

# **IMPACT DEGREE OF THE TOTAL QUALITY MANAGEMENT ON THE PUBLIC SCHOOLS EFFECTIVENESS IN THE GOVERNORATE OF JARASH AS VIEWED BY THE EDUCATIONAL SUPERVISORS**

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## **Abstract**

This study aimed to identify the impact degree of the applying the total quality criteria on the public schools effectiveness in the Governorate of Jarash as viewed by the educational supervisors. In order to realize the objective of this study, a 5-item questionnaire was constructed distributed over four areas (School Administration, Teaching and Learning, Links with the Community and School Activities). The validity and reliability of the instrument were verified, and the study population consisted of all the educational supervisors (n=35) in the Directorate of Education of the Governorate of Jarash-Jordan, during the 2012/2013 academic year. They were sent 35 questionnaires, out of which 30 were returned and were suitable for the study. Following the information and data collection, they were analyzed for the purposes of the study. The results showed that the impact degree of applying total quality criteria on the public schools effectiveness in the Governorate of Jarash, as viewed by the educational supervisors, was high for all the areas. However, the school administration area ranked first with a high degree of impact on the school effectiveness. On the other hand, the school activities area came last and still with a high degree of effectiveness. The study recommended generalizing the experience of applying the total quality criteria on all the Jordanian schools due to their impact in increasing the school effectiveness.

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**Keywords:** Total quality management, public schools, effectiveness

## **Introduction**

Governments always seek to modernize education driven by the notation that future is for education. School teaching is a basic foundation for preparing students to the future and providing the community members with fundamental knowledge and skills that qualify them for completing their vocational education, the intermediate or the university education, or prepare them for life. The school, being the field unit which deals with the students directly is required to restore its status and be an actual and effective tool in preparing the generations.

The cognitive revolution and information age require new styles of school work characterized by efficiency, effectiveness of the school system, in order to approach outcomes able to meet the needs and ambitions of the stakeholders of the education system of the school; and subsequently, realizing competitiveness at the international level (Hernandez, 2002).

Among the new trends in the school work is the total quality management (TQM), but this does not mean that the educational institution should become commercial or industrial profit organizations. Rather, all what could be made use of through applying the total quality management system in the educational process is the introduction of educational administrative methods for the aim of approaching a high quality educational outcome, and augmentation of the benefit of the number one beneficiary, the student; and encouraging competition to achieve the desired results (Alawneh, 2004).

In the educational field, total quality management is known as performance of work in a deliberate accurate manner from the first time, as per a set of educational criteria to raise the level of the educational product quality with the least possible effort and cost, achieving the educational objectives, the objectives of the community, and to meet the needs of the labor market of the scientifically qualified cadres (Atieh, 2008).

TQM process application in schools is characterized by five essential stages, as indicated by Weidmer & Harris, 1997, they are: convincement stage and management adoption of the TQM philosophy, planning stage, evaluation stage, implementation stage and experience exchange and spreading stage.

A package of benefits are achieved when applying principles of TQM at schools such as: improvement of the educational process and its outcomes in a continuous manner; development of leadership and administrative skills to lead the educational institution; development of workers skills, knowledge and trends in the educational field; focus on developing the processes more than defining the responsibilities; continuous work for an ongoing improvement; decreasing the waste resulting from school drop rates, or failure at school; achieving the stakeholders satisfaction (students, parents, teachers and community). Here services are provided to satisfy the needs of both the internal and external stakeholder; the place for providing scientific educational services that match the students' needs; for the optimal use of the available human and physical resources; for reducing the cost with the realization of the educational objectives in the social medians; providing measurement tools and criteria to measure the performance through applying the principle "prevention is better

than treatment", which mandates to perform the school work accurately from A to Z (Badah, 2003).

The school should apply quality as an administrative system and work toward the development and documentation of this system; formation of the quality and excellence team which includes the educational performance team; spreading the excellence culture in teaching; definition and issuance of distinguished performance criteria and quality guide; enhancement of the democratic principle through application of the suggestions and complaints system. Schools are also required to apply ongoing renovation and training of the teachers; reinforcement of the research spirit; development of the human resources; gaining new skills in the school situations; work for improving the education outcomes; preparation of the leadership personality; creating an everlasting information center; activation of the education technology role; communication with the educational and non-educational institutions; training the students on inducing the learning resources; directing the students to the different intellectual questions; make students acquire ability to organize time and make use of educational experiences at the local, Arab and international levels (Al-Qahtani, 1993).

