

# Duties Related to the Performance of Physical Education Teacher to Execute Physical Education Textbook according to Total Quality Criteria

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## Abstract

The purpose of this study is to identify the duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria. The sample of the study consisted of (95) male and female physical education teachers in North-east Badia District schools selected purposefully. To achieve the aim of this study the researcher used the questionnaire which consisted of (25) items describing the duties of the teacher. Data were analyzed through descriptive statistics such as means, standard deviations and Levene's Test for Equality of Variances.

The findings of the study showed that the duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria were in an average level as the means of the samples' responses were (2.64: 5.00) as the higher duties were the teacher, administration, assessment and the curriculum. There were no significant statistical differences attributed to gender and experience variables and on the tool as a whole. Based on the findings the researcher presented several recommendations.

**Keywords:** Physical Education Teacher Performance. Total quality Management.

## 1. Introduction & Literature review

The educational literature mentioned that schools are a meaning not only a building. Teachers are the main pillar in the educational process since their behavior is governed with their values and attitudes. Moreover, empirical studies clarified that the effective physical education teacher can fill any shortage in the curriculum or programs through his experiences which can be considered as an indicator of educational quality in schools.

Because the humans are the most important elements of production, which plays an important role in the success of economical, or social, or education or health institutions of different types, the leaders took a major interest in this vital element through research on the factors affecting the productivity. The interest in the study of performance assessment imposed by the desire to raise the level of performance of employees a way that ensure the achievement of their goals and at the same time to achieve the goals of the institution with a maximum of efficiency and effectiveness (Al-qhtani, 1997: 67).

The successful teacher should know all the principles and values of education within teaching, planning or management in order to fulfill his role and carry out his tasks setting from clear goals and quality performance (Al-khleef, 2010: 19).

In this context, the attempts to instill TQM in the Educational institutions requires inventing the tools that can achieve total quality management in education in order to enhance the outcomes of all educational processes (Al-mwsawi, 2003: 93). Therefore, TQM can be seen as a management philosophy, a paradigm, a continuous improvement approach to doing business through a new management model (Jeffery, 1999: 124). The TQM philosophy evolved from the continuous improvement philosophy with a focus on quality as the main dimension of business (Cohen, 1993). Under TQM, emphasizing the quality of the product or service predominates (Dibiase, 2005: 7).

It is the system that can achieve improvements in institutions since it depends comprehensive approaches, it achieve Owner/customer satisfaction is the measure of quality, everyone has owners/customers; everyone is an owner/customer and Quality improvement must be continuous (Abu Naba, 2004: 107).

Al-saheb & Sultan (2004) conformed that Total quality management (TQM) is the organization-wide effort to install and make permanent a climate in which it continuously improves its ability to deliver high-quality products and services to customers (Al-qhtani, 1993:17). While there is no widely agreed-upon approach, TQM efforts typically draw heavily on the previously-developed tools and techniques of quality control. As a business phenomenon, TQM enjoyed widespread attention during the late 1980s and early 1990s before being

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overshadowed by ISO 9000, Lean manufacturing, and Six Sigma (Morgan & Murgatroyed, 1994: 90)

Based on the above mentioned review the current study is seeking to explore the duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria.

### **1.1 Statement of Purpose**

Through practical experience and field training of the researcher as a coordinator of practical education he concluded that there is a need to take into consideration the duties related to the performance of the physical education teacher in order to carry out the curriculum. By reviewing the criteria of total quality management it has been found that these criteria are the essential foundation for the success of the educational process, administrative and related duties associated with the performance of physical education teacher. Therefore, this aim of this study was to identify the duties associated with the performance of physical education teacher for the implementation of Physical Education textbooks under the standards of total quality management.

