation.

**Quality requirements and standards in E-learning** (Fateh Al-Rahman, 2013):

**First: Providing basic conditions for the inputs, as the following:** create a guide that shows how to use electronic education for students and faculty. Equipping the educational institution with the technological facilities needed by computers and modern technologies, and providing immediate communication lines and administrative and technical device capable of dealing with electronic systems to solve the problems facing learners. Providing sufficient fund for managing e-learning and developing electronic programs and courses due to the high costs of online courses. Commitment to copyright and intellectual property rights for electronic programs and courses.

**Second:** The educational institution provides educational programs in accordance with the academic criteria for the degree awarded.

**Third:** Providing quality in the electronic courses, which include the integrity of the content, its lack of linguistic errors, the link of the content to the educational goals of the course, its coverage of all goals, ideas, concepts and behaviors, clarity of images and sound, and it contains objective self-correcting tests so that it displays the result of the learner's response by simply answering them.

**Fourth:** The student evaluation process includes two types: formative evaluation and a final evaluation, and it should be monitored by the educational institution, so that it

appropriately measures students' achievement of the competencies set for the academic course (Fateh Al-Rahman, 2013).

#### **2.1.6.10 Quality Management Practices:**

The administrative and structural organization of the educational institution is necessary, as being away from centralization and not limiting and grouping powers in the hands of a specific unit, and applying quality management practices from (strategic planning, human resource management, customer focus, process management, information analysis, and program design), all of this, would lead to technical innovation and creativity in the educational institution and this is the result of (Sciarelli et al., 2020) study. Quality Management Practices include the existence of a special unit for quality assurance, where this unit works on self-evaluation of the educational institution, and that the university has a clear quality manual, quality system documents, records and work instructions. Questionnaires distributed to students to evaluate the performance of a faculty member, employees, and the institution as a whole, and questionnaires distributed to employees to evaluate the educational institution, students, administrators, policies, and services, are the responsibilities of the Quality Assurance and Management Unit in the educational institution.

#### **2.1.6.11 The National Authority for Accreditation and Quality in Palestinian Higher Education Institutions:**

The idea of developing a vocational system to guarantee and improve quality began in a focused form since 1997 within the framework of the five-year plan to rationalize higher education in Palestine, which was prepared by the Ministry of Higher Education. "The idea was rooted after two years in the report of the working group on the future directions of Palestinian education, and then in the draft of higher education strategy in

Palestine." Later on, the ministers of higher education and scientific research in the Arab world emphasized in the eighth conference in Cairo (25-27 / 12/2001) the establishment of semi-independent national institutions to ensure quality and improve the qualitative performance of higher education institutions. As so, the National Authority for Accreditation was established as a semi-autonomous body within the framework of the Ministry of Higher Education and Scientific Research, upon the recommendation of the Minister and with the approval of the President on 27/1/2002, then a president of this body was appointed. "The general objective of the existence of this Authority is to improve the quality and rationalization of Palestinian higher education to respond to national strategic priorities, and to control quality through clear methodology and instructions for the approval of new programs and for the continuous evaluation of existing programs" (Dajani, 2006).

The National Authority for Accreditation and Quality in Palestinian Higher Education Institutions works to achieve its goals through (The National Authority for Accreditation and Quality in Higher Education, 2018):

- 1- Granting licenses and accreditation according to the relevant international standards in this field.
- 2- Following up and evaluating the licenses issued by the authority, and ensuring the quality of educational inputs, processes and outputs in higher education institutions, by granting or rejecting or freezing or withdrawing accreditation of educational programs or licenses after review and audit.
- 3- Develop and publish instructional instructions on licensing and accreditation procedures and processes, including timelines and related conditions.

- 4- Aligning educational programs provided by higher education institutions with the national development plan and strategic plans, in coordination and consultation with the Ministry of Education and Higher Education and other relevant official parties.
- 5- Ensuring the quality of higher education in the Palestinian economic, social and cultural context, taking into consideration the international dimension in developing higher education.
- 6- Serving researchers and applicants for higher education, by ensuring access to information related to the quality of educational programs (their inputs, processes, outputs and outcomes).
- 7- Developing databases, questionnaires and surveys on the performance of higher education institutions and their educational programs, their conditions, levels and classification according to these data.
- 8- Disseminating information and data to the public, regarding the performance and quality of higher education institutions and their approved programs.

### **2.1.7 Technical Education Importance, Difficulties and Technical Colleges:**

#### **2.1.7.1 The Concept of Technical Education:**

According to the UNESCO International Center for Technical and Vocational Education and Training (Univoc) (2013), technical and vocational education and training refer to a set of learning experiences related to the world of work that increase their opportunities in life and expand their scope.

#### **2.1.7.2 The Goals of Technical Education:**

The goals of technical education in Palestine are as follows (Radi & Al-Sardi, 2018):

- 1- Graduating skilled manpower and technical frameworks, and qualifying them in the various disciplines that economic and social development projects need.
- 2- Providing students with the directions and values that lead to integration into the labor market.
- 3- Achieving positive cooperation between technical education institutions and related productive service institutions.

### **2.1.7.3 The Emergence of Technical Education in Palestine:**

Upon the establishment of the Palestinian National Authority(PNA), the structure of technical and vocational education was found devastating, which grabbed the PNA attention, to meet the needs of the community in terms of competencies and skills capable of production, so the Ministry of Education and the Ministry of Higher Education established professional and technical community colleges to meet the requirements of comprehensive development plans and prepare technical cadres capable of implementing their projects (Sabra & Zamili, 2017).

Since 1995, several steps have been taken to develop the management of the TVET system, the most important of which are:

- 1- Carrying out analytical and realistic studies of the TVET system in Palestine.
- 2- Adopting the national strategy for technical and vocational education and training in the year 1999, as amended in the year 2010. This strategy came in response to the results of analytical and realist studies, which recommended the necessity of establishing the Technical and Vocational Education and Training Authority.
- 3- The strategy was reviewed and activated by a group of local and international experts, who again recommended the necessity of establishing a public authority for

technical and vocational education and training in Palestine as one of the most important pillars of sector development.

#### **2.1.7.4 The Difficulties Facing Technical Education in Palestine:**

Hamdan & Abu Assi (2008) divided the most important difficulties facing technical education in Palestine into five areas, namely:

##### **First: Difficulties Related to the Field of Information and Communication**

**Technology and Education Systems:** the world is changing rapidly, under the influence of stormy scientific and technical development, which imposes on the Ministry of Higher Education the speed of response and keeping pacing with this development. Among the most prominent areas of technical education that face challenges to his career are the following:

- 1- **Curricula and Teaching Methods:** technical education curricula dominate theoretical nature, insufficient attention to practical experiences and training, technical curricula are still traditional and not appropriate to modern technology.
- 2- **The Faculty:** the technical colleges suffer from the problem of providing the teaching and training frameworks for technical education in terms of quantity and quality or both, the difficulty of having the three basic elements interconnected in the faculty member, namely: academic competence (basic information and knowledge), vocational and technical skills, and educational qualification. In addition, the training programs provided do not meet their training needs, and the lack of participation in training programs does not exceed 5%, which is a small percentage.

- 3- **Strategic Planning:** the absence of strategic planning (in relation to determining the current and future need) in the field of technical education in Palestine, and most of the strategic plans in the field of technical education is short-term, procedural, and far from strategic thinking.

**Two: Difficulties Related to the System of Globalization:** The problem of poor public relations performance in technical colleges, and the lack of accuracy and clarity of public relations goals, and the reason. Public relations are a continuous and planned administrative function that seeks to gain understanding, sympathy, and support for the audiences that interest them.

**Three: Total Quality:** there is a clear weakness in the adoption of technical colleges for the TQM System, the weakness of trained and qualified cadres in the educational TQM field, capable of assuming responsibility and innovation, and the weak leadership patterns among managers and administrators who have decisions in the educational field, the weak relationship between educational institutions and the local community.

**Four: Difficulties Related to the Field of Social and Psychological Conditions:** this type of difficulties is the reluctance of students to join the technical colleges, due to the inferior view of the technical community, as many students and their parents still prefer a university diploma over a medium technical diploma, and students who join technical education have not had the opportunity to join academic education, and they are students with low academic achievement.

**Five: Financial Capabilities:** insufficient buildings, workshops, laboratories and libraries, and the inability of laboratories to absorb the growing numbers of students; Which makes it unable to meet the students' need for effective practical training within

the college, as well as some devices and equipment have become old, and in need of development and modernization to suit the rapid technological developments (Radi, 2018).

#### **2.1.7.5 Technical Colleges and Universities in Palestine:**

(Ministry of Higher Education and Scientific Research - General Administration for Vocational and Technical Education, 2019):

The Ministry of Higher Education and Scientific Research supervises 37 institutions that offer technical education (community college, university college, university), 22 institutions in the West Bank and Jerusalem and 15 institutions in the Gaza Strip, including 5 governmental technical institutions in addition to the Palestine Technical University-Khadouri and its branches. As for the rest of the colleges, they are either Public or Relief Agency (UNRWA) or Private. These institutions offer 102 different specializations, including 74 in the West Bank and 45 in the Gaza Strip (17 joint specialties). Technical education is divided into three types: community colleges for the diploma level; university colleges (offering the diploma and Bachelor's level) and technical community colleges affiliated with universities that offer technical and academic specializations offering diploma level. The extent of the study there are two years for the diploma level and four or five years for the Bachelor's level according to major. Students are required to successfully pass the General Secondary Education Certificate Examination (Tawjihi) with some special conditions for some specializations and some institutions.

The research limited to the technical colleges under the supervision of the Ministry of Higher Education in the West Bank especially governmental technical colleges. There

are four governmental technical colleges in the West Bank: Palestine Technical College-Al Aroub in Hebron, Palestine Technical College-Ramallah for girls, Palestine Technical University-Khadouri in Tulkarm and Al Ummah College in Jerusalem. Below is information about these technical colleges in terms of their history and majors:

### **1- Palestine Technical University Khadouri in Tulkarm:**

It occupies a distinguished position in the Palestinian higher education system; It is the only government university in Palestine specialized in scientific, technical and technological fields. It contains 5 technical colleges: Engineering and Technology, Applied Science and Literature, Business and Economics, Technical Palestine and Science and Technology Agricultural Colleges.

The Technical Palestine College in Tulkarm awards a diploma with the following majors: Management and Automate Offices, Financial and Banking Management, Technical Accounting, Industrial Automation, Air Conditioning and Refrigeration, Protected Cultivation Techniques, Communication Engineering Technology, Architecture, Fashion Design and Clothing Manufacture, Software and Databases, Computer and the Internet Networks, Sports Education, and Applied to Compute.

### **2- Palestine Technical University-Ramallah:**

It is one of the branches of the Palestine University “Khadouri”; it is subject to its law and policies; it is interested in providing new professional and technical programs based on the realistic study of the needs of the local work market of specializations, which allows the university graduates to find suitable job opportunities upon graduation. It was established as a teachers’ house for females in 1952 as one of the technical Palestinian colleges before its joining to the Palestine Technical University Khadouri.

The University contains three colleges: Applied Science and Literature, Business and Economics and Technical Community. It awards a diploma degree for 16 majors in Technical Community College: Sports Education, Sign Language, Music Education, Software and Databases, Design and Development of Web Pages, Smart Device Maintenance, Fine Art, Graphic Design, Interior Design/Decoration, Fashion Design and Clothing Manufacture, Technical Accounting, Technical Management, Management and Automate Offices, Montage, Cinematography, Output, and Production. Furthermore, it awards a Bachelor's degree for 9 majors, mainly: technology education, Media Technology, Applied to Compute, Design, and Applied Arts and Sports Education in Applied Science and Literature College and Technical Management, Accounting Information Systems, Computerized Financial and Banking Science and Business Administration and E-commerce in Business and Economics College.

### **3- Palestine Technical University - Al Aroub in Hebron:**

It is one of the branches of the Palestine University "Khadouri"; it was established in 1958 as a teachers' house then it was started working as a technical college in 1995.

The University contains four programs: Applied Arts, Administrative and Financial Business, Computer and Agriculture Technology. It awards a diploma and Bachelor's degree in the following majors: Media Technology, graphic design, Accounting Information Systems, technical Accounting, Management and Automate Offices, Financial and Banking Management, Applied to Compute, Software and Databases, Multimedia, Computer Network, Food Processing, and Gardening and Agriculture Guidance.

#### **4- Al Ummah College in Jerusalem:**

It was established in 1983. in Jerusalem; it is located on the main road between Ramallah & Jerusalem. The college was formerly the Ummah Secondary School, where it lacked the vital facilities of a Community College on the required level like several classrooms and laboratories. In 1998, the college obtained a license to build an area of 3,370 square meters.

The University contains five programs: Information Technology, Commercial Occupations, Applied Arts, Academic Programs, Engineering Programs. It awards a diploma degree in the following majors: Information Technology, Technical Accounting, Business Administrative, Financial and Banking Management, Management and Automate Offices, Graphic Design, Child-Rearing & Electrical Installations Engineering.

**Chapter Two**

**Part Two**

**Previous Studies**

## **2.2 Chapter Two: Part Two: Previous Studies**

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### **Introduction:**

The purpose of this chapter is to present previous studies related to quality in higher education, particularly in technical education. It divided into (18) Arabic and (10) foreign studies.

### **2.2.1 First: Arabic Studies:**

#### **1- (Tahaina & Oudat, 2019) The Extent of Applying Principles of TQM in the Colleges of Physical Education in Jordan**

The study aimed to identify the extent of applying the principles of TQM in colleges of physical education from the viewpoint of faculty members and identify the difference of views of faculty members about the extent of application of the principles of TQ in colleges of physical education due to the variables of the educational qualification, academic rank, years of experience in university teaching, and the university from which the faculty member graduated. The researchers used the analytical descriptive method and the researcher prepared a questionnaire consisting of 4 areas are the field of creating quality requirements in education, the field of following up the educational process, the field of human resource development and the field of decision-making and community service. The study population consists of all faculty members working in the colleges of education in the Jordanian public universities, Yarmouk, Al-Hashemia, and Mutah are (136) faculty members during the 2016/2017 academic year. As for the study

sample consisted of (72) faculty members who answered and returned the scale of the study, at a rate of (53%) from the original study population.

The study results reached the following: the implementation of the principles of TQ in the colleges of physical education was generally high. The fields of creating quality requirements, decision-making and community service, and the follow-up of the educational process, with a high level of application, while the field of human resources development with a medium level of application. The results also indicated there were no statistically significant differences in the extent of applying the principles of TQM in colleges of physical education due to the changes in the educational qualification, years of experience, and the university from which the faculty member graduated from all areas of TQM. Also, the study results reached the presence of differences due to the variable academic rank in the field of decision-making and community service, and in favor of those with higher academic ranks.

## **2- (Qashmar et al., 2019) Applying TQM in Palestinian and Lebanese Universities from the Viewpoint of Faculty Members**

The study aimed to know the extent of applying TQM in Palestinian and Lebanese universities from the viewpoint of faculty members and know the existence of differences in the extent of applying TQ in Palestinian and Lebanese universities due to the following variables: experience, the college in which the faculty member works, the academic rank. The researcher followed the analytical descriptive approach and the researcher prepared a questionnaire consisting of 14 paragraphs distributed over 3 areas: the commitment of the highest management to quality, the efficiency of the workforce at the university and the management of the quality process at the university. The study

population consisted of all full-time and Arabic-speaking faculty members in Palestinian and Lebanese universities from PhD and Masters holders during the first semester of the academic year (2018/2019). A random sample was chosen from the faculty members in Palestinian and Lebanese universities consisting of (153) faculty member. The results of the study concluded the application of TQM in Palestinian and Lebanese universities was very high in the three areas. The study results also showed there were no statistically significant differences between the averages of the respondents' responses due to the variable of experience and the college in which the faculty member works and the academic rank.

### **3- (Othman et al., 2019) Applying TQM Using a Balanced Performance Perspective from the Viewpoint of Faculty and Administrative Staff at the Faculty of Politics and Economics- Suez University - Egypt**

This study aimed to determine the extent to the opinions of faculty members and the administrative apparatus can be explored towards the requirements of achieving TQ using a balanced performance card and determine the importance of achieving TQ using a balanced performance card. The research relied on the analytical descriptive method and the research was applied to all members of the teaching staff are (22) members and the administrative unit are (11) employees. The study tool consisted of a questionnaire consisting of 50 paragraphs distributed on 4 axes, namely: the financial dimension, clients' dimension, internal operations dimension, and learning and growth dimension.

The study results concluded the view of the faculty members and the administrative unit of the Faculty of Politics and Economics at the University of Suez towards the reality of

applying TQ using a balanced performance perspective reflected a clear difference in the level of awareness of the elements of using a balanced performance card.