A number of studies examined quality at schools, such as:

Jardine & Peter (1994) made a study titled "Toward a Quality Development at Schools", which aimed at developing the educational services at the school in the light of the total quality philosophy through concentration on the changes of the educational system in England and Wales. The study presented the role of the central government in surveillance over the school and the changes taking place there. It also examined the role of the school administration in raising the level of the teacher and in-service training. In this concern, the school per se carries out training programs prepared by experienced teachers and some specialist in the field from the local community. This activity shall be supervised by the school principal. The most important finding of this study was that the philosophy of the total quality is that it is a basic rule and effective element inside the school to develop the educational services in line with the goals of development.

Murroy (1996) conducted a study aimed at the exploration of the role of leadership in the fields of training and development in applying the philosophy and practices of the TQM at elementary schools in Australia. Data collected was effected through interviews, and analyzing the school documents subject matter of this study; observations and comments of the (female) researcher, around the leadership strategies applied in implementation of the total quality management (TQM), and the qualities of the schools that are committed to apply the total quality, training and development in these schools; and the strategies used to

enhance the relationship between parents and school. The study made a number of results concerning the characteristics of the total quality at schools. These characteristics were present in the support by the leaders, dominance of the leadership model based on group and teamwork spirit, focus on the customers, and taking group decisions and development of the group work inside the school, and trust in the effectiveness of power delegation.

Detert & Maurief (1997) concluded a study aimed at answering the following question: "Can Total Quality Management (TQM) Input Improve the Systematic Performance of the School in America in a Meaningful Manner"? The study provided an evaluation to this input as a program for improving teaching. It also described it and compared its relevant philosophy with the procedural theories and research over a long period of change and modernization attempts of the educational systems in general, and school reformation in particular. The results of the study showed some strengths in the TQM philosophy such as: focus on this philosophy on total change, evaluation of the processes deliberately, and taking decisions built on actual information. The results further showed certain weaknesses such as: poor interest in the social nature of the schools as societal institutions, difficulty in identifying the learning clients and customers, difficulty in changing the prevalent culture, in addition to the lack of time and funding.

Noble (2001) made a study titled "Evaluation of the Teacher and Student's Perceptions about the Necessary Elements for Controlling the Secondary School System, and How to Use it with the Total Quality Management Theory". The study aimed to explore the students and teachers' visions knowledge of the necessary elements to impose discipline and order in the secondary school, so as to be positive and realize the goal the community expects it to achieve in approaching constructive educational outcomes. The study concluded that teachers and students imagine that the group work, communication and mutual respect among the school administration, the teachers and students represent important elements to realize an effective control at the schools.

Ibrahim (2002) conducted a study aimed at identifying the concept of the total quality and its application stages in the educational systems, for the purpose of utilizing it in developing the public secondary school administration. It also aimed at revealing the factuality of the public secondary school administration in Egypt, and identifying the problems they face; access of the requirements for applying the TQM at the secondary school. The study further initiated an proposed image to develop the public secondary school administration in the light of the total quality management. The study made a number of results, such as providing wide powers to the school administration in decision taking;

performing the technical and administrative assignments that help in realizing the quality through the self-management style; improving the work atmosphere within the school; organizational development of the school; initiation of new cultural dimensions, values and beliefs that adopt the total quality philosophy; and development of the self-awareness inside the school.

Hernandez (2002) made a study titled "Total Quality Management in Education: Its Application in Texas Education District". The study aimed at identifying the initial hopes and current conditions, the total quality management at school, extent of its application and utilization at the schools of the State of Texas. The results showed that TQM was imposed from top beginning with supervisors, then assistants, principals and finally to teachers.