### **1.2 Study objectives and Questions**

The objective of this study is to explore the duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria. The study sought to answer the following research questions:

1. What are the administrative duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria?
2. What are the duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria?
3. What are the educational duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria?
4. What are the assessment duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria?
5. Are there any significant statistical differences at the level of ( $\alpha = 0.05$ ) in duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria attributed to gender and experience?.

### **1.3 Significance of the study**

The importance of this study emerged from its purpose as it seeks to reach several findings benefiting researcher son both practical and scientifically levels. This can be summarized as follows:

1. Scientific importance: The scientific importance of this study is represented from its goal of rooting an important issue regarding TQM related to the duties of the physical education teacher in order to enrich the knowledge of new information.
2. Practical Importance: the practical importance is emerged from the goal of this study which is exploring the duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria.

### **Study Limitations**

The study is limited to (95) respondents of male and female physical education teachers in North-east Badia District schools selected purposefully in the first semester of the schooling year 2011/2012.

### **1.4 Definition of Terms**

- Developing Performance: The systematic use of scientific and technical knowledge to meet specific objectives or requirements (Jumean, 1999: 54-57). The experiment of development in public sector is one of the most important issues up to date (Al-udwan, 1994: 12-14). Operationally, it is the ability of the ministry of education to achieve the required goals according to TQM in the best effort and less time

- TQM: management philosophy and company practices that aim to harness the human and material resources of an organization in the most effective way to achieve the objectives of the organization (Al-Kakari, 2006: 7). Operationally, it is set of organized negative trends towards radical changes in the administrative structure concerning the introduction of standards which are based on the principles of total quality management.

## **2. Previous studies and comments**

The current study presents several previous studies related to the issue of this study directly and indirectly.

Al-hilali (1998) analyzed e concept of TQM tools and methods and how they are applied in higher education institutions and also aimed to provide a proposed model for universities that can be applied in their plans and programs. The researcher has identified the main pillars for the application of total quality management in higher education institutions and higher education, namely: customer concerns and the educational institution and leadership. Subsequently researcher tried to provide a vision proposed for the implementation of TQM in the institutions of higher education.

Naji (1998) conducted a study aimed to explore the concepts and methods of TQM and the possibility of implementing it in Jordanian Higher Education institutions. The study investigated the perceptions of Deans and

department heads and directors of departments and students on the application of total quality management at the university. The study found that the level of satisfaction of Amman Private University students was high with regard to university facilities and low for the plans of study and academic staff, regulations and internal instructions. The university has available conviction and a desire to apply the principles of total quality management, and the University of the Actual Application of some of the principles of total quality management, such as providing incentives for employees and work to meet the needs of students.

Ayyoub (2000) conducted a study to identify the effectiveness of developing Jordanian universities performance as well as exploring the differences in the evaluation of this effectiveness attributed to university and academic rank variables. To achieve this aim the researcher selected a sample of (282) faculty members from Jordanian universities. The findings showed that there are significant statistical differences in the evaluations of the sample regarding the use of evaluation to develop Jordanian universities performance.

Bassioni (2004) studied The importance of total quality management in achieving business and customer satisfaction. The researcher used the standards are based on the principles of total quality management and within the foundations arguing in customer satisfaction have been circulating these standards. The results showed the existence of a positive impact of total quality management in customer satisfaction.

Revilla (2004) conducted a study to identify the role of total quality management in the implementation of projects. The study showed that total quality management increase production for the improvement of (35.7%) on production through improved performance by traditional methods.

Khdeer (2004) studied the degree of importance of TQM and its implementation. The sample of the study consisted of (54) supervisors and (190) male and female principals. The researcher concluded that the suitability degree is high and the implementation possibility is in a high level too.

Al-Quran (2005) study aimed to Develop a model to measure the degree of implementation of total quality management in the administrative units in Jordanian universities, the population of the study consisted of (755) individuals, from eighteen public and private Universities, stratified random sample consisted of 357 individuals was selected. The findings showed that the degree of possibility of applying the elements of total quality management in general, which has been in the light of model building medium, and came to know the members of the study sample technology team building the first prize and moderately, while management technology came through the recording of the results came in last.