#### **4- (Masry, 2019) The Role of Learning in the Work Environment in Improving Employment Opportunities for Graduates of Vocational and Technical Education and Training from the Viewpoint of Training and Technical and Vocational Education Providers (Case Study Sector: Gaza)**

This study aimed to verify the role of the learning methodology in the work environment in improving the employment opportunities of vocational and technical training graduates in the Gaza Strip from the viewpoint of vocational and technical training providers on the one hand, and those working in the private sector on the other hand. The researcher followed the descriptive and analytical approach and two questionnaires were distributed, the first questionnaire was designed targeting vocational and technical education providers and workers in these institutions, and another questionnaire was designed targeting workers in the private sector on the other hand. The two questionnaires were distributed to 180 people, including 80 people working in vocational and technical training institutions, and 100 people as workers in the private sector. The questionnaire consisted of three parts: The first part consists of personal information are type, age, educational qualification, institution, supervising authority, job title, and years of experience. The second part consists of 7 areas are available resources, skills and knowledge development, curriculum, practices and processes, disciplines and programs offered, standards and quality, and government support, and the third part of questions related to improving employment opportunities for graduates of vocational and technical education.

The results of the statistical analysis showed several results, the study variables resources, skills and knowledge development, curriculum, practices and processes, professional and technical specializations, quality standards, employee satisfaction, government support are important factors must be taken into account in the field of vocational and technical education, and the learning methodology in the work environment has a methodology that is appropriate to the reality and need of the Palestinian labor market. Moreover, these variables contribute to the success of the learning methodology in the work environment in enhancing the employability of graduates of vocational and technical education and training. The results also showed the importance of developing specialized committees to develop, monitor and follow-up quality standards that help to follow-up problems and dilemmas facing technical and vocational education and training and solve them. It also showed employers' satisfaction with the methodology of learning in the work environment, in terms of its outputs are appropriated to their real needs in the labor market, as well as dissatisfaction with the government's role in financing and supporting this methodology and providing facilities to donors who support this methodology.

##### **5- (Hourani et al., 2019) A Comprehensive Study of the Experience of Technical Education in the Hashemite Kingdom of Jordan: Reality, Challenges, Achievements and Aspirations**

This study aimed to define what is technical education and its modern concept, identify the obstacles facing technical education in the Arab world in general, and clarify the reality of technical education in Jordan, the challenges it faces, and determine the strategies that Jordan has taken to stand up to these challenges and constraints. This exploratory study has been based on Jordanian national strategies that contain goals,

priorities and projects that are measurable and applicable through performance indicators, and aim to bridge the gaps and harmonization between technical education outputs and labor market requirements. The result of this study was most students did not join the Technical Education course due to society's inferior view of it, not implementing the Technical Education course with quality that meets the needs of the labor market. In addition to financing is one of the most important obstacles facing technical education in Jordan and the lack of partnerships between community colleges, production and service institutions that aim to twin with companies, operate, and adopt different styles of technical education and continuing training. The percentage of unemployed graduates from these colleges, which reached 14% in 2015.

**6- (Sabra & Eid (Al-Zamili), 2018) Availability of Technical Education Requirements to Meet the Needs of the Palestinian Labor Market (An Applied Study on Palestine Technical College - Deir Al-Balah)**

The study aimed to determine the availability of the college's policies that support technical education in meeting the needs of the Palestinian labor market, determine the availability of the quality of college outputs to meet the needs of the Palestinian labor market and determine the availability of the policies of the Ministry of Education and Higher Education to meet the needs of the Palestinian labor market. The researcher used the analytical descriptive method, and the researcher prepared a questionnaire consisting of 3 areas: the field of college policies, the field of college outputs, and the field of policies of the Ministry of Education and Higher Education. The study population consist of all the employees of Palestine Technical College (academics and administrators) with 189 and a sample of 31.7% was chosen to use the method of the random stratified sample.

The results of the study found the requirements of technical education represented by the policies of the college supporting technical education are available at 65.66%, while the quality of the college outputs is provided by 61.82% and the policies of the Ministry of Education and Higher Education are provided by 59.82%.

#### **7- (Assaf, 2018) The Level of Quality of the Technical and Vocational Higher Education Environment in the Palestinian Gaza Governorate in the Light of the Six Sigma Principles and the Methods to Improve it.**

This study aimed to identify the level of estimation of the students' sample from colleges of technical and vocational education in the Gaza Governorate for the level of the educational environment quality in the light of Six Sigma principles, find out whether there were statistically significant differences at the level of  $\alpha \leq 0.05$  between the averages of the sample members to the level of the educational environment quality in light of the Six Sigma principles due to the independent variables: gender, the type of secondary certificate (scientific, literary), and the identification of how to improve the quality level of the technical and vocational education environment in the governorates of Gaza in the light of the Six Sigma principles from the viewpoint of a sample of educators. The researcher followed the analytical descriptive method, and a questionnaire was prepared consisting of 66 paragraphs distributed over 6 areas: continuous improvement, quality of relationships and systems, human resources, follow-up evaluation, academic life, and satisfaction of the beneficiaries. An interview was also conducted with 8 faculty members in technical colleges to determine how to improve the quality of the technical and vocational education environment in Gaza Governorate. The study population consisted of all 6236 male and female students of technical and vocational education in Gaza Governorate, while the study sample

consisted of 200 male and female students from technical and vocational education colleges who were chosen in a simple random way.

The study results concluded the degree of total appreciation for the level of quality of the educational environment in colleges of technical and vocational education in light of the Six Sigma principles from of its students' viewpoint was significant with a relative weight of 70.24%. The field of monitoring and evaluation came in the first place with a relative weight of 78.67%, while the field of human resources came in the last place with a relative weight of 59.73%. The study results also found there were no statistically significant differences at the level of  $\alpha \leq 0.05$  between the averages of the sample individuals for the level of the educational environment quality in light of the Six Sigma principles due to the variables: gender and the type of secondary certificate (practical, literary). The faculty members working in the field of quality are working to find additional criteria to evaluate the level of those wishing to join at technical higher education institutions because of the total criterion in the high school is not the only criterion for evaluation

#### **8- (Radi & Sardi, 2018) Level of Quality of Implementation of Standards for Both Infrastructure and Educational Services in Palestinian Technical Colleges from the Viewpoint of Faculty Members: A Case Study - Palestine Technical College - Deir al-Balah**

This study aimed to identify the level of implementation of the Palestine Technical college Deir Al-Balah to the infrastructure standard (buildings and classrooms, laboratories and workshops) and the standard of educational services from the viewpoint of faculty members. Also, it aimed to identify the differences between the

averages of faculty members' responses regarding the level of application of infrastructure and educational services standards at the Palestine Technical college due to the variables (job description, educational qualification, years of service).

The researcher followed the analytical descriptive method and a questionnaire consist of 36 paragraphs distributed on two axes: the infrastructure standard, which includes buildings, classrooms and operational laboratories, and the educational services standard. The study population consisted of all faculty members are 94 faculty members. The study sample consisted of 60 faculty members who were chosen by the intentional sample.

The study results concluded the infrastructure represented by the quality of buildings and classrooms, the quality of laboratories and workshops, and the quality of educational services applied in a medium degree. Also, the results showed there were no statistically significant differences between the averages of the respondents' responses regarding the level of application of the infrastructure and educational services standards due to the variables (Job description, educational qualification, years of service).

#### **9- (Radi, 2018) The Level of Implementation of Quality Standards in Palestinian Technical Education from the Students' Viewpoint: The Administrative and Financial Work Program at Palestine Technical College, Deir al-Balah as a Model**

The study aimed to identify the level of implementation of the administrative and financial business program in the Palestine Technical college to quality standards (program management, program specifications, student evaluation, faculty, students, teaching methods, scientific research, physical facilities and equipment) from its

students' viewpoint. Also, the study aimed at identifying the differences between the averages of students' responses regarding their views on the applying the Administrative and Financial Business Program in the Palestine Technical college to quality standards due to the independent variables: the nature of the program, the name of the program, gender and academic level.

The researcher used the analytical descriptive method. The researcher prepared a questionnaire consist of 58 paragraphs distributed over eight axes are the quality criteria mentioned previously. The study population consist of all students of the Administrative and Financial Business Program at Palestine Technical college, Deir Al-Balah during the 2016/2017 semester are 624 students.

The study results concluded the program is committed to applying quality standards with an average degree, except for two criteria (program management, and the teaching staff) that are applied to a large degree. Also, there are statistically significant differences between the responses of students with regard to their views on the application of the administrative and financial Business program in the Palestine Technical college to the quality standards due to the nature of the program for the favor of the diploma, the name of the program for the favor of the accounting and insurance diploma, the gender for the favor of females and the academic level for the favor of the first level.

**10- (Otaibi et al., 2018) The Technical Education System to Keep Pacing with the Aspirations of the Kingdom of Saudi Arabia's 2030 Vision, in Light of the Japanese Experience**

This study aimed to diagnose the reality of technical education in the Kingdom of Saudi Arabia, identify the advantages of the Japanese experience in technical education and identify the differences between technical education in the Japanese experience from technical education in the Saudi experience. In addition to identifying the requirements to achieve the vision of the Kingdom of Saudi Arabia 2030 in technical education. The study was applied to some educational departments of technical education institutions in the Kingdom of Saudi Arabia, and the current study belongs to descriptive studies using the comparative approach to some studies and research related to technical education (2 reports, 3 research).

The study results revealed weak educational outcomes from institutes and colleges of technical education in the Kingdom, a gap between the outputs of technical training centers and technical colleges and between higher education and the labor market and the actual need of the Saudi labor market, the weakness of the Saudi system and the absence of a skilled Saudi individual in most of the technical sectors and weak strategic partnership programs with the private sector.

**11- (Abdullah, 2017) Resettlement of International Quality Standards in Higher Education Institutions in Sudan, and its Role in Improving Performance: A Field Study in Light of the Quarter-Century Plan**

The PhD thesis aimed to identify some requirements and constraints of applying quality in higher education, know the extent of applying international quality standards in

institutions of higher education and scientific research and their role in improving performance. The researcher relied on the analytical descriptive method and the study population consisted of the 49 higher education and scientific research institutions in Khartoum State. While the study sample consisted of (20) heads of QM departments in institutions of higher education and scientific research in the state of Khartoum, including eight government universities, six private universities, and six university colleges. The researcher used a questionnaire consisting of 56 paragraphs distributed on 10 areas are faculty quality standards, student acceptance quality standards and evaluation of their performance, academic program objectives quality standards, infrastructure and services quality standards, financial resource quality standards, curriculum quality standards, management or academic leadership quality standards, scientific research and external communication quality standards, QM and its improvement quality standards, and output quality standards.

The results of the study found there is a practice of most international quality standards in higher education institutions, and there are a number of international quality standards not practiced in higher education institutions, the practice of international quality standards for infrastructure are weak, and the practice of international quality standards works to improve performance.

## **12- (Mousa, 2017) Applying the Balanced Scorecard in Evaluating the Performance of Technical Colleges in the Kingdom of Saudi Arabia: A Proposed Perception**

This study aimed to know the current situation to evaluate the performance of technical colleges in the Kingdom of Saudi Arabia whether the strength or weakness elements as

well as building a proposed vision for the application of the balanced scorecard in evaluating the performance of technical colleges in the Kingdom of Saudi Arabia. The study relied on the descriptive method and the study population consist of (39) educational management experts and technical training leaders in the Kingdom of Saudi Arabia. The researcher prepared a questionnaire consisted of (33) items distributed on four areas are the perspective of the beneficiaries and the local community are (9) paragraphs, the learning and growth perspective are (8) paragraphs, the perspective of internal operations are (7) paragraphs, and the financial perspective are (9) paragraphs.

The study results showed the obstacles to applying a balanced scorecard are weak understanding and perception of those undertaking to evaluate performance in technical colleges with the criteria and requirements for a balanced scorecard, weak monitoring and control systems, lack of agreement on uniform standards, some performance evaluation indicators need to be rationed, and performance measures must include quantitative and qualitative measures.

### **13. (Samadi, 2017) The Extent of the Intermediate University Faculties' Commitment to the Applied Balqa University of Technical Education Excellence Standards**

This study aimed to investigate the extent of adherence to the standards of technical excellence in intermediate governmental colleges of the Applied Balqa University from the viewpoint of the teachers of these colleges, as well as knowing the extent of the difference in faculty members 'estimates in intermediate universities colleges to the extent of their commitment to technical excellence standards with different (college, academic qualification, teaching experience, specialization). The study used the

descriptive approach, and the study population consisted of all community colleges affiliated to Applied Balqa University, are (13) official colleges. Three colleges were chosen as an intentional sample are: two technical colleges are Al-Hosn university college and Technological Engineering college and non-technical college is Ajloun university college. The study sample consist of (123) faculty members were chosen from these colleges in a randomly. The study tool is the questionnaire and consisted of 60 paragraphs distributed on 6 axes: leadership, planning, organizational culture, curriculum, teaching technology, scientific research, community service and development.

The study results found the responses of the individuals of the study sample came mostly on the intermediate level, and the results also showed there were no statistically significant differences at ( $\alpha = 0.05$ ) in the estimates of the members of the study sample to the extent of university colleges commitment to technical excellence standards due to the study variables (college, educational qualification, teaching experience, specialization). The results concluded the university provides within its capabilities adequate services for people with special needs, including students and employees, workers in the university to benefit from the budget scientific research, the university maintains objective documents on activities and plans that achieve excellence in performance and achievements, and the university gives priority to research with financial returns.

#### **14-(Abdel Ghani & Abdel Qader, 2017) The Reality of Technical Education in Sudan: Problems and Solutions**

The study aimed to identify the reality of technical education in Sudan, identify the society's views towards technical education students, and identify the extent of the availability of infrastructure, laboratories, and workshops in technical education. The two researchers used the descriptive and analytical approach and the study population consist of (350) professors and graduates of technical education. A random sample was chosen to consist of (100) teachers of technical education and (100) of technical education graduates. The two researchers used two questionnaires to collect the necessary information for the subject of the study, the first: a questionnaire directed to professors and administrative of technical education, and the second: a questionnaire directed to graduates of technical education. The questionnaire consisted of (30) items distributed into three areas, namely: the field of the clarity of technical education vision for officials, the field of how society views the student of technical education and the field of the extent of availability of infrastructure, laboratories and workshops to implement the technical education project.

The results of the study concluded the objectives of technical education in Sudan are clear, as the labor market needs and needs of the Sudanese community from majors were taken into consideration. However, the labor market is not involved in setting goals and decisions, the set goals encourage investment in technical education, benefit from the work of partnerships with the sectors of society and the private sector, and the student of technical education joins it of desire and finds a job opportunity after his graduation.

### **15- (Jabreen, 2016) The Reality of Applying TQM Standards at Prince Sultan Private University in Riyadh from the Viewpoint of Faculty Members**

The study aimed to identify the degree of application of the standards of TQM for higher education in Prince Sultan Private University from the viewpoint of faculty members, and identify the statistically significant differences between the individuals with regard to the degree of the university's implementation of TQM standards for higher education based on a number of independent variables (gender, educational qualification, years of experience in university teaching). Also, the study aimed to identify proposals of the faculty members at Prince Sultan Private University, which can contribute to raising the level of applying TQM standards for higher education in private university education institutions to keep pace with global developments. The researcher used the descriptive survey method, and a questionnaire was prepared to consist of 45 questions divided into four areas, namely: the field of creating quality requirements in higher education, the field of monitoring and developing the educational process, the field of developing manpower, and the field of decision-making and community service. The study population consists of all faculty members who speak Arabic at Prince Sultan Private University 2008-2009 AD, and those who hold a degree (lecturer, assistant professor, associate professor) with (50) faculty members.

The study results concluded the degree of applying TQM standards at Prince Sultan Private University was great and the most applied TQM standards at the university were created quality requirements in education, and follow the educational learning process and its development. While the degree of application of the human resources development standard and standard of decision-making and community service is medium. The study results found there are no statistically significant differences in the

extent of applying the standards of TQM in Prince Sultan Private University from the viewpoint of teaching staff members due to the variables (gender, scientific degree, years of experience in university teaching).

**16- (Faqih, 2015) The Importance of Applying TQM in Technical Colleges in the Kingdom of Saudi Arabia from the Viewpoint of the Training Staff Members.**

The study aimed to get acquainted with the opinions of the training staff members in the technical colleges in Abha, Jizan, Al-Qunfudhah, and Najran towards the degree of the importance of applying TQM in these colleges, and identify the degree of availability of human, material and organizational elements necessary for the application of TQM in technical colleges from the viewpoint of the training staff members. Also, it aimed to determine the statistically significant differences in the responses of the training staff members towards the study axes due to the different independent variables (college location (city), academic qualification, current work, and attending training courses/workshops in the quality field). The researcher used the analytical descriptive method and the study population consisted of the training staff members in the technical colleges in Abha, Jizan, Al-Qunfudhah and Najran with (520) training staff members. While the study sample consisted of (260) training staff members with a percentage of (50%) of the total study population. The sample study was chosen in a simple random sample method from all colleges specified in the study.