Al-Rasi (2004) conducted a study aimed at the development of the secondary education according to the total quality in the Ministry of Education, Sultanate of Oman, through reaching the specifications of the inputs, processes and outputs of the secondary education. The school also sought to identify the difference degree of the specification by the administrative level, academic qualification and educational experience of the administrative and technical staff. The study results showed the specifications of the secondary education inputs concerning the school principal, which included (23) specifications; (16) specifications for the teacher; (14) for the curriculum; (10) for the class and non-class activities; (7) for the educational supervision; (12) for training; (10) for achievement evaluation; and (6) specifications for teachers' performance; all according the principles of the total quality management (TQM).

Al-Majhasneh (2012) conducted a study titled "Effectiveness Degree of the Application of the Total Quality Criteria in the Jordanian Public Schools that Apply TQM". It aimed at revealing the effectiveness degree of applying TQM criteria in the Jordanian public schools that apply this method, from the views of the female teachers and female students. As well as the members of the educational development council. To achieve the objective of the study, a (50) item questionnaire distributed over four areas. The instrument validity and reliability were assured, and the results showed that the effectiveness degree of applying the TQM criteria, as viewed by the female teachers, female students and the educational development council, was good.

This study was in agreement with the former studies in terms of the subject matter, but differed from them in terms of its population. In this concern, a study was made which stimulated the application of total quality in the public schools effectiveness, as viewed by

the educational supervisors, being elements that supervise the schools and evaluate their works.

### **Study Problem and Questions**

Over the last years, wide calls spread over to develop the schools and make them qualified to take their role at the international, Arab and Jordanian levels. Among these calls were calls to introduce the total quality into the schools, initiatives to improve and upgrade the school work, such as "My School Initiative" (in native language "Madrasati"), and "Toward a Safe School Environment" initiative, as well as the project for applying total quality at schools of Jordan.

Jordanian Ministry of Education had applied the TQM principles in certain schools of the Kingdom, at the rate of two schools per education directorate, through the institutional efficacy project, which was implemented by the Ministry of Education under cooperation with the British Council and funding by the British Department for International Development (Ministry of Education, 2002). As a result of such an application, this study was made to identify the effects of this experiment on the Jordanian schools as viewed by the educational supervisors, since they are the supervision party of the Ministry of Education, who are assigned to evaluate both the teachers and schools. The study problem is represented by identifying the degree of the impact of the TQM on the effectiveness of the public schools in the Governorate of Jarash (Jordan), as viewed by the educational supervisors.

Definitely, the study is seeking to answer the following question:

"What is the degree of the impact of the total quality management "TQM" on the public schools effectiveness in the Governorate of Jarash, as viewed by the educational supervisors?"

### **Importance of the Study**

The importance of this study is seen through its scientific aspect, as it dealt in the impact of applying the total quality on the effectiveness of the Jordanian public schools, as viewed by the educational supervisors, which will lead into the enrichment of the educational library about this topic. As for its practical aspect, it is anticipated that the educational leaderships at the schools, directorates of education and the Ministry itself will benefit the results of this study, through identifying the impact of quality on the effectiveness of the Jordanian schools. Subsequently, this experience will be generalized over the Jordanian schools.

### **Study Terms**

This study included the following procedural definitions:

**Effectiveness Degree:** the anticipated effects on the schools in the event they apply the TQM in the perfect manner as per the criteria set by the Ministry of Education in Jordan. It is measured by the grade given by the educational supervisors to the items of the study instrument, which measures the impact of applying the total quality on the school effectiveness.

**Total Quality Management (TQM):** a number of specifications defined by the Ministry of Education, Jordan, for applying in the Jordanian schools to provide its services to its students, at their different levels, in the proper and continuous manner, from the first time. And every time to support the institutional work through an educational development plan, and through which a documented and applied system will be implemented, regardless of the person occupying this or that position, to realize decentralization through defining the tasks and responsibilities of each and every unit of the Ministry.

### **Study Limits**

This study included the following limits:

- 1- **Place Limits:** the study was limited by the public schools at the Governorate of Jarash.
- 2- **Time Limits:** the study was applied in the first semester of the 2012/2013 academic year.
- 3- **Human Limits:** it had been applied on all the educational supervisors of the Directorate of Education in the Governorate of Jarash.