Through reviewing those studies the researcher noted that all studies sought to analyze the concept of total quality, its tools and methods as well as implementing it in the educational institutions. Moreover, studies confirmed that the teacher is the main pillar in the educational process as in (Al-hilali, 1998; Naji, 1998; Ayyoub, 2000, Bassioni, 2004; Revilla, 2004; Khadeer, 2004, Al-Quran, 2005). The importance of the current study emerged from a lack of studies and research that dealt with the duties associated with the performance of physical education teacher for the implementation of the curriculum for Physical Education under the TQM standards which makes this study enrich the Arabic library including adding of scientific knowledge in this field.

### 3. Study Methodology

#### 3.1 Methodology:

It contains a description of the sample of the study, and study tool, and procedures for validity and reliability of the instrument used in the study, also deal with a description of the statistic that will be used in the analysis of data, and extract the results, this study belongs to a type of descriptive research survey aimed to, analysis, and evaluate of the characteristics of a particular group, or a certain position dominated by the recipe selection.

#### 3.2 Study Sample

The sample of the study consisted of (95) respondents from male and female physical education teachers in North-Eastern Badia selected purposefully. Table (1) presents the distribution of the sample according to gender and experience variables.

Table 1. Datasheet of Mock-up Test

Item	No	%
Gender		
Male	57	60
Female	38	40
Total	95	100
Experience		
Less than 5 years	58	61.05
5 years and more	37	38.95
Total	95	100

#### 3.3 Study Tool

The study instrument is a questionnaire directed to the physical education teachers. The questionnaire is aiming to investigate the Duties Related to the Performance of Physical Education Teacher to Execute Physical Education Textbook according to Total Quality Criteria. The questionnaire contained (25) items describing the duties of the teacher according to TQM.

The questionnaire consisted of two parts, the first contained personal information about the sample such as gender and experience, while, the second contained (25) items describing the duties of the teacher according to TQM within (Administration, curriculum, teacher and evaluation). The questionnaire was developed according to 5- likert scale (extremely agree, agree, none, disagree, disagree extremely).

### 3.4 Instrument Validity

Validity was established through content and face validity, and the instrument was standardized on the response of experts of psychology, curriculum and teaching methods.. Those experts were asked to comment on and discuss any part of the instrument they might consider to be ambiguous.

### 3.5 Instrument reliability

Reliability of the instrument was determined through a pilot study; sample of 25 respondents from of the study population. The reliability coefficient was (0.78) and it seemed to be reliable for use a Jordanian population.

### 3.6 Study Variables and statistical Procedures

Data was processed through SPSS software by coding the variables in a clear way as well as recording each variable and its symbol as in the list. Then data were processed in the computer according to the following method: the maximum is 5 alternative for each item: 1 =  $\frac{3}{4}$  levels (high, average, low) = 1.33 and therefore the minimum limit is  $1+1.3 = 2.33$ , the average is  $2.34+1.33= 3.67$ , the highest level =  $3.68+ .$  Therefore, the scale of the items is: (3.68- 5.00 high degree, 2.34- 3.67 average, 1.00- 2.33 low).

To achieve the aim of this study and answering the questions twp types of statistics were used those are, the descriptive statistics such as Frequency distributions, measures of central tendency and measures of dispersion, where the frequency distributions were used to determine the number of iterations, and the percentage of repeat is obtained by each answer, relative to the total iterations, in order to determine the relative importance of each answer. The weighted arithmetic average; in order to determine the degree of concentration of the study sample answers to each paragraph of paragraphs; so as to check the availability paragraph or not. And standard deviation to measure the dispersion of the answers and the extent of deviation from the arithmetic average. The second is the analytical type such as Cronbach's Alpha and Levene's Test for Equality of variance.

## 4. Study Findings

The objective of this study is to explore the duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria.