As for the study tool used, the questionnaire consisted of (35) paragraphs distributed on four areas: the degree of importance of the application of TQM in technical colleges, the degree of availability of human ingredients, the degree of availability of the physical ingredients and the degree of availability of organizational ingredients necessary to

implement TQM in technical colleges. The results concluded the importance of applying TQM in technical colleges to a large degree. While the availability of the necessary ingredients to apply TQM in these colleges came with an average degree for human, physical and organizational ingredients. Also, the results indicated there are statistically significant differences in the opinions of the training staff members towards the importance of applying TQM in technical colleges due to the variable of the college's location, and the variable of attending training courses/workshops in the TQ field. In addition to there are statistically significant differences in the opinions of the training staff members in the axis of the availability of human ingredients with the variable of attending training courses in the field TQ, and there are also statistically significant differences in the axis of organizational ingredients due to the location of the technical college.

#### **17- (Hamdan, 2013) Extent of Implementing of Quality Standards in Technical Education at Palestine Technical University and Colleges in West Bank from the Viewpoint of Faculty Members**

The Master's thesis aimed to know the reality and extent of applying quality standards in universities and technical colleges. The researcher used the analytical descriptive approach and a questionnaire consisting of 83 paragraphs was prepared, with a degree of reliability 0.945 Cronbach's Alpha, distributed on the eight areas of study like the following: the standard of the teaching staff, the curriculum standard, the standard of teaching and learning methods, evaluation and exams standard, community service quality standard, technical educational programs standard, technical environment standard. The study population consisted of all the full-time faculty members at Khadouri Technical University, Palestine Technical College Ramallah for Girls, Al-

Aroub Technical College, and Al Ummah College, who hold a diploma, bachelors, masters, and doctorate degrees for the year 2013 with 85 faculty members, but the study sample was (71) faculty members.

As for the study results: The extent of implementing the technical education quality standards at Palestine Technical University and Colleges in West Bank from the viewpoint of faculty members in the standard of technical programs and the technical environment standard is positive and high, while the standards of faculty, curricula, teaching and learning methods, Evaluation and exams and community service quality are moderate.

#### **18- (Douai, 2012) TQM Standards in Higher Education: Administrative Technical College / Baghdad - An Application Model**

This study aimed to estimate the proportion of TQ matching and diagnose the strength and weakness in applying the TQ standards in the Administrative Technical College/Baghdad. The researcher relied on the “Case Study” approach, as it used the Gap Analysis and Checklist. The research population consists of workers at the higher administrative levels at the college represented by (the dean of the college, the dean's assistants, heads of scientific departments, and officials of some units). The quality of university facilities, the quality of research, the quality of community service, the quality of the student, and the quality of performance evaluation were developed as paragraphs in the checklist for respondents to estimate the quality matching of the educational service.

The study reached to a set of results, including, the rate of quality matching at the college reached 76% at a good level, and the college has a clear strategic vision for the

future among the strategic leaders. Some educational programs are not updated, reviewing study plans in a limited way, and the existence of a system to evaluate the performance of professors, technicians, and workers. Also, the study reached to the lack of financial allocations granted to them in order to enhance their skills and encourage them and the lack of support for researchers and scientific conferences.

### **2.2.2 Second: Foreign Studies:**

#### **1- (Africano et al., 2019) The Main Benefits of the Implementation of the Quality Management System in Higher Education Institutions in Angola**

This study aimed to obtain a diagnosis regarding the implementation of the Quality Management System (QMS) according to ISO 9001 in higher education institutions (HEIs) in Angola and highlight the main advantages of the implementation and certification of the QMS in higher education in Angola. The study population consisted of (55) Angolan HEIs from (73) existing ones, which are part of the Statistical Yearbook of the Ministry of Higher Education, corresponding to (75%) of the total of Angolan public and private HEIs. The percentage of questionnaires answered and received about 91%. These questionnaires were distributed to the Rector/Vice-Rectors and those with the functions of directors.

The study results showed that (50) of Angolan HEIs surveyed, only (20%) of them have the QMS implemented. Furthermore, and the study showed the main benefits of the implementation of the QMS in HEIs of Angola are improvement of the quality of teaching; improvement of student satisfaction; improvement of confidence of students and other stakeholders; improvement in student assessment; improvement of teacher competences; teacher as the most crucial resource of learning. Also, it showed that directors deal more closely with the problems of teaching quality and organizations than

rectors, thus they have more precise idea than the rectors. In addition, the study showed the key reason for not implementing TQM in HEIs in Angola was financial incapacity with (75%), followed it pack of incentives policies and availability of time with (10%), then little institutional interest with (5%).

## **2- (Mpanza et al., 2019) Examining the Service Quality of Administrative Practices in Technical and Vocational Education and Training (TVET) Colleges in South Africa**

This study aimed to determine the expectations and perceptions of students regarding the service quality of administrative practices; identify the perceived gap between current and best practices identified by SERVQUAL gaps; identify the challenges experienced by administrative clerks in delivering quality service administrative practices.

The study was conducted by means of a mixed-method approaches. Quantitative data were collected through prepared SERVQUAL questionnaires. Qualitative data were collected via face-to-face interviews. Three TVET colleges (Elangeni TVET, Umbumbulu Coastal TVET and EThekweni TVET) were selected for evaluation of administrative practices in KwaZulu-Natal, South Africa and the study population was 793. A stratified random sampling technique was used for staff. Three administrative managers were part of the study since each college has one administrative manager; 30 administrative clerks were part of the study since there were 10 administrative clerks per college; and 650 students were part of the study. Data were collected via prepared SERVQUAL questionnaires from third-year students. The research instrument comprised 30 items, with a level of measurement at a nominal or ordinal level. The questionnaire was divided into six sections, which measured various themes, as

illustrated below: Biographical data; Tangibles; Reliability; Responsiveness; Assurance; and Empathy.

The study results noted those expected scores were larger than the perceived scores. The results indicated high scores for expectations, which resulted in negative values for service quality of administrative practices in three selected TVET colleges in KZN. Thus, the study results demonstrated that in each of the five SERVQUAL dimensions, which are, reliability, assurance, tangibles, empathy, and responsiveness there was a negative quality administrative practice gap. As a result, the responsibilities have not been sufficiently fulfilled to meet student expectations.

### **3- (Salem M. A et al., 2019) Structural Equation Modeling of the Relationship Between TQM Practices and Organizational Commitment in Higher Educational Institutions**

This study aimed to investigate the relationship between the implementation of TQM practices and organizational commitment in higher educational institutions of Qatar. The data have been collected using a questionnaire distributed to all academic and administrative staff and 170 usable questionnaires were collected with a response rate of 43%. The questionnaire contains two sections. The First section represents the sample characteristics (gender, position, experience and qualification), while the second section covers the main variables of the study (TQM and organizational commitment). TQM implementation was measured using 64 items and organizational commitment was measured using 15 items.

The results show the implementation of TQM practices will improve the dimensions of organizational commitment. However, not all TQM practices are positive contributors

to organizational commitment. Leadership, vision and stakeholders focus do not contribute positively to the organizational commitment.

#### **4- (Raissi & Droubi, 2019) Evaluating the Quality of Service in Universities a Qualitative Approach of Studying Multiple Cognitive Fields (Tunis University as a Case Study)**

This study aimed to evaluate the University of Tunisia through analysis of the opinions of students who are studying or having their diploma from the university of Tunisia. The study sample consists of 2381 students in bachelor program and 293 graduates. The researchers chose the questionnaire as a way of collecting data. The first part presented demographic questions of respondent, such as working class, gender, education level. The second part is conferring to four groups; the students, alumni who are taking to master program, graduates who are looking for a job and employees.

The results show the education system is theoretical rather than practical. Moreover, according to graduates' responses: the theoretical concepts were insufficient and unsatisfactory. It means many theories were not inconvenienced with skills that need by the labor market, the evaluation system does not have a practical training. The study explains the other aspects of poor achievement of the objectives relied on operability, efficiency and professional insertion of graduates in the labor market. In addition, the learning evaluation was not suitable to ensure students' ability to compete in the labor market.

**5- (Salleh et al., 2018) Critical Success Factors of TQM Implementation in Higher Education Institution: University Technology Malaysia (UTM) Case Study**

This research was conducted to identify the critical success factors of TQM implementation in HEIs and propose a framework to the TQM implementation. Besides that, a relationship between TQM implementation and performance measurement was investigated. The critical success factors of TQM are management commitment and leadership; continuous improvement; total customer satisfaction; employee involvement; training; communication and teamwork.

The sample of the population was conducted in University of Technology Malaysia (UTM), including staffs from Faculty office and Administrative office. The study sample as 100 respondents, and a set of questionnaires have been designed by the researchers, and it has been distributed by using Stratified Random Sampling method and the data were analyzed by using PASW version 18.0. Descriptive analysis has been used such as mean, percentage, and frequency. The finding revealed that there is a relationship between TQM critical success factors and performance measurement. Besides that, implementations of TQM improve the performance measurement. The Researcher has selected staff commitment, customer satisfaction and mission achievement as a predictor for TQM implementation.

**6- (Swanzy & Potts, 2017) Quality Assurance Strategies in Higher Education: The Case of Ghanaian Polytechnics**

Investigated the internal quality assurance strategies in Ghanaian polytechnics enacted to improve graduate outcomes. A qualitative methodological approach via in-depth interviewing of twenty key informants and document analysis was used to establish how

polytechnics in Ghana addressed problematic situations in quality assurance. After the analysis and interpretation process of the data emerged fourteen core themes revealed the internal quality assurance strategies that Ghanaian polytechnics enacted to achieve the quality they desired. These quality assurance strategies focused on the staff and students, which are the first section for staff: transparent and merit-based recruitment processes, induction, rules and regulations, formal appraisal methods, workshops and seminars, further studies, and short training courses.

The second section for students: transparent and merit-based recruitment, orientation, simulated workplace, academic counseling, disciplinary associations, graduation ceremonies, and alumni tracer studies. These strategies used by the polytechnics were not adequate because issues related to physical facilities were not taken into consideration by their internal quality assurance strategies.

#### **7- (Martin & Parikh, 2017) Quality Management in Higher Education: Developments and Drivers Results from an International Survey**

This research aimed to identify main international trends in the orientation, functioning, drivers of QM, and obstacles to QM, illustrate innovative practices and good principles, demonstrate effects and identify internal and external factors that condition the effective functioning of QM at universities. The study was conducted by the UNESCO's International Institute for educational planning (IIEP), with the International Association of Universities. The study population consists of 311 HEIs.

The researchers used the analytical descriptive method and prepared the questionnaire consisted of (9) areas are quality management structures and orientations, processes and tools used for QM (QM of teaching and learning, QM and employment-orientation, QM

and research, QM and governance/management, QM, income generation, and community services, QM and international cooperation), Management information system and use of information for decision-making and external drivers, internal factors and challenges in the development of QM.

The results of this study found the focus or orientation of QM in the responding institutions was teaching and learning (with 96% of responding HEIs viewing it as either important and very important). Other institutional functions-research, governance, and management were typically less covered by QM and international cooperation was even less marked. A majority of 82% of responding HEIs indicated they had a quality policy but was not translated into a QM handbook (only slightly more than half of responding institutions had one). This indicates there is a gap between policy intentions to enhance academic quality and implementation.

#### **8- (Shokry & Soliman, 2016) Study of Influences on TQM and Academic Accreditation Standards Application in Nursing Program at Saudi Universities**

This study aimed to investigate nursing educators' perceptions toward the importance of the TQM and academic accreditation standard (AAS) application in Nursing program & aimed to determine the influences that affect the TQM and AAS application in the Nursing programs at Shaqra and Taif Universities. A comparative descriptive analytical design was conducted in applied medical sciences' college at Shaqra University and Taif University, during the academic year 2015/2016. A total of 64 nursing educators were working in the Nursing program at Shaqra University (N=38) and Taif University (N=26). The questionnaire sheet has consisted of 43 items categorized in; part 1: demographic characteristics of the study sample including (age, academic position, and

participation in a quality workshop and related activities or not). Part 2: perception of the importance of TQM and AAS application in the Nursing program and consisted of 7 items. Part 3: influences affecting TQM and AAS application consisted of 36 items categorized in 5 subscales namely: employee involvement; administrative practices; organizational characteristics; cultural appropriateness; program measures and external influences.

The study results rated the importance of TQM and AAS application in the institutional Nursing programs as moderate at Shaqra and Taif Universities, with no statistically significant differences between groups. But the proportion of rating was more at Taif University than Shaqra University, because Taif University considered the oldest university with more academic experience. Concerning the influences that affect the application of TQM and AAS in the Nursing program was positively affect, namely: employee involvement, administrative practices organizational characteristics, and program measures; and the influences affect Shaqra University with higher mean scores than Taif University.

**9- (Kasperaviciute, 2013) Application of ISO 9001 and EFQM Excellence Model Within Higher Education Institutions: Practical Experiences Analysis**

This study aimed to systemize and analysis practical experiences of the application of the EFQM excellence model and ISO 9001 standard within HEIs. There is an aim to understand: 1) what are the main motives of the application of quality management means within academic institutions; 2) what are the most common issues occurring during the implementation; 3) what are the most common benefits. Research methods: systematic scientific literature analysis and content analysis. Practical experiences of

higher education institutions from various countries are analyzed and the data from 30 case studies (17 case studies focus on experiences applying ISO 9001 standard for quality management system (QMS) development and 13 case studies focus on experiences implementing EFQM excellence model).

The research results showed the motives of the application of both ISO 9001 standard and EFQM excellence model within HEIs are more often related to internal needs of the institutions (respectively 62% average of internal motives and 38% average of the external model). The institution implements QM to improve internal institutional processes and procedures, satisfy the needs of the stakeholders, and competitiveness in the market. The difficulties in the ISO model and the Excellence model are more often related to institutional issues than standard/model problems (respectively 53% average of institutional and 47% average of standard/model issues). For both the most common issues experienced are staff commitment, lack of support and motivation (institutional) and difficulties understanding and interpreting (standard model). Both the benefits of implementation of QMS of ISO 9001 standard and EFQM EM within HEIs resulted in internal benefits (respectively 89% average of internal benefits and 11% average of external benefits). The most common point out are the identification of weaknesses and areas for improvement and the staff commitment to the quality.

#### **10- (Asif et al., 2011) A Model for TQM in Higher Education**

The purpose of this paper is to identify the critical success factors of TQM in universities of Pakistan-a country that has introduced extensive reforms in higher education during the last decade. A part of these reforms was quality assurance initiatives and the establishment of Quality Enhancement Cells within the universities. These initiatives have led to increasing awareness of TQM in the HEIs of Pakistan.

The researchers used the quantitative descriptive approach and prepared a questionnaire formed from 17 paragraphs distributed over 6 areas are leadership, vision, measurement and evaluation, process control and evaluation, program design and resource and the other stakeholders focus. The study population consists of 30 HEIs in Pakistan and the questionnaire was distributed to the directors of Quality Enhancement Cells by the postal mail with the number of questionnaires distributed was 450, 272 (60%) completely filled questionnaires were received back. The findings reveal that leadership, vision, measurement and analysis, process control and evaluation, program design and resources allocation and stakeholder focus emerge as the critical success factors of TQM in HE.

### **2.2.3 Comments on Previous Studies:**

The researcher noticed, through reviewing of previous studies, that they all started from knowing the extent of applying the principles of total quality, diagnosing the strengths and weaknesses in applying the total quality. All the previous studies have assured the importance and benefits of applying the total quality in educational institutions and its impact on employee participation and administrative, technical, and organizational creativity, and the impact of each of leadership, vision, measurement, analysis, process monitoring, evaluation, and attention to the needs of stakeholders on the successful implementation of TQM in educational institutions. These studies recommended that each educational institution should have a special unit for quality assurance and accreditation, and this study presented a number of previous studies designed and conducted in different environments and times, and the researcher noted in the presentation of the previous studies the following:

**In terms of the Scientific Method:**

Previous studies used the descriptive method as a scientific method of study.

**In terms of Goals:**

Previous studies aimed at a set of goals that set by the field of study, its subject,, variables, and the scientific method that it followed in addition to the questions and hypotheses that it addressed, so one of the most important goals of these studies was to identify the reality of quality application in educational institutions, the benefits and importance of their application and quality improvement strategies, and the impact of their application on administrative, organizational and technical creativity.