### **Study Method and Procedures**

The study applied the survey descriptive method

### **Study Population**

The study population of this study was all the educational supervisors in the directorate of Education of the Governorate of Jarash (n=35) of both genders. They were sent the questionnaire (n=35), out of which (30) were returned which represented the responses of the individuals of the study population to the study instrument.

### **Study Instrument**

The researcher constructed the study instrument depending on the quality procedures stipulated in the total quality application guide issued by the Ministry of Education, and the study of Al-Mahasneh (2012) as well as the study of Al-Alawneh (2004).

### **Instrument Validity**

To assure the study instrument validity, the researcher followed the content validity method. It had been presented in its initial form to (10) arbitrators who all hold Ph.D. degree

in Education. The researcher requested the arbitrators to write down their remarks and show their points of view about the validity degree of the items and suitability to the study objective. He further requested them to add any item they deem fit, and then the arbitration questionnaire was copied, with the item that obtained consensus of (8) arbitrators was taken as the minimum (i.e. 80%) and upwards, taking into consideration the amendments, remarks and additions of the arbitrators, and rejecting the items that did not gain their approval. The questionnaire was approved in its final form with (50) items distributed over four areas: school administration (18), teaching and learning (10), links with the society (10), and school activities (13) items.

### **Instrument Reliability**

To make sure of the study instrument reliability, the researcher calculated the reliability using the internal consistency method, and Chronbach Alpha equation was used. Table (1) shows the internal consistency coefficients of the study instrument areas:

**Table (1) Internal Consistency Coefficient (Chronbach Alpha) of the Study Areas**

Areas	Internal Consistency
School administration Area	0.90
Teaching and Learning Area	0.92
Links with the Community Area	0.91
School Activities Area	0.95

### **Study Procedures**

Following to the construction of the study instruments and assuring its validity and reliability, as well as obtaining the official approval for application, the researcher, distributed it over the study population (n=35) of the educational supervisors in the directorate of education in the Government of Jarash (Jordan) (n=350). Thirty (30) questionnaires were returned, and the response on every item consisted of five levels measuring the degree of the impact of applying total quality management on the public schools activities in the Governorate of Jarash as per the five-level scale. To judge the effectiveness degree, the researcher depended on the means, i.e. means (1-2.33) indicate low impact degree; (2.34-3.67) indicate medium impact degree, and (3.68- more) indicate high impact degree.

### **Statistical Treatments**

To answer the study question, the means and standard deviations were employed.

### **Results of the Study and Discussion**

Results concerning the response to the first question:

"What is the degree of the impact of the total quality management "TQM" on the public schools effectiveness in the Governorate of Jarash, as viewed by the educational supervisors?"



To answer this question, the researcher obtained the means, SD's and rank of the responses of the study population on the effectiveness degree of applying the total quality criteria at the Jordanian public schools in the Governorate of Jarash, which employ the total quality, as viewed by the educational supervisors. Table (2) explains this.

**Table (2)**  
**Means and SD's of the impact Degree of Applying the Total Quality Criteria on the Public Schools Effectiveness in the Governorate of Jarash, as Viewed by the Educational Supervisors, Arranged in a Descending Order by Means.**

Rank	No.	Area	Mean	SD	Effectiveness Degree
1	1	School administration	4.12	.62	High
2	2	Teaching and Learning	4.01	.83	High
3	3	Links with the Society	3.91	.83	High
4	4	School Activities	3.84	.94	High
		The Instrument as a Whole	3.99	.69	High

Table (2) indicates that the means of the impact degree of applying the total quality on the schools effectiveness, as viewed by the educational supervisors was between 3.84 and 4.12, all fall within the high rank of the impact on effectiveness. The school administration area ranked first with 4.12 mean, meanwhile the school activities area ranked last with a 3.84 mean, and the overall mean of the instrument was (3.99). This may be ascribed to the persuasions of the supervisors that application of the total quality will highly impact the school effectiveness, which, in turn, may be due to their observations of these impacts at the schools employing this TQM method. Necessarily, this will reflect on the other schools effectiveness if they apply TQM. The results of this study were in line with those of Al-Haishan's (2004) in achieving high degrees in applying the total quality criteria, and those of Hernandez's (2002) in terms of the teaching and learning area.