### 4.1 The findings of the first question:

What are the administrative duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria?

This domain contains five items describing the duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria. Therefore, means, standard deviations and rank was calculated as in Table (2):

Table (2) means, standard deviations and rank of administration domain

Rank	Item	SD	M
1	The lack of knowledge regarding administrative duties related to regulations and laws in school	1.32	3.08
1	Carrying out many routines duties such as absence records and shifts.	1.32	3.08
6	The shortage in administrative facilities needed by the teacher	1.31	2.32
3	Teaching other subject as part of the schedule	1.03	2.76
5	The lack of independence of physical education teacher in making his own decisions.	0.76	2.41
4	Lack of response management with the use of physical education teacher for modern teaching methods.	0.88	2.63
2	Supervisors judgments through attending one class	1.07	3.06
21	Total	0.67	2.76

Table (2) showed that the highest means ranged from (2.32- 3.08) as item one (The lack of knowledge regarding administrative duties related to regulations and laws in school) came in the first rank, item (2) (Carrying out many routines duties such as absence records and shifts) came in the first rank. While item (7)( Supervisors judgments through attending one class) came in the second rank with an average mean totaled (3.06). This means that the duties of the physical education teacher in this domain were in an average level as the total means was

<sup>1</sup> The domain rank according to other domains (Empirical study)

(2.76: 5).

The findings showed that the highest items of respondents about the duties associated with the performance of physical education teacher to implement curriculum for Physical Education under the criteria of total quality management were as follows: lack of knowledge of physical education teacher administrative matters relating to rules and regulations and regulations applicable in the school, and assigning physical education teacher with many administrative work routine as the setting record absences , rotation , and governs the educational supervisor on the performance of physical education teacher teaching by watching studied only one , assigning physical education teacher teaching materials and other decisions to complete redress teaching , and this reflects the violation of total quality management standards , and teachers of physical education do not have the needed knowledge to realize TQM importance.

Therefore, according to the continues developments in knowledge it is not possibility to provide teachers with skills and competences. Applying TQM is a necessity for those teachers who want to achieve excellence so this study sought to make efforts towards the development of scientific and educational performance, strategic planning and development, and academic accreditation and quality standards; because no educational system can develop without understanding and applying the principles of total quality management.

#### 4.2 The findings of the Second question:

What are the duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria?

Duties related to this domain contain (6) items Therefore, means, standard deviations and rank were calculated as in Table (3):

Table (3) means, standard deviations and rank of Curriculum domain

Rank	Item	SD	M
5	The inappropriateness of the physical education content with community needs	0.91	2.28
2	The current curriculum is restricted and don't encourage teachers' creativity	0.57	2.91
4	The current curriculum ignores the suitability of content with students abilities	0.75	2.35
1	The weak connection between content and real practice	0.73	3.01
6	The difficulty of adjusting with students needs and interests	0.81	1.64
3	The shortage in equipment related to the curriculum	0.75	2.63
4	Total	0.38	2.47

Table (3) presents the means, standard deviations and rank for each item. It is noted that the highest means ranged from (1.64- 3.01) as item (11) provided that (The weak connection between content and real practice) came in the first rank with a mean of (3.01) while, item (9)( The current curriculum is restricted and don't encourage teachers' creativity) came in the second rank with a mean of (2.91). This means executing the curriculum domain came in an average level as the total mean was (2.47:5).

This can be explained by the reality that teachers face the problem of the gap between the curriculum and real practice since it lacks originality and creativity, not to mention the shortage in equipment or technology to help in carrying out the curriculum according to TQM. This results is consistent with Naji (1998), Ayyoub (2000) and Khadeer (2004).

#### 4.3 The findings of the Third question:

What are the educational duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria?