**In terms of Results:**

- 1- The degree and extent of applying total quality in educational institutions varied, as they ranged between good and high, but there is no guideline book of quality, which indicates a gap between the policy intentions to improve quality and implementation.
- 2- Most studies showed there were no statistically significant differences towards the demographic variables.
- 3- There is a relationship between the total quality management practices of (leadership, vision, strategic planning, measurement and analysis, process control and evaluation, program design, resource allocation, human resource management and focus on stakeholders) and administrative and organizational creativity.
- 4- Most of the attention of educational institutions was focused towards education and teaching, neglecting research jobs, governance, management and training,

weak measurement and evaluation of student performance, weak curricula for technical education, weak laboratory and equipment, and weak partnership and networking with the private sector.

### **Benefiting from Previous Studies:**

- 1- The researcher benefited from the previous studies in choosing the study method, the statistical methods and how the data were analyzed used in these studies.
- 2- The researcher benefited from these studies in designing the questionnaire.
- 3- The researcher benefited from previous studies in presenting the theoretical framework of the study.
- 4- Standing up to what the researchers reached and starting from where they ended up to produce results to be circulated this to the decision-makers.
- 5- The researcher benefited from the previous studies in determining the axes of the study.
- 6- Benefit from the results and recommendations of these studies
- 7- The researcher expanded the knowledge and information base on the subject of the study.

### **What Distinguishes this Research from Previous Studies?**

- 1- This research is the first of its kind for the author, that combines the knowledge of reality of quality and building a scientific tool or model to measure the quality in technical colleges in Palestine.
- 2- The study population are members of the teaching staff and administrators in the governmental technical colleges in West Bank, and they are (4) colleges:

Palestine Technical College Al-Aroub in Hebron, Palestine Technical College - Ramallah, Palestine Technical University Khadouri in Tulkarm, and Al Ummah College in Jerusalem. It differs with all previous studies in the study population except for the study of (Hamdan, 2013) as it is similar to it in the same study population, but this study included administrators.

- 3- The fields of study consisted of 5 criteria: the strategic planning quality standard, faculty members quality standard, students quality standard, curriculum and academic programs quality standard, infrastructure quality standard. It differs with some previous studies in these standards, but it is very similar to the study of (Abdullah, 2017), and the study of (Hamdan, 2013) in most of the criteria. This research added strategic planning quality standard as it's very important for educational institutions as it became one of the modern administrative practices that Palestinian institutions began to take an interest in them, whether in the service or industrial sectors. This study also added the special paragraphs of the quality of e-learning to its priorities in the twentieth century, it requires both of the faculty members and students to have the needed knowledge in modern computer technologies.
- 4- Research variables, and they are (6) variables: gender, academic qualification, job title, college, experience and participate in quality training programs or courses. These variables are similar to most studies. Also, similar to the study of (Hamdan, 2013) in all variables except participate in quality training programs or courses variable in the field of quality, which is an addition in this study.
- 5- The study method used the descriptive approach, followed by a quantitative analysis using the SPSS.

**Chapter Three:**  
**Research Design and Methodology**

## Chapter Three: Research Design and Methodology

### Introduction:

This study aims to measure the reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff. Analytical descriptive methodology used to find the results.

### 3.1 The Population of the Study:

The research was limited to the technical colleges under the supervision of the Ministry of Higher Education and Scientific Research in West Bank specifically in the governmental technical colleges. There are four governmental technical colleges in West Bank: Palestine Technical College-Al Aroub in Hebron, Palestine Technical College-Ramallah, Palestine Technical college-Khadouri in Tulkarm and Al Ummah College in Jerusalem. Information on the number of teaching staff and administrators illustrated in Table (3-1).

**Table (3-1): Population Distribution by College and the Number of Teaching Staff and Administrators**

Palestine Technical Colleges	Teaching Staff		Administrators		Total
	Frequency	Percentage%	Frequency	Percentage%	
Palestine Technical College-Khadouri in Tulkarm	225	77%	67	23%	<b>292</b>
Palestine Technical College-Al Aroub in Hebron	46	87%	7	13%	<b>53</b>
Palestine Technical College-Ramallah	49	67%	24	33%	<b>73</b>
Al Ummah College in Jerusalem	23	64%	13	36%	<b>36</b>
<b>Total</b>	<b>343</b>	<b>76%</b>	<b>111</b>	<b>24%</b>	<b>454</b>

*Source: Statistical Yearbook of Palestinian Higher Education Institutions, (2018).*

Table (3-1) shows that teaching staff has the highest percentage of 76% of the study population, while on the other hand, 24% of the study population are the administrators.

### 3.2 The Sample of the Study:

The sample is a simple random sample. The researcher adapted Stephen Thomason equation for calculating the sample of the study with margin error 0.1. The following is the mathematical equation that was used:

$$n = \left[ \frac{N \times p(1-p)}{\left[ N-1 \times \left( d^2 \div z^2 \right) \right] + p(1-p)} \right]$$

Where (**n**) is the sample size, (**N**) is the population size and equals 454, (**P**) is the probability value, which is a constant value and equals 0.5, (**d**) is the margin error and equals 0.1 and (**z**) is the standard score corresponding to the level of significance 0.05 and the level of confidence 0.95, which is a constant value and equals 1.96.

**Table (3-2): Sample Distribution by the Governmental Technical Colleges and Job Title**

Palestine Technical Colleges	Teaching Staff		Administrators		Total
	Frequency	Percentage %	Frequency	Percentage %	
Palestine Technical College-Khadouri in Tulkarm	39	77%	12	23%	<b>51</b>
Palestine Technical College-Al Aroub in Hebron	8	87%	1	13%	<b>9</b>
Palestine Technical College-Ramallah	9	67%	4	33%	<b>13</b>
Al Ummah College in Jerusalem	4	64%	2	36%	<b>6</b>
<b>Total</b>	<b>60</b>	<b>76%</b>	<b>19</b>	<b>24%</b>	<b>79</b>

Table (3-2) shows that 60 (76%) questionnaires distributed to teaching staff which is still the highest compared with administrators 19 (24%). Table (3-3) illustrates the description of the sample distributed according to the demographic variables.

**Table (3-3): Sample Distribution by Demographic Variables, Frequencies and Percentages**

Variable	Values	Frequency	Percentage %
Gender	Male	57	72%
	Female	22	28%
Academic Qualification	Diploma	6	8%
	Bachelor's	11	14%
	Higher education	62	78%
Job Title	Administrative officer	19	23%
	Head of academic department	17	22%
	Lecturer	10	13%
	Technician	33	42%
Technical College Name	Palestine Technical college- Khadouri in Tulkarm	51	65%
	Palestine Technical College-Al Aroub in Hebron	9	11%
	Palestine Technical College- Ramallah	13	17%
	Al Ummah College in Jerusalem	6	8%
	Years of Experience	Less than 5 years	9
	Between 5 and 10 years	22	28%
	More than 10 years	48	61%
Participate in Quality Training	Never	25	32%

Programs	or	1-3 times	28	35%
Courses		4 times or more	26	33%

Table (3-3) shows the demographic data of all the individuals who participated in the study. It shows that 72% of the participants are males, 78% got a higher education certificate, 23% are administrative workers, 77% are lecturers, 65% are working at Al-Khadouri college in Tulkarm city, 61% of the sample has experience of more than 10 years and 33% participate 4 times or more in quality training programs or courses.

### **3.3 The Research Instrument:**

The research instrument was a structured questionnaire consisting of two sections. The first section focuses on the demographic variables such as gender, academic qualification, job title, the college name, years of experience and participate in quality training programs or courses. The second section is about domains relating to the standards of quality, including (strategic planning quality, academic faculty members quality, design of academic programs and curriculum quality, educational facilities quality and students' quality). All statements are measured considering a five-point Likert scale (1= strongly disagree to 5= strongly agree).

The various parts of the questionnaire were all based on the literatures review. The following is the presentation of the previous studies that the researcher was taken from them to build the questionnaire for each standard of quality:

#### **1- Strategic Planning Quality:**

- The paragraphs from (1-5) and (11-14) were taken from Baz (2016).

- The paragraphs from (6-10) were built and correct from the researcher and arbitrators.
- The paragraphs 15 and 16 were taken from Sabra & Eid (Al-Zamili) (2018).
- The paragraphs from (17-21) were taken from Sciarelli et al. (2020).
- The paragraph 22 was taken from Radi & Al-Sardi (2018).

**2- Academic Faculty Members Quality:**

- The paragraphs from (23-30) were taken from Badrakhan (2018).
- The paragraph 31 was taken from Dais (2017).
- The paragraphs 32, 33, 34 and 35 were taken from Abdullah (2017).
- The paragraphs 36, 37 and 38 were taken from Sciarelli et al. (2020)

**3- Design of Academic Programs and Curriculum Quality:**

- The paragraphs 39, 40 and 43 were taken from A'raji & Mona (2012)
- The paragraphs 41, 44, 49, 50 and 51 were taken from Sciarelli et al. (2020)
- The paragraph 42 was taken from Sabra & Eid (Al-Zamili) (2018)
- The paragraphs 45, 46, 47 and 48 were taken from Fath Al-Rahman (2013)
- The paragraphs from (52-60) were taken from Aboudi (2015)

**4- Educational Facilities Quality:**

- The paragraphs from (61-80) were taken from Radi & Al-Sardi (2018).

**5- Students' quality:**

- The paragraphs from (81-90) were taken from Abdullah (2017).

### 3.4 Survey Validity:

#### 3.4.1 External (Content) Validity:

Content validity refers to the extent of the questionnaire answers on the research questions and the research problem, as well as the extent of the questionnaire coverage of the study subject. The content validity of the questionnaire is conducted through the supervisors' review. Also, the academicians from the Arab American University and An-Najah National University reviewed the questionnaire and provided valuable notes to improve its validity and their comments are taken into consideration. Appendix A shows the questionnaire in its final shape.

#### 3.4.2 Internal Validity:

Internal validity of the questionnaire is measured by the internal consistency and correlation between every statement and the dimension (quality standard). If the value of the calculated correlation is more than 0.40, then the statement is related to the dimension, Table (3-4) shows the result:

**Table (3-4): Correlation Coefficient Between Statements and Dimensions:**

<b>Dimension 1: Strategic Planning Quality</b>			
<b>Statement</b>	<b>Correlation</b>	<b>Statement</b>	<b>Correlation</b>
Statement 1	0.67	Statement 2	0.67
Statement 3	0.75	Statement 4	0.75
Statement 5	0.85	Statement 6	0.81
Statement 7	0.76	Statement 8	0.62
Statement 9	0.64	Statement 10	0.81
Statement 11	0.76	Statement 12	0.86
Statement 13	0.74	Statement 14	0.78
Statement 15	0.64	Statement 16	0.54
Statement 17	0.60	Statement 18	0.65
Statement 19	0.77	Statement 20	0.71
Statement 21	0.82	Statement 22	0.71
<b>Dimension 2: Academic Faculty Members Quality</b>			
<b>Statement</b>	<b>Correlation</b>	<b>Statement</b>	<b>Correlation</b>

Statement 23	0.59	Statement 24	0.47
Statement 25	0.49	Statement 26	0.46
Statement 27	0.62	Statement 28	0.80
Statement 29	0.74	Statement 30	0.69
Statement 31	0.52	Statement 32	0.70
Statement 33	0.45	Statement 34	0.81
Statement 35	0.61	Statement 36	0.49
Statement 37	0.64	Statement 38	0.74
<b>Dimension 3: Design of Academic Programs and Curriculum Quality</b>			
<b>Statement</b>	<b>Correlation</b>	<b>Statement</b>	<b>Correlation</b>
Statement 39	0.77	Statement 40	0.59
Statement 41	0.75	Statement 42	0.75
Statement 43	0.74	Statement 44	0.82
Statement 45	0.55	Statement 46	0.69
Statement 47	0.65	Statement 48	0.52
Statement 49	0.57	Statement 50	0.78
Statement 51	0.73	Statement 52	0.63
Statement 53	0.49	Statement 54	0.70
Statement 55	0.59	Statement 56	0.73
Statement 57	0.66	Statement 58	0.50
Statement 59	0.55	Statement 60	0.66
<b>Dimension 4: Educational Facilities Quality</b>			
<b>Statement</b>	<b>Correlation</b>	<b>Statement</b>	<b>Correlation</b>
Statement 61	0.55	Statement 62	0.75
Statement 63	0.77	Statement 64	0.68
Statement 65	0.60	Statement 66	0.65
Statement 67	0.78	Statement 68	0.69
Statement 69	0.57	Statement 70	0.65
Statement 71	0.61	Statement 72	0.62
Statement 73	0.50	Statement 74	0.49
Statement 75	0.63	Statement 76	0.63
Statement 77	0.41	Statement 78	0.66
Statement 79	0.52	Statement 80	0.60
<b>Dimension 5: Students' quality</b>			
<b>Statement</b>	<b>Correlation</b>	<b>Statement</b>	<b>Correlation</b>
Statement 81	0.69	Statement 82	0.69
Statement 83	0.78	Statement 84	0.81
Statement 85	0.56	Statement 86	0.66
Statement 87	0.79	Statement 88	0.83

Statement 89	0.81	Statement 90	0.82
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Table (3-4) shows the correlation between all statements and dimensions are greater than 0.40, which is acceptable and every statement is related to the dimension.

### 3.5 Reliability:

To find out the reliability degree of the questionnaire, the reliability coefficient (Cronbach's Alpha) is calculated as an indicator of the homogeneity to the level of the instrument. An accepted level would be more than (70%).

**Table (3-5): Reliability (Cronbach's Alpha) for the Quality Standards and the Whole Instrument**

Quality Standards	Number of Items	Cronbach's Alpha	Result
Strategic Planning Quality	22	0.96	Accepted
Academic Faculty Members Quality	16	0.89	Accepted
Design of Academic Programs and Curriculum Quality	22	0.94	Accepted
Educational Facilities Quality	20	0.91	Accepted
Students' Quality	10	0.9	Accepted
Total	90	0.98	Accepted

It is clear from Table (3-5) that Cronbach's Alpha for all the quality standards and the whole instrument are more than 0.70. The range of reliability for all the quality standards are located between 0.89 for the academic faculty members quality, and 0.96 for the strategic planning quality. The reliability for the whole instrument equals 0.98. All Cronbach's Alpha values are high and statistically accepted for the purposes of this research.

### **3.6 Study Variables:**

The main variables in this study are two the independent and dependent variables, which are as follows:

1. The independent variables: These include the demographic variables obtained from the study questionnaire such as gender, academic qualification, job title, the college name, years of experience, and participate in quality training programs or courses.
2. The dependent variable: The standards of quality, including strategic planning quality, academic faculty members quality, design of academic programs and curriculum quality, educational facilities quality and Students' quality.

### **3.7 Statistical Analysis:**

The Statistical Package for Social Sciences program (SPSS Version25) was used for the data entry and analysis. The descriptive statistical analysis was used, to summarize the frequency distributions and percentages for categorical variables, also the means with standard deviations for continuous variables. The reliability coefficient (Cronbach's Alpha) is calculated, The One-Way ANOVA and T-Independent tests are used to find the significant mean differences, a p-value of less than or equal to 0.05 was deemed to be a statistically significant.

### **3.8 Procedures of the Study:**

The researcher used the following procedures during the application of this study:

- First, establishing the validity and reliability of the instrument by the experts in the field, who approved the utility of the instrument for carrying out the study.

The researcher has adopted these observations and suggestions proposed and insert the modifications.

- Second, permission was taken from the administration of Arab American University to get the needed information and to distribute the questionnaires among participants.
- Third, collecting all the tests results. Then, the data were entered to the (SPSS25) program, and then statistically treated.

**Chapter Four:**  
**Results of the Thesis**

## **Chapter Four: Results of the Thesis**

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### **Introduction:**

This study aims to explore the reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff. Also, it aims to examine the significant means differences of the reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff according to the independent variables, including gender, academic qualification, job title, the college name, years of experience, and participate in quality training programs or courses.

### **The Result Related to the First Main Question: What is the Reality of Strategic Planning Quality, Academic Faculty Members Quality, Design of Academic Programs and Curriculum Quality, Educational Facilities Quality and Students' Quality in the Governmental Technical Colleges in West Bank from the Viewpoint of Administrators and Teaching Staff?**

To answer this question Table (4-1) shows the means and standard deviations distributed according to standards of quality and the whole instrument. Also, Table (4-2) shows the lowest and highest arithmetic means for each of quality standard.

We used the following scale to consider the level mean scores degree for standards of quality and statements. This scale depends on interval length=range/number of intervals, interval length=  $(5-1)/5=0.80$ .