To identify the evaluations of the study sample members of the items of each area, the researcher calculated the means and SD's of the items of every area separately, as per the following details:

#### **First Area: School administration**

**Table (3) Means and SD's of the Impact Degree of Applying the Total Quality Criteria on the School Effectiveness for the School administration Items, Arranged in A Descending Order by Means.**

Rank	No	Items	Mean	SD	Effectiveness Degree
1	2	Organizes the School Records	4.50	0.69	High
2	11	Contributes in documenting the school achievements	4.40	0.79	High
3	3	Contributes in defining job description of all the school workers	4.34	0.72	High
4	9	Helps in improving school planning process	4.25	0.85	High
5	15	Leads to observe school systems and regulations	4.21	0.77	High
6	4	Increases communication between teachers and management	4.20	0.79	High

7	7	Develops the cooperation spirit at school	4.20	0.89	High
8	12	Helps in making the school objectives defined and clear	4.20	0.91	High
9	1	Upgrades the administrative services of the school	4.14	1.12	High
10	8	Contributes in improving the class planning process	4.12	0.99	High
11	6	Contributes in increasing communication among teachers	4.08	0.90	High
12	10	Contributes in providing suggestions for work development	4.00	0.93	High
13	17	Increases opportunities for the use of educational means in the classes	4.00	1.10	High
14	18	Contributes in raising the health awareness degree in the school	3.99	1.00	High
15	5	Contributes in increasing communication between the teachers and students	3.93	0.96	High
16	14	Increases ethical adherence toward the school work	3.93	0.91	High
17	16	Contributes in providing suitable learning aids	3.93	1.07	High
18	17	Contributes in treating the behavioral problems	3.89	1.00	High

Table (3) indicates that the means of the impact degree of applying the total quality criteria on the public schools effectiveness, as seen by the educational supervisors, in terms of the management area, ranged between (3.89) and (4.50), all of which fall within the high effectiveness degree. In this concern, item (2) stating "Organizes the School Records" ranked first with a (4.50) mean. This may be due to the fact that the school records are highly concerned by the educational supervisors, and they consider them a documentary record of the school performance. Therefore, if these records were organized according to the TQM principles, they will be benchmarks of the external evaluation of the school. On the other hand, item (13) stating "Contributes in treating the behavioral problems" ranked last with a (3.89) mean, which may be attributed to that the behavioral problems sometimes need behavioral treatments by the educational counselor at the school. These treatments may extend for long periods, so their effect could only be known after a long time.

## Second Area: Teaching and Learning

**Table (4) Means and SD's of the Items of Teaching and Learning Area Arranged in A Descending Order by Means.**

Rank	No	Items	Mean	SD	Effectiveness Degree
1	24	Contributes in activating the modern teaching strategies	4.26	0.91	High
2	25	Contributes in activating the evaluation strategies	4.10	0.87	High
3	19	Improves the teaching-learning process	4.08	0.95	High
4	20	Improves the teaching-learning environment	4.07	0.92	High
5	22	Increases the effectiveness of the computer labs	4.02	0.96	High
6	21	Increases the effectiveness of the science labs	4.01	0.98	High
7	26	Contributes in providing different learning sources	3.99	1.02	High
8	27	Contributes in introducing educational technology into the classrooms	3.85	1.11	High

9	23	Contributes in increasing the student's self-awareness	3,83	1.13	High
10	28	Contributes in overcoming the students' achievement problems.	3.79	1.08	High

Table (4) shows the means of the impact degree of applying the total quality criteria on the public schools effectiveness as viewed by the educational supervisors in terms of teaching and educational environment area ranged from 3.79 to 4.26, and all fall within the high effectiveness rank. In this concern, item (24) stating: "Contributes in activating the modern teaching strategies" came first, with a (4.26) mean. This may be due to that the educational supervisors observe the quality effect of activating the teaching strategies actually when they attend the classes with the teachers. On the other hand, item (28) stating: "Contributes in overcoming the students' achievement problems" came last with a (3.79) mean, which may be ascribed to that overcoming the achievement problems of the students needs a long-term follow up over the school semester. Sometimes, the supervisor does not follow-up the students' progress and solving their achievement problems. However, this does not mean availing records and remedial plans for treating the achievement problems of the students, which will be better availed when the total quality is introduced to the school.