Duties related to this domain contain (8) items Therefore, means, standard deviations and rank were calculated as in Table (4):

Table (4) means, standard deviations and rank of teacher domain

Rank	Item	SD	M
2	The lack of experience in using effective teaching methods	0.47	3.65
4	The difficulty in dealing with individual differences in classroom	0.85	3.26
3	The weak response of students to modern teaching methods	0.81	3.30
1	The teacher fear of not being accepted by students	0.00	4.00
5	The teacher confusion in finding the suitable teaching method.	1.18	2.45
6	The teacher fear of providing students with inaccurate information	1.12	2.14
8	The weakness in teachers' professional preparation	0.90	1.68
7	The teacher feels unwilling to teach	0.95	2.02
	Total	0.56	2.81

Table(4) showed that the means, standard deviations and rank for each item and the domain as a whole ranged from (1.68- 4.00) as item 17 (The teacher fear of not being accepted by students) came first with a mean of (4.00) followed by item (14) (The lack of experience in using effective teaching methods) then item (16) (The weak

response of students to modern teaching methods) with a mean of (3.30). This means that this domain ranked in an average level as a whole.

The results showed that the highest items which responded by respondents about the duties associated with the performance of physical education teacher to implement the curriculum for Physical Education under the criteria of total quality management was as follows: The teacher fear of not being accepted by students, The lack of experience in using effective teaching methods and The weak response of students to modern teaching methods, this can be explained that the teachers of Physical Education have fears of dealing with the students and the means and media used to facilitate course content as roles of the teacher varied between the role of cognitive, assessment, control and administration, and whenever the teacher's role less rigid found the teacher himself involved in a particular type of social therapy, roles of teachers are: : teaching and social normalization as wee as social criticism These results are consistent with a study Al-ostath (2007), where the teacher doing the teaching and performance, experience and specialization is one of the indicators on the educational quality in the school.

#### 4.4 The findings of the Fourth question:

What are the assessment duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria?

This domain contains (4) items describing the assessment duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria.

Table (5): Means and standard Deviations of Assessment domain

Rank	Item	SD	M
4	The weakness in teacher's ability in dealing with tests to determine student achievement	0.65	2.23
2	The performance is carried out to asses school performance through quality related items	0.73	2.73
1	Employees are assessed regularly through quality related items	0.75	2.82
3	Assessment is an essential part of learning and teaching process	1.19	2.24
	Total	0.58	2.50

Table (5) presents the means, standard deviation and rank for the items of this domain and the domain as a whole, it is noted that all means ranged from (2.23- 2.82) as item (24) (Employees are assessed regularly through quality related items) came in the first rank with a mean of (2.82) followed by item (23) (The performance is carried out to asses school performance through quality related items) with a mean of (2.73) while item (25) (Assessment is an essential part of learning and teaching process. This means that all duties related to this domain were in an average level as the total mean of the responses was (2.50: 2.50)).

The findings showed that all the highest items in this domain were: The weakness in teacher's ability in dealing with tests to determine student achievement, The performance is carried out to asses school performance through quality related items, Employees are assessed regularly through quality related items and assessment is an essential part of learning and teaching process. This can be explained that teachers see assessment as a continuous process related to learning and teaching since their main job is transferring knowledge to students thus, they need knowledge in order to carry out this mission. This results goes with Al-ostath (2007) which confirmed the need of applying TQM.

#### 4.5 The findings of the fifth question:

Are there any significant statistical differences at the level of ( $\alpha = 0.05$ ) in duties related to the performance of physical education teacher to execute physical education textbook according to total quality criteria attributed to gender and experience?.