The following scale represents the result:

Less than 1.80 very low

1.80 - less than 2.60 low

2.60 - less than 3.40 medium

3.40 - less than 4.20 high

4.20-5 very high

**Table (4-1): Means Scores and Standard Deviation's Distribution by the Quality Standards**

No	Standards of Quality	Standard Deviation	Mean	Effect
1	Strategic Planning Quality	0.64	3.710	High
2	Educational Facilities Quality	0.50	3.802	High
3	Students' Quality	0.56	3.847	High
4	Design of Academic Programs and Curriculum Quality	0.53	3.853	High
5	Academic Faculty Members' Quality	0.50	3.877	High
<b>Total Average</b>		0.50	3.81	High

It appears from Table (4-1) that the degree effect of the total mean of the reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff is high with the total average (3.81) and standard deviation (0.50). The highest mean (3.88) related to the “academic faculty members quality” and standard deviation equals (0.50) with a high degree effect, followed by the mean (3.853) related to “design of academic programs and curriculum quality” and standard deviation equals (0.53) with a high degree of effect. The lowest mean equals (3.71) which is related to “strategic planning quality” with a high degree effect and (0.64) standard deviation.

**Table (0-2): The Lowest and Highest Arithmetic Means for each Quality Standard**

No	Standards of Quality	Standard deviation	Mean	Effect
<b>1</b>	<b>Strategic Planning Quality</b>			
	<b>The Lowest Arithmetic Means in Strategic Planning Quality</b>			
	The college conducts studies to find out the satisfaction of the labor market (society) of its graduates	0.98	3.3	Medium
	The college provides free job opportunities for graduates	0.93	3.28	Medium
	The college conducts studies to find out the graduates' satisfaction with their scientific degree	0.75	3.27	Medium
	<b>The Highest Arithmetic Means in Strategic Planning Quality</b>			
	The college provides a student guide that contains the most important laws and instructions for students	0.80	4.19	High
	The college has a clear vision	0.73	4.05	High
	The college has a mission that defines the current and future field of work of the organization	0.79	3.96	High
<b>2</b>	<b>Educational Facilities Quality</b>			
	<b>The Lowest Arithmetic Means in Educational Facilities Quality</b>			
	The department administration provides open times for students to use the laboratories and workshops to carry out activities under the specialized technical supervision	0.92	3.66	High
	Buildings and classrooms are modern	0.82	3.65	High
	People with special needs are taken into account in the design of buildings, classrooms, laboratories and workshops	0.75	3.47	High
	<b>The Highest Arithmetic Means in Educational Facilities Quality</b>			

	The college website provides excellent services for students (registration - schedule of lectures - degrees - e-learning – etc.)	0.67	4.04	High
	Access to IT and Internet laboratories is easy and available for all students	0.72	4	High
	The college provides facilities such as (entertainment halls - an integrated clinic)	0.80	3.92	High
<b>3</b>	<b>Students' Quality</b>			
<b>The Lowest Arithmetic Means in Students' Quality</b>				
	Students in the college have the motivation to learn	0.71	3.73	High
	Students in the college can search for information	0.80	3.66	High
	The number of faculty members is proportional to the number of students	0.91	3.61	High
<b>The Highest Arithmetic Means in Students' Quality</b>				
	Graduate students from this college are able to enroll in bridging or postgraduate programs	0.67	4.20	Totally high
	Students are accepted on the principle of merit, which is determined by capabilities and motivation	0.74	3.94	High
	The graduates are Provided with the knowledge and competencies that help him to integrate into the world of work	0.69	3.94	High
<b>4</b>	<b>Design of Academic Programs and Curriculum Quality</b>			
<b>The Lowest Arithmetic Means in Design of Academic Programs and Curriculum Quality</b>				
	The private sector is involved in evaluating students' practical training	0.87	3.68	High
	The content of the curriculum is related to students' real life	0.87	3.62	High

	Labor market is involved in preparing programs and majors in the college	0.90	3.39	medium
<b>The Highest Arithmetic Means in Design of Academic Programs and Curriculum</b>				
	There is a description for the theoretical and practical courses	0.70	4.19	High
	The college contains a guide that shows how to use e-learning for students and faculty members	0.74	4.10	High
	Diversity of evaluation methods used (objective - essay - oral) according to different educational strategies	0.73	4.03	High
<b>5</b>	<b>Academic Faculty Members Quality</b>			
<b>The Lowest Arithmetic Means in Academic Faculty Members Quality</b>				
	The educational-professional-academic qualification is provided for new faculty members	0.97	3.42	High
	Faculty member participates in research (at least one research each academic year)	0.88	3.37	Medium
	Faculty members participates in solving community problems	0.90	3.32	Medium
<b>The Highest Arithmetic Means in Academic Faculty Members Quality</b>				
	Faculty member provides students with the course plan	0.67	4.42	Totally high
	The college is constantly evaluating the performance of faculty members and administrators	0.64	4.23	Totally High
	Faculty members have qualifications and specializations that are compatible with the nature of the program	0.67	4.20	Totally high
<b>Total average</b>		<b>0.50</b>	<b>3.81</b>	<b>High</b>

**The Result Related to the Second Main Question: Is there a Significant Mean Difference at the Level of ( $\alpha \leq 0.05$ ) Due to the Reality of Quality in the Governmental Technical Colleges in West Bank from the Viewpoint of Administrators and Teaching Staff Attributed to the Independent Variables, Including Gender, Academic Qualification, Job Title, the College Name, Years of Experience and Participate in Quality Training Programs or Courses?**

In order to answer this question, we need to test the hypothesis.

**Hypothesis 1:** There are no statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) between the average responses of the sample towards the reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff attributed to gender variable.

To test this hypothesis, we use t- test for two independent samples.

**Table (0-3): Independent T-test Among the Participants Attributed to Gender Variable**

Standards of Quality	Level	N	Mean	SD	T value	P value
Strategic Planning Quality	male	57	3.72	0.59	0.26	0.80
	female	22	3.68	0.77		
Academic Faculty Members' Quality	male	57	3.90	0.45	0.70	0.49
	female	22	3.81	0.62		
Design of Academic Programs and Curriculum's Quality	male	57	3.88	0.50	0.81	0.42
	female	22	3.77	0.62		
Educational Facilities' Quality	male	57	3.82	0.46	0.60	0.55
	female	22	3.75	0.60		
Students' Quality	male	57	3.88	0.52	0.91	0.36
	female	22	3.75	0.64		
Total Average	male	57	3.83	0.45	0.67	0.51
	female	22	3.75	0.62		

Through the results from Table (4-3), the null hypothesis accepted due to  $SIG=P>0.05$  for all standards and the total average. This means that, there are no statistically significant differences at the level of significance ( $\alpha\leq 0.05$ ) between the average responses of the sample towards the reality of quality in the governmental technical colleges in West Bank attributed to gender variable.

**Hypothesis 2:** There are no statistically significant differences at the level of significance ( $\alpha\leq 0.05$ ) between the average responses of the sample towards the reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff attributed to the academic qualification variable.

To test the significance of this hypothesis, mean scores of the reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff calculated attributed to the academic qualification variable as shown in table (4-4).

**Table (4-4): Total Mean Scores of the Reality of Quality Standards Attributed to the Academic Qualification Variable**

<b>Standards of Quality</b>	<b>Diploma</b>	<b>Bachelor</b>	<b>Higher Education</b>
Strategic Planning Quality	4.12	3.68	3.68
Academic Faculty Members' Quality	4.10	3.89	3.85
Design of Academic Programs and Curriculum's Quality	4.05	3.79	3.85
Educational Facilities Quality	3.94	3.75	3.80
Students' Quality	4.03	3.83	3.83
<b>Total Average</b>	<b>4.05</b>	<b>3.78</b>	<b>3.79</b>

**Table (4-5): One-way ANOVA the Significant Differences of the Total Average and Standards of Quality Attributed to the Educational Level Variable**

<b>Standards of Quality</b>	<b>Source of Variation</b>	<b>Sum of Squares</b>	<b>d.f</b>	<b>Mean Square</b>	<b>F</b>	<b>SIG.</b>
Strategic Planning Quality	Between Groups	1.10	2	0.55	1.34	0.27
	Within Groups	31.15	76	0.41		
	Total	32.25	78			
Academic Faculty Members' Quality	Between Groups	0.35	2	0.17	0.68	0.51
	Within Groups	19.36	76	0.26		
	Total	19.70	78			
Design of Academic Programs and Curriculum Quality	Between Groups	0.29	2	0.15	0.51	0.60
	Within Groups	21.76	76	0.29		
	Total	22.06	78			
Educational Facilities Quality	Between Groups	0.14	2	0.07	0.28	0.76
	Within Groups	19.38	76	0.26		
	Total	19.53	78			
Students' Quality	Between Groups	0.23	2	0.11	0.36	0.70
	Within Groups	24.01	76	0.32		
	Total	24.24	78			
<b>Total Average</b>	Between Groups	0.38	2	0.19	0.77	0.47
	Within Groups	18.94	76	0.25		
	Total	19.32	78			

As shown on table (4-5), the null hypothesis accepted due to  $SIG=P>0.05$  for all standards and the total average, which means that there are no statistically significant differences at the level of significance ( $\alpha\leq 0.05$ ) between the average responses of the

sample towards the reality of quality in the governmental technical colleges in West Bank attributed to the academic qualification.

**Hypothesis 3:** There are no statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) between the average responses of the sample towards the reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff attributed to the job title variable.

To test the significance of this hypothesis, means of the reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff calculated attributed to the job title variable as shown in table (4-6).

**Table (0-6): Total Mean of the Reality of Quality Standards Attributed to the Job Title Variable**

<b>Standards of Quality</b>	<b>Administrative Officer</b>	<b>Head of Academic Department</b>	<b>Lecturer</b>	<b>Technician</b>
Strategic Planning Quality	3.82	4.03	3.98	3.40
Academic Faculty Members' Quality	3.89	4.06	3.98	3.74
Design of Academic Programs and Curriculum's Quality	3.83	4.10	3.93	3.72
Educational Facilities' Quality	3.89	4.04	3.89	3.60
Students' Quality	4.05	4.01	3.91	3.63
<b>Total Average</b>	<b>3.88</b>	<b>4.05</b>	<b>3.94</b>	<b>3.61</b>

**Table (4-7): One-way ANOVA the Significant Differences of the Total average and Standards of Quality Attributed to the Job Title Variable**

<b>Standards of quality</b>	<b>Source of Variation</b>	<b>Sum of Squares</b>	<b>d.f</b>	<b>Mean Square</b>	<b>F</b>	<b>SIG.</b>
Strategic Planning Quality	Between Groups	5.81	3	1.94	5.50	0.00
	Within Groups	26.44	75	0.35		
	Total	32.25	78			
Academic Faculty Members' Quality	Between Groups	1.25	3	0.42	1.70	0.18
	Within Groups	18.45	75	0.25		
	Total	19.70	78			
Design of Academic Programs and Curriculum's Quality	Between Groups	1.69	3	0.56	2.08	0.11
	Within Groups	20.36	75	0.27		
	Total	22.06	78			
Educational Facilities' Quality	Between Groups	2.55	3	0.85	3.76	0.01
	Within Groups	16.98	75	0.23		
	Total	19.53	78			
Students' Quality	Between Groups	2.86	3	0.95	3.34	0.02
	Within Groups	21.38	75	0.29		
	Total	24.24	78			
<b>Total Average</b>	Between Groups	2.57	3	0.86	3.84	0.01
	Within Groups	16.75	75	0.22		
	Total	19.32	78			

As shown on table (4-7), the null hypothesis rejected due to  $SIG=P<0.05$  for the standards of quality (strategic planning quality, educational facilities quality, students'

quality and the total average), which means, there are statistically significant differences at the level of ( $\alpha \leq 0.05$ ) due to the reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff attributed to the (strategic planning quality, educational facilities quality, students' quality, and the total average). On the other hand, there are no statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) between the average responses of the sample towards the reality of (academic faculty members' quality, design of academic programs and curriculum quality) in technical colleges in West Bank from the viewpoint of administrators and teaching staff attributed to the job title variable.

To test the differences, the (LSD) test between means shows the statistically significant differences attributed to the job title variable as shown in table (4-7):

**Table (0-8): The LSD Significant Differences Attributed to the Job Title Variable**

<b>Dependent Variable</b>	<b>Job Title(I)</b>	<b>Job Title(J)</b>	<b>Mean Difference (I-J)</b>
Strategic Planning Quality	Administrative Officer	Head of Academic Department	-0.21362
		Lecturer	-0.16603
		Technician	.41359*
	Head of Academic Department	Administrative Officer	0.21362
		Lecturer	0.04759
		Technician	.62721*
	Lecturer	Administrative Officer	0.16603
		Head of Academic Department	-0.04759
		Technician	.57961*

Educational Facilities' Quality	Administrative Officer	Head of Academic Department	-0.14644
		Lecturer	0.00974
		Technician	.29474*
	Head of Academic Department	Administrative Officer	0.14644
		Lecturer	0.15618
		Technician	.44118*
Students' Quality	Administrative Officer	Head of Academic Department	0.0356
		Lecturer	0.13737
		Technician	.42010*
	Head of Academic Department	Administrative Officer	-0.0356
		Lecturer	0.10176
		Technician	.38449*
<b>Total Average</b>	Head of Academic Department	Administrative Officer	0.1762
		Lecturer	0.11275
		Technician	.44254*

Table (4-7) shows the significant differences for the three quality standards between (administrative officer, head of academic department) and Technician in the favor of administrative officer and head of academic department. However, the total average illustrates significant differences between head of academic department and technician in the favor of head of academic department.

**Hypothesis 4:** There are no statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) between the average responses of the sample towards the reality

of quality in the governmental technical colleges from the viewpoint of administrators and teaching staff in West Bank attributed to the college name variable.

To test the significance of this hypothesis, mean scores of the reality of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff attributed to the job title variable as shown in table (4-8):

**Table (4-9): Total Mean Scores of the Reality of Quality Standards Attributed to the College name**

<b>Standards of Quality</b>	<b>Palestine Technical College- Al Aroub in Hebron</b>	<b>Palestine Technical College- Khadouri in Tulkarm</b>	<b>Palestine Technical College- Ramallah</b>	<b>Al Ummah College in Jerusalem</b>
Strategic Planning Quality	3.83	3.66	3.80	3.78
Academic Faculty Members Quality	3.95	3.88	3.88	3.73
Design of Academic Programs and Curriculum Quality	3.95	3.84	3.81	3.92
Educational Facilities Quality	3.89	3.81	3.63	4.01
Students' Quality	4.01	3.79	3.82	4.15
<b>Total Average</b>	<b>3.92</b>	<b>3.79</b>	<b>3.78</b>	<b>3.90</b>

**Table (4-10): One-way ANOVA the Significant Differences of the Total Average and Quality Standards Attributed to the College Name**

<b>Standards of Quality</b>	<b>Source of Variation</b>	<b>Sum of Squares</b>	<b>d.f</b>	<b>Mean Square</b>	<b>F</b>	<b>SIG.</b>
Strategic Planning Quality	Between Groups	0.41	3	0.14	0.32	0.81
	Within Groups	31.85	75	0.43		
	Total	32.25	78			
Academic Faculty Members' Quality	Between Groups	0.18	3	0.06	0.23	0.87
	Within Groups	19.52	75	0.26		
	Total	19.70	78			
Design of Academic Programs and Curriculum Quality	Between Groups	0.14	3	0.05	0.16	0.92
	Within Groups	21.91	75	0.29		
	Total	22.06	78			
Educational Facilities' Quality	Between Groups	0.73	3	0.24	0.97	0.41
	Within Groups	18.80	75	0.25		
	Total	19.53	78			
Students' Quality	Between Groups	0.97	3	0.32	1.04	0.38
	Within Groups	23.27	75	0.31		
	Total	24.24	78			
<b>Total Average</b>	Between Groups	0.18	3	0.06	0.24	0.87
	Within Groups	19.14	75	0.26		
	Total	19.32	78			

As shown on Table (4-9), the null hypothesis accepted due to  $SIG=P>0.05$  for all standards and the total average, which means, there are no statistically significant differences at the level of significance ( $\alpha\leq 0.05$ ) between the average responses of the sample towards the reality of quality in the governmental technical colleges in West Bank attributed to the college name variable.

**Hypothesis 5:** There are no statistically significant differences at the level of significance ( $\alpha\leq 0.05$ ) between the average responses of the sample towards the reality of quality in the governmental technical colleges in West Bank attributed to the years of experience variable.

To test the significance of this hypothesis, the mean of reality standards of quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff calculated attributed to the years of experience variable as shown in table (4-10).