### Third Area: Links with the Community

Table (5) Means and SD's of the Items of Links with the Community Area Arranged in A Descending Order by Means.

Rank	No	Items	Mean	SD	Effectiveness Degree
1	29	Improves communication between the school and parents	4.03	0.86	High
2	35	Increases the motives of the students to serve the community	4.03	1.00	High
3	31	Increases the school participation with the community on different occasions	3.94	0.93	High
4	36	Reinforces the social role of the school	3.94	1.05	High
5	30	Increases the effectiveness of the community in solving the behavioral problems	3.93	0.87	High
6	33	Facilitates seeking the help of the existing experiences with the school workers in solving the problems the face the parents	3.89	0.98	High
7	37	Useful for providing necessary services for both the community and environment	3.87	1.02	High
8	32	Activates parents' contribution in solving problems that face the students	3,82	1.06	High
9	34	Avails chances for seeking the help of the existing experiences with the local community for solving the school problems.	3.75	1.03	High

Table (5) illustrates the means of the impact degree of applying the total quality criteria on the public schools effectiveness as viewed by the educational supervisors in terms of the links with community area. They ranged between 3.75 and 4.03, and all fall within the

high effectiveness rank. Items (29, 35) stating: "Improves communication between the school and parents" and "Increases the motives of the students to serve the community" ranked first, with a (4.03) mean. This may be attributed to that the application of the total quality requires improving communication with the parents through holding meetings, documenting them and a follow-up of what they may yield, all of which are documented and inspected by the supervisors. On the other hand, item (34) stating: "Avails chances for seeking the help of the existing experiences with the local community for solving the school problems" came last with a (3.75) mean, which may be due to the fact the seeking the help of the experiences existing in the local community for solving the school problems is still limited and needs better activation.

#### Fourth Area: School Activities

Table (6) Means and SD's of the Items of School Activities Area Arranged in A Descending Order by Means.

Rank	No	Items	Mean	SD	Effectiveness Degree
1	49	Activates the school councils work	3.99	1.08	High
2	45	Activates the school activities	3.06	1.13	High
3	39	Contributes in activating the school radio	3.93	1.08	High
4	40	Reinforces the non-curriculum activities in the school	3.92	1.08	High
5	38	Increases the library effectiveness	3.85	1.04	High
6	46	Motivates students to participate in the school councils	3.85	1.07	High
7	47	Contributes in increasing the sport teams effectiveness	3.85	1.08	High
8	50	Contributes in motivating the students to participate in the school activities	3.85	1.04	High
9	42	Make the students acquire skills for defining the school activities	3.84	1.11	High
10	41	Improves the students' performance in the different activities	3.81	1.03	High
11	48	Spreads awareness in dealing with the technical instruments and appliances	3.80	1.08	High
12	43	Contributes in increasing the technical teams effectiveness	3.63	1.09	Medium
13	44	Spreads awareness among the students when dealing with the sporting appliances	3.63	1.15	Medium

Table (6) indicates that the means of the impact degree of applying the total quality criteria in the schools which already applied this method, as viewed by the female teachers, on the effectiveness of school activities area, ranged between (3.63) and (3.99), and all fall within the high effectiveness rank, except for two items which came with medium effectiveness degree. In this concern, item (49) stating: "Activates the school councils work" ranked first with a (3.99) mean. This may be due to that quality requires participatory work, which in turn, necessitates activating the role of the school councils in all whatever concerns

the school work. On the other hand, item (44) stating: "Spreads awareness among the students when dealing with the sporting appliances" ranked last with a (3.63) mean, which may be due to the poor awareness on the mechanisms for dealing with the sporting appliances.

### **Recommendations**

In the light of the study results, the researcher recommends:

- Generalization of the experiment of applying the total quality criteria on all the Jordanian schools because of its positive effect on increasing the schools effectiveness.
- Carrying out more research works about the effect of applying the total quality criteria in the schools.

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