To find if there is any differences Levene's test of Equality of variance was used as shown in Table (7)

Table (7): Levene's Test for Equality of Variances according to gender variable

Domain	Gender	No	M	SD	F	Sig
Administration	Male	57	2.84	0.70	4.081	0.046*
	Female	38	2.64	0.61		
Curriculum	Male	57	2.49	0.41	1.466	0.229
	Female	38	2.43	0.34		
Teacher	Male	57	2.86	0.56	0.458	0.500
	Female	38	2.74	0.54		
Assessment	Male	57	2.60	0.55	0.056	0.814
	Female	38	2.36	0.60		
Total			2.70	0.40	0.549	0.461

Table (7) showed that there are significant statistical differences for the duties related to the performance of physical education teacher to carry out physical education curriculum according to total quality management in the administration domain attributed to gender in the favor of male teachers while there were no differences in

the other domains. Those results explained the awareness of male and female teachers in all schools of the importance of total quality management and its role in developing performance. This result consistent with Khadeer(2004) study and Al-quran (2005)study.

To find if there are significant statistical differences at the level of ( $\alpha = 0.05$ ) in the duties related to the performance of physical education teacher to carry out physical education curriculum according to total quality management, means and standard deviations were calculated according to experience variable , levene's Test for Equality of Variances was used as shown in table (8)

Table (8):levene's Test for Equality of Variances according to experience variable

Domain	Experience	No	M	SD	F	Sig
Administration	Less than 5 years	58	2.71	0.69	0.165	0.685
	5year +	37	2.84	0.63		
Curriculum	Less than 5 years	58	2.52	0.40	1.906	0.171
	5year +	37	2.39	0.35		
Teacher	Less than 5 years	58	2.83	0.58	2.597	0.110
	5year +	37	2.78	0.51		
Assessment	Less than 5 years	58	2.56	0.62	3.545	0.063
	5year +	37	2.41	0.50		
Total	Less than 5 years	58	2.66	0.43	2.723	0.102
	5year +	37	2.61	0.37		

Table (8) showed that there were no significant statistical differences in the duties related to the performance of physical education teacher to carry out physical education curriculum according to total quality management attributed to experience variable in all domains and this means that all teachers realize the total quality management regardless their experiences since they are qualified and taught previously about this issue. Consequently, the success of a teacher depends on his positive attitudes towards his job as those attitudes are the bases of most of the educational activities. Furthermore, positive attitudes are the keys of predicting the social environment which will brought by the teacher to the classroom and its is the pillar of instructions and the relationships with students and school community. This result disagrees with Khadeer(2004) and Al-quran (2005) studies

## 5. Recommendations

Based on the findings of the study the researcher recommended

1. The necessity of providing administrative facilities needed by physical education teacher to enable him from being independent in taking decisions regarding his work.
2. Enriching physical education teacher with real activities extracted from students environment to fit with community needs.\
3. Taking into consideration all cognitive, mental and motion aspects of physical education curriculum without ignoring the content suitability for students needs.
4. The need of preparing physical education teacher in general to be more qualified and supporting him morally and financially.
5. The need of concentration on qualification ad training needs to deal with the weakness in teachers' ability especially in tests to determine students' achievement.

## References

- Abu Naba, A. (2004). Studies in Modernizing University Administration. Amman: al-waraq Co.  
 Al-Adwan, Y. (1994). Administrative Development in Jordan. Abhath Al-Yarmouk Journal. Irbid.  
 Al-ali, A. (2006). Production and process management. Amman: Dar Wael.  
 Al-bana, R. (2007). TQM: concepts and foundations. The 21st annual conference for basic education. Saudi Arabia.  
 Al-hilali, H. (2001). Using Transformational and Transactional theories in university colleges. Education Future Journal, 21.  
 Al-Hilali, S. (1998). TQM in higher Education institutions: Proposed vision. Mansoursa Faculty of Education College. (37).  
 Al-hkari, L. (2006). The ability of applying TQM in private colleges in Jeddeh. Unpublished master Thesis. Um Al-qura university. Saufi Arabia.  
 Al-khleef, M. (2004). How to be a successful teacher. Supervision section. Jordan  
 Al-mwsawi, N. (2003). Developing a tool to measure TQM in Higher education Institutions. Educational Journal, 17(67), Bahrain.  
 Al-ostath, M. (2007). Transforming from objectives culture into standards to develop teachers' performance.