**Table (4-11): Total Mean Scores of the Reality of Quality Standards in the Governmental Technical Colleges in West Bank Attributed to the Years of Experience Variable**

<b>Standards of Quality</b>	<b>Less than 5 years</b>	<b>5-10 years</b>	<b>More than 10 years</b>
Strategic Planning Quality	3.74	3.63	3.74
Academic Faculty Members Quality	4.00	3.84	3.87
Design of Academic Programs and Curriculum Quality	4.00	3.71	3.89
Educational Facilities Quality	3.59	3.68	3.90
Students' Quality	3.89	3.67	3.92
<b>Total Average</b>	<b>3.83</b>	<b>3.70</b>	<b>3.86</b>

**Table (4-12): One-way ANOVA the Statistically Significant Differences of the Total Average and Standards of Quality Attributed to the Years of Experience Variable**

Standards of Quality	Source of Variation	Sum of Squares	d.f	Mean Square	F	SIG.
Strategic Planning Quality	Between	0.19	2	0.09	0.22	0.80
	Within Groups	32.07	76	0.42		
	Total	32.25	78			
Academic Faculty Members' Quality	Between	0.16	2	0.08	0.32	0.73
	Within Groups	19.54	76	0.26		
	Total	19.70	78			
Design of Academic Programs and Curriculum's Quality	Between	0.74	2	0.37	1.32	0.27
	Within Groups	21.32	76	0.28		
	Total	22.06	78			
Educational Facilities' Quality	Between	1.23	2	0.61	2.54	0.09
	Within Groups	18.30	76	0.24		
	Total	19.53	78			
Students' Quality	Between	0.93	2	0.47	1.52	0.23
	Within Groups	23.31	76	0.31		
	Total	24.24	78			
<b>Total Average</b>	Between	0.36	2	0.18	0.72	0.49
	Within Groups	18.96	76	0.25		
	Total	19.32	78			

As shown on table (4-11), the null hypothesis accepted due to  $SIG=P>0.05$  for all standards and the total average, which means, there are no statistically significant differences at the level of significance ( $\alpha\leq 0.05$ ) between the average responses of the sample towards the reality of quality in the governmental technical colleges attributed to the years of experience variable.

**Hypothesis 6:** There are no statistically significant differences at the level of significance ( $\alpha\leq 0.05$ ) between the average responses of the sample towards the reality

of quality in the governmental technical colleges in West Bank attributed to participate in quality training programs or courses.

To test the significance of this hypothesis, means of the reality of the quality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff calculated according to participate in quality training programs or courses as shown in table (4-12).

**Table (4-13): Total Mean of the Reality of Quality Standards Attributed to Participate in Quality Training Programs or Courses**

<b>Standards of Quality</b>	<b>Never</b>	<b>1-3 Times</b>	<b>4 Times or More</b>
Strategic Planning Quality	3.47	3.77	3.87
Academic Faculty Members Quality	3.71	3.90	4.02
Design of Academic Programs and Curriculum's Quality	3.66	3.89	4.00
Educational Facilities' Quality	3.59	3.80	4.00
Students' Quality	3.66	3.98	3.89
<b>Total Average</b>	<b>3.61</b>	<b>3.85</b>	<b>3.96</b>

**Table (4-14): One-way ANOVA the Significant Differences of the Total Average and Standards of Quality Attributed to Participate in Quality Training Programs or Courses**

<b>Standards of Quality</b>	<b>Source of Variation</b>	<b>Sum of Squares</b>	<b>d.f</b>	<b>Mean Square</b>	<b>F</b>	<b>SIG.</b>
Strategic Planning Quality	Between Groups	2.14	2	1.07	2.71	0.07
	Within Groups	30.11	76	0.40		
	Total	32.25	78			
Academic Faculty Members' Quality	Between Groups	1.24	2	0.62	2.55	0.09
	Within Groups	18.47	76	0.24		
	Total	19.70	78			
Design of Academic Programs and Curriculum Quality	Between Groups	1.54	2	0.77	2.85	0.06
	Within Groups	20.52	76	0.27		
	Total	22.06	78			
Educational Facilities' Quality	Between Groups	2.16	2	1.08	4.73	0.01
	Within Groups	17.37	76	0.23		
	Total	19.53	78			
<b>Students' Quality</b>	Between Groups	1.42	2	0.71	2.37	0.10
	Within Groups	22.81	76	0.30		
	Total	24.24	78			
<b>Total Average</b>	Between Groups	1.66	2	0.83	3.57	0.03
	Within Groups	17.67	76	0.23		
	Total	19.32	78			

As shown on table (4-13), the null hypothesis rejected due to  $SIG=P<0.05$  for the (educational facilities quality, and the total average), which means, there are significant mean differences at the level of ( $\alpha\leq 0.05$ ) due to the educational facilities quality and the total average. On the other hand, there are no statistically significant differences at the level of significance ( $\alpha\leq 0.05$ ) between the average responses of the sample towards the reality of (strategic planning quality, academic faculty members' quality, design of academic programs and curriculum quality) in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff attributed to participate in quality training programs or courses.

To test the differences, the (LSD) test between means shows the statistically significant differences attributed to participate in quality training programs or courses variable as shown in table (4-14):

**Table (4-15): The LSD Significant Differences Attributed to Participate in Quality Training Programs or Courses Variable**

<b>Dependent</b>	<b>Participate(I)</b>	<b>Participate(J)</b>	<b>Mean</b>
Educational Facilities' Quality	Never	1-3 times	-0.20979
		4 times or more	-.41185*
	1-3 times	Never	0.20979
		4 times or more	-0.20206
	4 times or more	Never	.41185*
		1-3 times	0.20206
<b>Total Average</b>	Never	1-3 times	-0.24606
		4 times or more	-.35186*
	1-3 times	Never	0.24606
		4 times or more	-0.1058
	4 times or more	Never	.35186*
		1-3 times	0.1058

Table (4-14) shows the significant differences for the educational facilities quality and the total average between never participate in quality training programs or courses in 4 times or more in the favor of participate 4 times or more in quality training programs or courses.

**Chapter Five:**  
**Findings Discussion and Recommendations**

## **Chapter Five: Findings Discussion and Recommendations**

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### **Introduction:**

This chapter deals with interpreting the results of the study and their questions. Also, it deals with comparing these results and the extent of their difference or agreement with the previous studies, and then presenting some recommendations in the results.

### **Study questions discussion:**

#### **1-What is the Reality of Strategic Planning Quality, Faculty Members Quality, Design of Academic Programs and Curriculum Quality, Educational Facilities Quality and Students' Quality in the Governmental Technical Colleges in West Bank from the Viewpoint of Administrators and Teaching Staff?**

The results showed that the arithmetic average of the overall score for the quality reality in the governmental technical colleges in West Bank from the viewpoint of administrators and teaching staff was (3.81), and with percentage (76.2%), which has high scale. It agrees with the study of Jabreen (2016) and Faqih (2015), and disagrees with Hamdan (2013).

The highest important standard was the faculty members' quality standard, with an average of (3.877) and with percentage (77.54%), which has high scale. The reason is that the faculty members provide students with course plan, the college is constantly evaluating the performance of faculty members and administrators, and the faculty members have qualifications and specializations that are compatible with the nature of the program.

However, with regard to the faculty member's participation in research (according to research each academic year), the faculty member's participation in solving community problems, and the educational-professional-academic qualification is provided for new faculty members. All the previous paragraphs obtained the lowest arithmetic averages in the field of faculty members' quality with a moderate according to Likert scale. This standard is consistent with the study of Abdullah (2017), and differs with the study of Hamdan (2013), where the total average means in the standard of teaching staff quality were moderate.

The quality of design of academic programs and curriculum come in the second place, with an arithmetic average of (3.853) and with percentage (77.06%), which has a high scale, and the reason is that there is a description for the theoretical and practical courses, the college contains a guide that shows how to use e-learning for students and faculty members, and diversity of evaluation methods used (objective-essay-oral) according to different educational strategies. This study is consistent with the study of Abdullah (2017), and it agrees with the study of Hamdan (2013). The results in which related to the quality of technical programs were high, but differed in relative to quality of curriculum, which concluded that the application of curriculum quality in technical colleges was a moderate degree. It also differs with Hamdan's study (2013) regarding evaluation and examinations, as one of its results was the weakness in evaluation and examination standards, which showed the faculty members' reliance on a single evaluation method, such as exams, whether that focus on the skill of memorization or that focuses on exams only. The results of Hamdan (2013) also showed that the teaching methods used depend on the style of declamation and presentation only, without the

active participation of students.

The students' quality come in the third place, with an arithmetic average of (3.847) and with percentage of (76.94%), which has a high scale. The reason is that graduate students from this college are able to enroll in bridging or postgraduate programs, students are accepted on the principle of merit, which is determined by capabilities and motivation and the technical colleges provide the graduate with knowledge and competences that help him/her to integrate into the world of work. This study is consistent with the study of Abdullah (2017), and differs with the study of Hamdan (2013), as the students' quality obtained a low score.

The educational facilities quality comes in the fourth place, with an arithmetic average of (3.80) and with percentage of (76%), it also has a high scale. The reason is that the college website provides excellent services for students (registration - schedule of lectures - grades - e-learning - etc.), access to IT and internet laboratories is easy and available for all students and the college provides facilities such as (entertainment halls- an integrated clinic). But with regard to taking into account people with special needs in the design of buildings, classrooms, laboratories and workshops, the modernity of buildings and classrooms, and the department administration provides open times for students to use the laboratories and workshops to carry out activities under the specialized technical supervision. All the previous paragraphs obtained the lowest arithmetic averages in the field of educational facilities quality with a high degree of influence.

This differs with the study of Radi and Al-Surdi (2018) as the infrastructure represented by the quality of buildings and classrooms, laboratories, workshops, and the quality of

educational services are applied to a medium degree at the Palestine Technical College - Deir al-Balah. It also differs with the study of Abdullah (2017) as the quality of the infrastructure weakly applied, as well as it differs with the study of Smadi (2017) with regard to people with special needs are taken into account in the design of buildings, classrooms, laboratories and workshops, which is applied to the Balqa Applied University in a very high degree. On the other hand, it agrees with Hamdan's study (2013) where the quality of the technical environment is applied with a high degree.

The strategic planning quality comes in the fifth place, with an arithmetic average of (3.710) and percentage of (74.2%), which has a high scale. The reason is the technical colleges provide guide contains the most important laws and instructions for students, the college has a clear vision, the college has a mission that defines the current and future field of work of the organization and the college contains a quality assurance unit. As for the faculty conducting studies to find out the graduates 'satisfaction with their academic degrees, the lack of free job opportunities for graduates, and the college conducting studies of labor market (community) satisfaction with its graduates. All the previous paragraphs obtained the lowest arithmetic averages in the field of strategic planning quality with a moderate effect. It agrees with the study of Sabra and Al-Zamili (2018).

**2- Are there a Significant Mean Differences at the Level of ( $\alpha \leq 0.05$ ) Due to the Reality of Quality in the Governmental Technical Colleges in West Bank from the Viewpoint of Administrators and Teaching Staff Attributed to the Independent Variables, Including Gender, Academic Qualification, Job Title, the College Name, Years of Experience and Participate in Quality Training Programs or Courses?**

### **Study Hypotheses' Results Discussion:**

#### **1- There are no Statistically Significant Differences at the Level of Significance ( $\alpha \leq 0.05$ ) Between the Average Responses of the Sample Towards the Reality of Quality in the Governmental Technical Colleges in West Bank from the Viewpoint of Administrators and Teaching Staff Attributed to Gender Variable.**

The results indicated that there are no statistically significant differences at the level of  $\alpha \leq 0.05$  in the quality standards in the governmental technical colleges in West Bank from the viewpoint of the faculty members and administrative officials due to the gender variable. This indicates acceptance of the null hypothesis related to the gender variable, and the researcher attributes that faculty members work in the same conditions, whether they are male or female.

The results agree with the study of Assaf (2018), the study of Jabreen (2016), and the study of Hamdan (2013), while it differs with the study of Abdul Qadir and Abdul-Ghani (2017) as there are differences in the favor of males.

#### **2- There are no Statistically Significant Differences at the Level of Significance ( $\alpha \leq 0.05$ ) Between the Average Responses of the Sample Towards the Reality of Quality in the Governmental Technical Colleges in West Bank from the Viewpoint of Administrators and Teaching Staff Attributed to the Scientific Qualification Variable.**

The results indicated that there were no statistically significant differences at the level of  $\alpha \leq 0.05$  in the quality standards in the governmental technical colleges in West Bank from the viewpoint of the teaching staff and administrators due to the scientific

qualification variable, and this indicates acceptance of the null hypothesis related to the scientific qualification variable. The researcher indicated that the administrators and teaching staff participating in this study are aware of the importance of total quality, its role in improving the quality of education and its outputs, developing their performance, and developing their teaching and research capabilities regardless of academic qualification (bachelor's, diploma and postgraduate studies).

This result is consistent with the Tahaina and Al-Awdat study (2019), the Kashmar et al. (2019), the Radi and Al-Sardi study (2018), the Smadi study (2017), and the Jabreen study (2016). It differs with the Hamdan study (2013), which indicated that there are statistically significant differences at the level of ( $\alpha \leq 0.05$ ) in the degree of applying the quality standards for technical education at Palestine Technical Universities and Colleges in West Bank from the viewpoint of the teaching staff due to the scientific qualification variable between holders of a diploma on the one hand, and holders of a master's degree on the other hand, in all the mentioned fields (technical educational programs, technical environment and total degree), and for the favor of holders of a diploma.

**3- There are no Statistically Significant Differences at the Level of Significance ( $\alpha \leq 0.05$ ) Between the Average Responses of the Sample Towards the Reality of Quality in the Governmental Technical Colleges in West Bank from the Viewpoint of Administrators and Teaching Staff Attributed to the Job Title Variable.**

The results indicated that there are statistically significant differences at the level of ( $\alpha \leq 0.05$ ) in the quality standard of strategic planning in governmental technical colleges in West Bank from the viewpoint of the teaching staff and administrators due to the job

title variable in the favor of the administrators, head of the academic department, and the lecturer compared to the technician. This indicates the rejection of the null hypothesis related to the job title variable, and the reason is that the technician does not receive training or courses in the field of strategic planning, and he/she is considered a research and teaching assistant and has no role in developing the policies and strategies of the technology college.

The results also indicated that there are statistically significant differences at the level of ( $\alpha \leq 0.05$ ) in the standard of educational facilities quality at the governmental technical colleges in West Bank from the viewpoint of the teaching staff and administrators due to the job title variable in the favor of the administrators and the head of the academic department compared to the technician. Which indicates the rejection of the null hypothesis related to the job title variable and the reason is that the technician is the most familiar with the faculty laboratories and educational facilities, tools and devices, and since their answers are negative compared with the answers of administrators and departments heads, it means that the educational facilities need to be improved and modified. The answers of administrators and departments heads may be biased.

This study is consistent with the study of Tahina and Al-Awdat (2019), Kashmar et al. (2019), and Radi and Sardi (2018). On the other hand, it differs with the Hamdan study (2013), which showed that there are no statistically significant differences at the level of ( $\alpha \leq 0.05$ ) to apply quality standards for technical education at Palestine Technical University and Colleges in West Bank from the viewpoint of the faculty members due to the job title variable in all fields and the overall score.

**4- There are no Statistically Significant Differences at the Level of Significance ( $\alpha \leq 0.05$ ) Between the Average Responses of the Sample Towards the Reality of Quality in the Governmental Technical Colleges in West Bank from the Viewpoint of Administrators and Teaching Staff Attributed to the College Variable.**

The results indicated that there were no statistically significant differences at the level of ( $\alpha \leq 0.05$ ) in the quality standards in the governmental technical colleges in West Bank from the viewpoint of the teaching staff and administrators due to the college variable, and this indicates acceptance of the null hypothesis related to the college variable, and the researcher mentioned that the Ministry of Higher Education and Scientific Research has given equal attention to the governmental technical colleges.

The results agree with the study of Qashmar and others (2019) and Samadi (2017), where it differs with the study of Faqih (2015), and the study of Hamdan (2013), which showed statistically significant differences at the level of ( $\alpha \leq 0.05$ ) in the degree of applying quality standards for technical education at Palestine Technical University and Colleges in West Bank from the viewpoint of teaching staff due to the university variable in the field of technical environment at Al-Khadouri University and Ramallah College on the one hand, and their colleagues in Al-Aroub College on the other hand, in the favor of Al-Aroub College. Also, there are also statistically significant differences between Ramallah College and their colleagues in Al-Ummah College and in the favor of Al- Ummah College.

**5- There are no Statistically Significant Differences at the Level of Significance ( $\alpha \leq 0.05$ ) Between the Average Responses of the Sample Towards the Reality of Quality in the Governmental Technical Colleges in West Bank from the Viewpoint of Administrators and Teaching Staff Attributed to the years of Experience Variable.**

The results indicated that there were no statistically significant differences at the level of ( $\alpha \leq 0.05$ ) in the quality standards in the governmental technical colleges in West Bank from the viewpoint of the teaching staff and administrators attributed to the years of experience variable, and this indicates acceptance of the null hypothesis related to the years of experience variable.

The researcher attributed that all administrators and teaching staff participating in this study have awareness and extensive knowledge of the TQM system in terms of (the quality of the strategic planning, the quality of the design of academic programs and curriculum, the quality of educational facilities, and the students' quality). This is considered one of the requirements of the modern era in institutions management.

This result is consistent with the study of Tahaina and Al-Awdat (2019), Kashmar et al. (2019), Radi and Sardi study (2018), Smadi (2017), and Jabreen study (2016), and it differs with the study of Abdul Qadir and Abdul-Ghani (2017), where there are differences in the favor of those with experience from (1-5) years. Also, it differs with the study of Hamdan (2013), where there are differences in the quality of technical educational programs in the favor of those with experience (from 5 years - less than 10 years).

**6-There are no Statistically Significant Differences at the Level of Significance ( $\alpha \leq 0.05$ ) Between the Average Responses of the Sample Towards the Reality of Quality in the Governmental Technical Colleges in West Bank from the Viewpoint of Administrators and Teaching Staff Attributed to Participate in Quality Training Programs or Courses Variable.**

The results indicated that there are statistically significant differences at the level of ( $\alpha \leq 0.05$ ) in the quality standards in the governmental technical colleges in West Bank from the viewpoint of teaching staff and administrators attributed to participate in quality training programs or courses, and this indicates rejection of the null hypothesis related to the variable of participate in quality training programs or courses in the field of educational facilities' quality and for the favor of 4 times or more compared to never. The researcher attributes this to a deficiency in holding training courses from the viewpoint of administrators and teaching staff. This is consistent with the result of the study of Faqeh (2015).

**Recommendations:**

The recommendations are based on the lowest averages for each dimension:

**First: Improving the Strategic Planning Quality Through the Following:**

- 1- The researcher recommends colleges to conduct studies to find out the graduates' satisfaction with their academic degrees.
- 2- Colleges would build a better reputation if they work on providing free job opportunities for graduates.

- 3- It will be great for colleges to conduct studies to find out the satisfaction of the labor market (society) for its graduates. This will help in creating a healthy communication channel between colleges and students.

**Second: Improving the Faculty Members Quality Through the Following:**

- 1- The faculty member's participation in solving community problems will lead to increase the trust level within the college's communities.
- 2- The researcher recommends the faculty member to participate in making research (by doing a research each academic year).
- 3- It will be much better for colleges to participate in enhancing the educational-professional-academic qualification of new faculty members.

**Third: Improving the Design of Academic Programs and Curriculum Quality Through the Following:**

- 1- Allow the labor market to be involved in preparing programs and majors at the college.
- 2- The content of the curriculum should be related to the students' real life.
- 3- The private sector participation in evaluating the practical training of students can give students different point of views and expand their educational knowledge.

**Fourth: Improving the Educational Facilities Quality (Buildings, Classrooms, Laboratories, Workshops, and Library) Through the Following:**

- 1- People with special needs should be taken into consideration in the design of buildings, classrooms, laboratories, and workshops.
- 2- Modernizing the buildings and classrooms can be very important. For

students, once they have easy access and usage of classroom facilities and tools, they will have a better opportunity to accelerate the education process.

- 3- The department's administration should provide open sessions (free periods) for students to use the laboratories and workshops to carry out activities, and under specialized technical supervision.

**Fifth: Improving Students' Quality:**

- 1- The researcher recommends colleges to make the number of faculty members proportional to the number of students.
- 2- Training students on how to make proper researches.
- 3- The college motivation for students plays a main role in student learning and educational process. It can also help students in making better achievements and accomplishments. A better motivation means a better performance.

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**APPENDICES:****Appendix (A): list of Referees' Name****List of the Questionnaire Referee**

#	Name	Referee title
1-	Prof. Mohammad Omran	Arab American University Postgraduate (AAUP)
2-	Dr. Majeed Mansour	Arab American University Postgraduate (AAUP)
3-	Dr. Dalal Iriqat	Arab American University Postgraduate (AAUP)
4-	Dr. Khaled Rabayaa	Arab American University Postgraduate (AAUP)
5-	Dr. Nidal Dwaikat	An-Najah National University
6-	Dr. Abdelrahman Tamimi	Arab American University Postgraduate (AAUP)

## Appendix (B): Questionnaire (English Version)



**Arab American University-Jenin**

**Faculty of Graduate Studies**

**Administrative and Financial Sciences Department**

**Strategic Planning and Fundraising**

**Questionnaire**

**The reality of quality in governmentally technical colleges in the West Bank from the  
viewpoint of administrators and teaching staff**

A questionnaire addressed to faculty members and administrative officials in governmentally technical colleges in the West Bank

Peace, mercy and blessings of God

Let me put in your hands a questionnaire that I used to gather data for a study entitled “The reality of quality in governmentally technical colleges in the West Bank from the viewpoint of administrators and teaching staff” to complete my master's degree in strategic planning and fundraising from the Arab American University

The questionnaire consists of two parts, the first section: demographic variables which consists of (6) variables, where the second section: quality standards which consists of (90) items distributed on (5) standards: strategic planning quality (plans, policies, ....), Academical Faculty Members Quality, Design of Academic Programs and Curriculum Quality, Educational facilities quality (buildings, classrooms, laboratories, workshops, and library, ...), Students’ quality and their outputs.

Kindly, answer the items of the questionnaire in the column of the reality of quality in your technical college, by placing a sign (x) in front of each item. Note that what you will give of data will be used for the purpose of scientific research only.

Thanks for your collaboration

Nada Fayyad

MA student

**First section: demographic variables:**

Please tick an x in front of the option that applies to you:

Gender	<input type="checkbox"/> Male	<input type="checkbox"/> Female	
Academic qualifications	<input type="checkbox"/> Diploma	<input type="checkbox"/> Bachelor's degree	<input type="checkbox"/> Higher Education
Job title	<input type="checkbox"/> Head of the Academic Department <input type="checkbox"/> Lecturer <input type="checkbox"/> Lab supervisor <input type="checkbox"/> Administrative Officer: position _____		
the college	<input type="checkbox"/> Palestine Technical College- Aroub	<input type="checkbox"/> Palestine Technical College - Ramallah	<input type="checkbox"/> Al Ummah college- Al-Quds
Years of Experience	<input type="checkbox"/> Less than 5 years	<input type="checkbox"/> 5-10 years	<input type="checkbox"/> More than 10 years
Participate in quality training programs or courses	<input type="checkbox"/> Never	<input type="checkbox"/> 1-3 times	<input type="checkbox"/> 4 times or more

**Second Section: Standards of Quality:**

**First Standard: Strategic Planning Quality (Plans, Policies, ....)**

No. Item	Item	Reality of Quality				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1-	The college has a clear vision					
2-	The college's vision is related to the job market					
3-	The college has a mission that defines the current and future field of work of the organization					
4-	The college has specific, clear and measurable goals					
5-	The College has values that express the core beliefs that strategic decision makers adhere to					
6-	The college selects the appropriate strategy using certain mechanisms such as a matrix of opportunities, threats, strengths and weakness					
7-	The college works on converting strategies into projects					
8-	The college works to determine the					

	project budget					
<b>9-</b>	The college measures the performance of implementing the strategic plan through preset performance indicators					
<b>10-</b>	The college follows the method of collective participation in preparing the plan					
<b>11-</b>	Policies and strategies are will be announced in all departments of the college					
<b>12-</b>	The college works to update and revise its policies according to the needs and expectations of its stakeholders					
<b>13-</b>	The college has a well-trained administrative staff to implement strategic plans					
<b>14-</b>	The college collects accurate information, data and statistics before preparing the strategic plan					
<b>15-</b>	There is clear coordination between the college and the Palestinian labor					

	market					
<b>16-</b>	The college provides free job opportunities for graduates					
<b>17-</b>	The college contains a quality assurance unit					
<b>18-</b>	The Quality Assurance Unit works on self-evaluation for the college					
<b>19-</b>	The College has a Quality Manual to document the quality-related mechanisms					
<b>20-</b>	The college conducts studies to find out the graduates' satisfaction with their scientific degree					
<b>21-</b>	The college conducts studies to find out the satisfaction of the labor market (society) of its graduates					
<b>22-</b>	The college provides a student guide that contains the most important laws and instructions for students					

**Second Standard: Academic Faculty Members' Quality**

No. Item	Item	Reality of Quality				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
23-	Faculty members have qualifications and specializations that are compatible with the nature of the program					
24-	The number of faculty members is proportional to the number of students enrolled in the program					
25-	The faculty member provides students with the course plan					
26-	The faculty member employs the latest educational technology					
27-	The faculty member carries out innovative scientific research in the field of specialization					
28-	The faculty member participates in conferences and seminars in the field of developing the educational process in general, and specialization in particular					
29-	The faculty member participates in research (at least one research each academic year)					
30-	The faculty member participates in solving community problems					

<b>31-</b>	The faculty members respect the lecture time					
<b>32-</b>	The educational-professional-academic qualification is provided for new faculty members					
<b>33-</b>	The college worked on training faculty members on how to create and make electronic courses					
<b>34-</b>	There is continuous academic development for faculty members to keep pacing with recent developments in the field of specialization					
<b>35-</b>	There is a healthy communication between the faculty members and the supporting technical and administrative frameworks					
<b>36-</b>	The college is constantly evaluating the performance of faculty members and administrators					
<b>37-</b>	Faculty members and administrators are promoted according to specific standards and mechanisms					
<b>38-</b>	There is an exchange of experience and knowledge among the faculty					

**Third Standard: Design of Academic Programs and Curriculum Quality**

No. Item	Item	Reality of Quality				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
39-	The goals of the program are set in line with the general goals of the college, in which defined by the vision and mission					
40-	Academic programs are coherent in terms of course offering and diversity					
41-	The requirements of students, society and the job market are carefully considered in designing academic programs					
42-	The labor market is involved in preparing programs and majors in the college					
43-	Academic programs keep pacing with local and global variables as well as development requirements					
44-	Academics and experienced proposals are considered in					

	designing academic programs and curricula					
<b>45-</b>	The college contains a guide that shows how to use e-learning for students and faculty members					
<b>46-</b>	The College offers electronic-educational programs according to the academic standards of the awarded degree					
<b>47-</b>	The electronic programs and courses are subject to close monitoring during their implementation by the college administration					
<b>48-</b>	The electronic programs and courses are subject to examination, follow-up and evaluation processes by the Accreditation and Quality Authority					
<b>49-</b>	The course and program are evaluated by students periodically					
<b>50-</b>	The course and program are evaluated by the					

	faculty members periodically					
<b>51-</b>	The faculty facilities are taken into consideration in developing and improving academic programs and curricula					
<b>52-</b>	The plan contains a suitable practical training					
<b>53-</b>	There is a description for the theoretical and practical courses					
<b>54-</b>	Subject information is based on solid, up-to-date books and research					
<b>55-</b>	The content of the curriculum is related to students' real life					
<b>56-</b>	Adopting more than one modern teaching method in addition to the lecture					
<b>57-</b>	The followed Teaching methods encourage students to gain information practically					
<b>58-</b>	Diversity of evaluation methods used (objective - essay - oral) according to different educational					

	strategies					
<b>59-</b>	The evaluation methods are characterized by their comprehensive for both theoretical and practical aspects					
<b>60-</b>	The private sector is involved in evaluating students' practical training					

**Fourth Standard: Educational Facilities' Quality (Buildings, Classrooms, Laboratories, Workshops, and Library, ...)**

No. Item	Item	Reality of Quality				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>61-</b>	The buildings and classrooms are characterized by adequate lighting (natural - artificial).					
<b>62-</b>	The size of the classrooms, laboratories and workshops is proportional to the number of students per class					
<b>63-</b>	The buildings and classrooms are modern					
<b>64-</b>	Classrooms are equipped with educational aids (LCD - computer - transparencies projector ..... etc)					
<b>65-</b>	Safety and security elements are available in buildings and classrooms					

66-	The people with special needs are taken into account in the design of buildings, classrooms, laboratories and workshops					
67-	The infrastructure of the laboratories and the workshops are commensurate with the nature of the laboratories' work and their objectives					
68-	Hardware and equipment are available in a sufficient and highly efficient way					
69-	Devices and equipments are updated periodically to be in line with technical development and curriculum updates					
70-	There is an instruction manual for the use of tools, equipments and devices in laboratories and workshops					
71-	The department administration provides open times for students to use the laboratories and workshops to carry out activities and provides specialized technical supervision					
72-	The library has Arabic and foreign books, periodicals, and references related to academic programs					
73-	The college website contains an electronic library					
74-	The college provides facilities such as (entertainment halls - an integrated and complete					

	clinic)					
75-	Library holdings and assets are constantly updated					
76-	Access to IT and Internet laboratories is easy and available for all students					
77-	The college website provides excellent services for students (registration - schedule of lectures - degrees - e-learning – etc.)					
78-	Adequate and appropriate support services (student affairs - admission and registration - accounting – etc.)					
79-	The college supervises the various student activities (curricular and extracurricular)					
80-	Academic counseling is provided on a regular and organized basis to solve the problems facing students					

**Fifth Standard: Students' Quality and Its Outputs**

No. Item	Item	Reality of Quality				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
81-	Students are accepted on the principle of merit, which is determined by capabilities and motivation					
82-	The college is attended by high-potential students					
83-	Students at the college have the					

	motivation to learn					
<b>84-</b>	Students at the college have the ability to search for information					
<b>85-</b>	The number of faculty members is proportional to the number of students					
<b>86-</b>	Graduate students from this college are able to enroll in bridging or postgraduate programs					
<b>87-</b>	Provides the graduate with the knowledge and competencies that help him to integrate into the world of work					
<b>88-</b>	The graduate is imbued with the ethics of the profession in which he/she is engaged					
<b>89-</b>	The college produces knowledge in the graduate that achieves economic growth					
<b>90-</b>	The college produces knowledge in the graduate that achieves social growth					

## Appendix (C): Questionnaire (Arabic Version)



الجامعة العربية الأمريكية

كلية الدراسات العليا

قسم العلوم الإدارية والمالية

التخطيط الإستراتيجي وتجديد الأموال

(واقع الجودة في الكليات التقنية الحكومية في الضفة الغربية من وجهة نظر المسؤولين الإداريين وأعضاء الهيئة التدريسية)

استبانة موجهة إلى أعضاء الهيئة التدريسية والمسؤولين الإداريين في الكليات التقنية الحكومية في الضفة الغربية

السلام عليكم ورحمة الله وبركاته

أسمحوا لي أن أضع بين أيديكم استبانة أستخدمها لجمع بيانات لدراسة بعنوان "واقع الجودة في الكليات التقنية الحكومية في الضفة الغربية من وجهة نظر المسؤولين الإداريين وأعضاء الهيئة التدريسية" استكمالاً للحصول على درجة الماجستير في التخطيط الإستراتيجي وتجديد الأموال من الجامعة العربية الأمريكية.

تتكون الاستبانة من قسمين القسم الأول: المتغيرات الديمغرافية ويتكون من (6) متغيرات، والقسم الثاني: معايير الجودة وتتكون من (90) بنداً موزعة على (5) معايير وهم: جودة التخطيط الإستراتيجي (الخطط، والسياسات، .....)، جودة أعضاء الهيئة التدريسية، جودة تصميم البرامج الأكاديمية والمناهج الدراسية ونوعيتها، جودة المرافق التعليمية (المباني والقاعات الدراسية، والمختبرات والمشاعل، المكتبة، .....)، جودة نوعية الطلبة ومخرجاتها.

أرجو كريم تفضلكم بالإجابة على بنود الاستبانة في عمود واقع الجودة في كليتك التقنية، بوضع إشارة (x) أمام كل بند وتحت درجة التقدير التي تراها مناسبة، علماً بأن ما ستدلى به من بيانات يستخدم لغرض البحث العلمي فقط.