Islamic University. Ghza.

Al-qhtani, S. (1993). TQM in Public sector. Administration Development Journal, 78.

Al-quran, A. (2005). Developing a model to measure TQM in the administrative units in Jordanian Universities. PhD Dissertation, Amman Arab University of higher studies. Jordan.

Al-saheb, M., & sultan, S. (2004). Iso 9000 in Information systems college in polytechnic university in Palestine. Paper submitted to education quality conference. Palestine.

Al-sirhan, M. (1988). Job satisfaction among basic stage teachers in North Badia Directorate. Unpublished Master Thesis, Al-albait University.

Al-tartory, M., & Gwgan, a. (2006). TQM in higher education Institutions, libraries and information centers. Amman: Dar Al-massera.

Atkinson, F. (1996). TQM: The correct bases of TQM, translated by: Abdelftah Al-nomani. Cairo: Professional experiences center.

Ayyoub, A. (2000). Evaluating the effectiveness of TQM in developing Jordanian universities Performance. Unpublished Master thesis. Yarmouk University. Irbid.

Bassioni, H 2004, Performance Measurement in Construction, Journal of Management in Engineering, Vol. 20 Issue 2, p:2

Cohen, Seven and Ronald 1993, "Total Quality Management in Government", San Francisco: Jossey- Bass.

Deming, W.E. 1982. Quality, productivity, and Competitive Position, Cambridge, Mas: Massachusetts Institute of Technology.

Dibiase, David 2005, Using the 5 Pillar Framework, Distance Education Report, Vol. 9 Issue 7, p:7

Gablonski, J. (2000). TQM: applying TQM in a general perspective, translated by Abdelatif al-nomani. Administration experiences center. Cairo.

Ibrahim, A. (2003). TQM in Educational Administration. Alexandria: Dar Al-wafa.

Jeffery, D. (1999). Developing Quality in Education, translated by Adnan l-ahmad. Damascus: Arab organization for culture and science Press.

Judeh, M. (2004). TQM: concepts and application. Amman: Dar Wael.

Jumean, M. (1999). Admsinitraitve development in Jordan. Amman, Jordan.

Kamal, S. (2003). General framework to guarantee good quality on Palestinian higher education. Palestine. Paper submitted to education quality conference. Palestine.

Khadeer, G. (2005). The compatibility degree of TQM and ability of implementation in Unrwa schools in Jordan. Unpublished PhD Dissertation, Amman Arab University of higher studies. Jordan.

Khazem, H. (2000). TQM. Amman: Dar Al-massera.

Morgan, C. & S. Murgatroyd 1994. Total Quality management in the public sector: An International Perspective, buckingham: Open University press.

N.H. Chorn, 1991, Total Quality Management: Panacea or Pitfall, International of Physical Distribution and Logistics Management, Vol.21, No1, p.32.

Naji, F. (1988). TQM and the ability of implementation in Higher education institutions: Case study- Amman private university. Master thesis, Yarmouk University. Irbid.

Nashwan, J. (2004). Developing Academic supervisors competencies according to TQM in Palestine. Paper submitted to education quality conference. Palestine.

Nashwan, Y., & Nashwan, J. (2004). Organizational behavior in manegment and educational supervision. Amman: Dar Al-furqan.

Nighingale, P. & M. O Neil 1994. Achieving Quality Learning in Higher Education, London: Kigan Page.

Revilla, Pedro 2004, Data editing by reporting enterprises, Statistical Journal of the UN Economic Commission for Europe, Vol. 21 Issue 1, p:67

Rhodes, L.A 1992, Education Leadership On the road to Quality, vol. 49, No. 6 .

Richard, L. (2004). Basics of TQM. Al-Riyadh: Jareer University.

Tuema, R et. Al. (2006). TQM in Education. Amman: Dar Al-massera.