أشكركم على حسن تعاونكم

ندى فياض

طالبة ماجستير

القسم الأول: المتغيرات الديمغرافية:

يرجى وضع علامة x أمام الفقرة أو الخيار الذي ينطبق عليك:

الجنس		<input type="checkbox"/> ذكر	<input type="checkbox"/> أنثى
المؤهل الأكاديمي		<input type="checkbox"/> دبلوم	<input type="checkbox"/> بكالوريوس
المسمى الوظيفي		<input type="checkbox"/> مسؤول إداري: الوظيفة .....	
		<input type="checkbox"/> رئيس قسم أكاديمي	<input type="checkbox"/> شرف مختبر
		<input type="checkbox"/> حاضر	<input type="checkbox"/> حاضر
الكلية		<input type="checkbox"/> كلية فلسطين التقنية- العرب	<input type="checkbox"/> كلية فلسطين التقنية-رام الله
		<input type="checkbox"/> كلية فلسطين التقنية-خضوري / طولكرم	<input type="checkbox"/> كلية الأمة-القدس
عدد سنوات الخبرة		<input type="checkbox"/> أقل من 5 سنوات	<input type="checkbox"/> من 5-10 سنوات
		<input type="checkbox"/> من 10 سنوات	<input type="checkbox"/> من 10 سنوات
المشاركة في برامج أو دورات التدريب على الجودة		<input type="checkbox"/> لا يوجد	<input type="checkbox"/> 1-3 مرات
		<input type="checkbox"/> 4 مرات فأكثر	<input type="checkbox"/> 4 مرات فأكثر

القسم الثاني: معايير الجودة

المعيار الأول: جودة التخطيط الإستراتيجي (الخطط، السياسات، .....)

رقم البند	البند	واقع الجودة			
		لا أوافق بشدة	لا أوافق	محايد	أوافق بشدة
1-	للكلية رؤية واضحة				
2-	رؤية الكلية ترتبط بسوق العمل				
3-	للكلية رسالة تحدد مجال عمل المنظمة الحالي والمستقبلي				
4-	للكلية أهداف محددة وواضحة وقابلة للقياس				
5-	للكلية قيم تعبر عن المعتقدات الأساسية التي يلتزم بها صناع القرارات الإستراتيجية				
6-	تختار الكلية الإستراتيجية المناسبة باستخدام آليات معينة كمصفوفة الفرص والتهديدات ونقاط القوة والضعف				

					7- تعمل الكلية على تحويل الإستراتيجيات إلى مشاريع لتنفيذها
					8- تعمل الكلية على تحديد موازنة المشاريع
					9- تقوم الكلية بقياس أداء تنفيذ الخطة الإستراتيجية من خلال مؤشرات أداء معدة مسبقاً
					10- تتبع الكلية أسلوب المشاركة الجماعية في إعداد الخطة
					11- يتم توصيل السياسات والإستراتيجيات لكل الأقسام في الكلية
					12- تعمل الكلية على تحديث ومراجعة سياساتها وفقاً لاحتياجات وتوقعات أصحاب المصلحة
					13- تمتلك الكلية جهاز إداري مدرباً تدريباً جيداً على تنفيذ الخطط الإستراتيجية
					14- تجمع الكلية معلومات وبيانات وإحصائيات دقيقة قبل البدء بإعداد الخطة الإستراتيجية
					15- يوجد تنسيق واضح بين الكلية وسوق العمل الفلسطيني
					16- توفر الكلية فرص عمل حرة للخريجين
					17- تحتوي الكلية على وحدة ضمان الجودة
					18- تعمل وحدة ضمان الجودة على التقييم الذاتي للكلية
					19- تمتلك الكلية دليل للجودة لتوثيق الآليات المتعلقة بالجودة
					20- تعمل الكلية على إجراء دراسات لمعرفة رضا الخريجين عن شهادتهم العلمية
					21- تعمل الكلية على إجراء دراسات لمعرفة رضا سوق العمل (المجتمع) عن خريجها
					22- توفر الكلية دليلاً للطالب يحتوي على أهم القوانين والإرشادات التي تخص الطلبة

## المعيار الثاني: جودة أعضاء الهيئة التدريسية

واقع الجودة					البند	رقم البند
أوافق بشدة	أوافق	محايد	لا أوافق	لا أوافق بشدة		
					يتمتع أعضاء هيئة التدريس بمؤهلات وتخصصات تتلائم مع طبيعة البرنامج	-23
					تتناسب أعداد أعضاء الهيئة التدريسية مع عدد الطلبة الملتحقين بالبرنامج	-24
					يزود عضو الهيئة التدريسية الطلاب بخطة المقرر الدراسي	-25
					يوظف عضو الهيئة التدريسية مستحدثات تكنولوجيا التعليم	-26
					ينفذ عضو الهيئة التدريسية أبحاث علمية مبتكرة في مجال التخصص	-27
					يشارك عضو الهيئة التدريسية في المؤتمرات والندوات في مجال تطوير العملية التعليمية عامة والتخصص خاصة	-28
					يشارك عضو الهيئة التدريسية في الأبحاث (بواقع بحث كل عام دراسي)	-29
					يشارك عضو الهيئة التدريسية في حل مشكلات المجتمع	-30
					يحترم أعضاء الهيئة التدريسية أوقات المحاضرات	-31
					يتم التأهيل التربوي-المهني-الأكاديمي لأعضاء هيئة التدريس الجدد	-32
					عملت الكلية على تدريب أعضاء الهيئة التدريسية على كيفية عمل وإنشاء المقررات الإلكترونية	-33
					يوجد تطوير أكاديمي مستمر لأعضاء هيئة التدريس لمواكبة التطورات الحديثة في مجال التخصص	-34
					يوجد تواصل بين أعضاء الهيئة التدريسية والأطر الفنية والإدارية المساندة	-35
					تعمل الكلية على تقييم أداء أعضاء الهيئة التدريسية والإداريين بشكل مستمر	-36

					37- يتم ترقية أعضاء الهيئة التدريسية والإداريين وفق معايير وآليات محددة
					38- يوجد تبادل للخبرة والمعرفة بين أعضاء الهيئة التدريسية

## المعيار الثالث: جودة تصميم البرامج الأكاديمية والمناهج الدراسية ونوعيتها

رقم البند	البند	واقع الجودة			
		لا أوافق بشدة	لا أوافق	محايد	أوافق بشدة
-39	تحدد الأهداف للبرنامج بما ينسجم مع الأهداف العامة للكلية المحددة بالرؤية والرسالة				
-40	البرامج الأكاديمية متناسقة من حيث طرح المساقات وتنوعها				
-41	يتم مراعاة متطلبات الطلاب والمجتمع وسوق العمل بدقة في تصميم البرامج الأكاديمية				
-42	يتم إشراك سوق العمل في إعداد البرامج والتخصصات في الكلية				
-43	البرامج الأكاديمية تواكب المتغيرات المحلية والعالمية ومتطلبات التنمية				
-44	يتم النظر في اقتراحات الأكاديميين وذوي الخبرة في تصميم البرامج الأكاديمية والمناهج الدراسية				
-45	تحتوي الكلية على دليل يبين كيفية استخدام التعليم الإلكتروني للطلاب وأعضاء الهيئة التدريسية				
-46	تقدم الكلية البرامج التعليمية الإلكترونية وفقاً للمعايير الأكاديمية للدرجة الممنوحة				
-47	تخضع البرامج والمقررات الإلكترونية لمراقبة دقيقة أثناء تنفيذها من قبل إدارة الكلية				
-48	تخضع البرامج والمقررات الإلكترونية لعمليات الفحص والمتابعة والتقييم من قبل هيئة الاعتماد والجودة				
-49	يتم تقييم المساق والبرنامج من قبل الطلاب بشكل دوري				
-50	يتم تقييم المساق والبرنامج من قبل أعضاء الهيئة التدريسية بشكل دوري				
-51	يتم أخذ مرافق الكلية بالاعتبار في تطوير وتحسين البرامج الأكاديمية والمناهج الدراسية				

					الخطة تحتوي على تدريب عملي مناسب	-52
					يوجد توصيف للمقررات النظرية والعملية	-53
					تستند معلومات المادة الدراسية إلى كتب وبحوث رصينة وحديثة	-54
					محتوى المنهج الدراسي يرتبط بالواقع الحياتي للطلبة	-55
					اعتماد أكثر من طريقة تدريس حديثة فضلاً عن المحاضرة	-56
					يتم اتباع طرائق تدريس تحث الطلبة لاكتساب المعلومات عملياً	-57
					تنوع وسائل التقويم المستخدمة (موضوعية-مقالية-شفهية) بحسب استراتيجيات التعليم المختلفة	-58
					تتنصف أساليب التقويم بالشمولية للجانبين النظري والعملي	-59
					يشارك القطاع الخاص في تقييم التدريب العملي للطلاب	-60

المعيار الرابع: جودة المرافق التعليمية (المباني والقاعات الدراسية، والمختبرات والمشاعل، والمكتبة، .....)

رقم البند	البند	واقع الجودة				
		لا أوافق بشدة	لا أوافق	محايد	أوافق	أوافق بشدة
-61	تنتم المباني والقاعات الدراسية بالإضاءة المناسبة (طبيعية-صناعية)					
-62	تناسب مساحة القاعات الدراسية والمختبرات والمشاعل مع أعداد الطلاب في الشعبة الواحدة					
-63	تنتم المباني والقاعات الدراسية بالحدثة					
-64	تجهز القاعات الدراسية بالوسائل التعليمية (LCD-كمبيوتر-جهاز عرض شفافيات ..... إلخ)					
-65	تتوفر عناصر الأمان والسلامة في المباني والقاعات الدراسية					

					يؤخذ بعين الاعتبار ذوي الاحتياجات الخاصة في تصميم المباني والقاعات الدراسية والمختبرات والمشاكل	-66
					تناسب البنية التحتية للمختبرات والمشاكل وطبيعة عمل المختبرات وأهدافها	-67
					تتوفر الأجهزة والمعدات بشكلٍ كافٍ وكفاءةٍ عالية	-68
					يتم تحديث الأجهزة والمعدات بشكلٍ دوري وبما يتوافق مع التطور التقني وتحديث المناهج	-69
					يوجد دليل إرشادات لاستخدام الأدوات والمعدات والأجهزة داخل المختبرات والمشاكل	-70
					توفر إدارة القسم أوقاتاً مفتوحة للطلبة لاستخدام المختبرات والمشاكل لتنفيذ الأنشطة وإشراف فني مختص	-71
					يتوفر بالمكتبة الكتب والدوريات والمراجع العربية والأجنبية ذات العلاقة بالبرامج الأكاديمية	-72
					يحتوي موقع الكلية على مكتبة إلكترونية	-73
					توفر الكلية المرافق مثل (صالات ألعاب وترفيه-عيادة طبية متكاملة-كافتيريا-إلخ)	-74
					يتم تحديث مقتنيات المكتبة بشكلٍ مستمر	-75
					الوصول إلى مختبرات تكنولوجيا المعلومات والإنترنت سهل ومتاح لجميع الطلبة	-76
					يقدم موقع الكلية خدمات مميزة للطلبة (التسجيل-جدول المحاضرات-الدرجات-التعليم الإلكتروني-إلخ)	-77
					خدمات الدعم كافية ومناسبة (شؤون الطلبة-القبول والتسجيل-المحاسبة-إلخ)	-78
					تشرف الكلية على الأنشطة الطلابية المختلفة (المنهجية واللامنهجية)	-79
					يتم الإرشاد الأكاديمي بشكلٍ دوري ومنظم لحل المشكلات التي تواجه الطلبة	-80

## المعيار الخامس: جودة نوعية الطلبة ومخرجاتها

واقع الجودة					البند	رقم البند
أوافق بشدة	أوافق	محايد	لا أوافق	لا أوافق بشدة		
					يتم قبول الطلبة على مبدأ الاستحقاق الذي يتحدد بالقدرات والدافعية	81-
					يلتحق بالكلية الطلاب ذو القدرات العالية	82-
					يمتلك الطلاب في الكلية الحافزية والدافعية نحو التعلم	83-
					يمتلك الطلاب في الكلية القدرة على البحث عن المعلومة	84-
					يتناسب عدد أعضاء الهيئة التدريسية مع عدد الطلاب	85-
					يتمكن الطلاب الخريجين من هذه الكلية من الالتحاق ببرامج التيسير أو الدراسات العليا	86-
					يزود الخريج بالمعارف والكفايات التي تساعد على الاندماج في عالم العمل	87-
					يتشبع الخريج بأخلاقيات المهنة التي ينخرط فيها	88-
					تنتج الكلية المعرفة لدى الخريج التي تحقق النمو الاقتصادي	89-
					تنتج الكلية المعرفة لدى الخريج التي تحقق النمو الاجتماعي	90-

## الملخص

هدفت هذه الرسالة إلى تشخيص واقع الجودة في الكليات التقنية الحكومية في الضفة الغربية من وجهة نظر أعضاء الهيئة التدريسية والمسؤولين الإداريين.

اعتمدت الرسالة على المنهج الوصفي التحليلي، حيث بنت الباحثة استمارة تألفت من 90 فقرة موزعة على خمس معايير وهم (معيار جودة التخطيط الإستراتيجي، معيار جودة أعضاء الهيئة التدريسية، ومعيار جودة تصميم البرامج الأكاديمية والمناهج الدراسية ونوعيتها، ومعيار جودة المرافق التعليمية، ومعيار جودة نوعية الطلبة ومخرجاتها). وتكون مجتمع الدراسة من جميع أعضاء الهيئة التدريسية والمسؤولين الإداريين العاملين في الكليات التقنية الحكومية في الضفة الغربية وهم (كلية فلسطين التقنية-العروب في الخليل، وكلية فلسطين التقنية-رام الله، وكلية فلسطين التقنية خضوري-طولكرم، وكلية الأمة الجامعية في القدس). وإجمالي أعداد أعضاء الهيئة التدريسية والمسؤولين الإداريين هو 454 ومنهم 343 عضو هيئة تدريس و111 مسؤول إداري، واختيرت عينة عشوائية عددها 79 منهم 60 عضو هيئة تدريسية و19 مسؤول إداري.

وتوصلت النتائج أن المتوسط الحسابي لإجابات أعضاء الهيئة التدريسية والمسؤولين الإداريين كانت عالية، حيث أن أعلى متوسط حسابي هو معيار جودة أعضاء الهيئة التدريسية وقيّمته (3.877)، وأدنى متوسط حسابي هو معيار جودة التخطيط الإستراتيجي وقيّمته (3.710). كما وأن قيمة كرو نباخ ألفا (Reliability) لجميع عبارات الاستبانة عالية وتساوي 98%، وتراوحت قيمة كرو نباخ ألفا بين (0.89 لمعيار جودة أعضاء الهيئة التدريسية، و0.96 لمعيار جودة التخطيط الإستراتيجي)، والاتساق الداخلي (Internal Consistency) بين جميع فقرات الاستبانة أكبر من 0.4.

كما بينت نتائج الدراسة عدم وجود فروق ذات دلالة إحصائية عند مستوى الدلالة ( $\alpha \leq 0.05$ ) بين متوسطات استجابات الباحثين تعزى لمتغير (الجنس، والمؤهل العلمي، والكلية، وسنوات

الخبرة)، كما بينت وجود فروق ذات دلالة إحصائية عند مستوى الدلالة ( $\alpha \leq 0.05$ ) بين متوسطات استجابات المبحوثين تعزى لمتغير المسمى الوظيفي في المعايير التالية: (واقع جودة التخطيط الإستراتيجي، وواقع جودة المرافق التعليمية، وواقع جودة نوعية الطلبة ومخرجاتها، وواقع الجودة ككل)، ولصالح المسؤول الإداري ورئيس القسم الأكاديمي مقارنة مع مشرف المختبر في جميع المعايير، وعدم وجود فروق في معيار جودة عضو الهيئة التدريسية، ومعيار جودة تصميم البرامج الأكاديمية والمناهج الدراسية ونوعيتها. كما بينت نتائج الدراسة وجود فروق ذات دلالة إحصائية عند مستوى الدلالة ( $\alpha \leq 0.05$ ) بين متوسطات استجابات المبحوثين تعزى لمتغير عدد مرات المشاركة في برامج أو دورات التدريب على الجودة ولصالح 4 مرات أو أكثر مقارنة مع أبداً في معيار جودة المرافق التعليمية وواقع الجودة ككل.

وأوصت الباحثة بأن تجري الكلية دراسات لمعرفة رضا الخريجين عن شهاداتهم الأكاديمية، وأن يشارك عضو الهيئة التدريسية في حل مشكلات المجتمع، وأن يشارك سوق العمل (المجتمع) في إعداد البرامج والتخصصات في الكلية، ويجب أن يؤخذ بعين الاعتبار ذوي الاحتياجات الخاصة في تصميم المباني والقاعات الدراسية والمختبرات والمشاكل، ويجب أن يكون عدد أعضاء الهيئة التدريسية متناسباً مع عدد الطلاب. كما أوصت الباحثة باستخدام الأداة لقياس وتشخيص واقع الجودة في الكليات التقنية الأخرى والتي لم تتناولها الدراسة.