**International Academic Institute for Science and Technology**

International Academic Journal of Business Management
Vol. 3, No. 1, 2016, pp. 17-26.

ISSN 2454-2768

**International Academic Journal of Business Management**

www.iaiest.com

# Performance Appraisal of the Department of Education in Tehran using the EFQM Excellence Model

Akbar Milani [1], Mansour Kheirgoo [2*]

1. MSc.Student, Department of public Management, Science and Research branch, Islamic Azad University, Tehran, Iran
2. Assistant Professor, faculty of management, University of Imam Ali,Tehran, Iran

·Corresponding Author

## Abstract

Performance Appraisal is one of the influencing components in promoting the quality of governmental organizations performance. In the present study, the attempt is made to appraise the performance of Tehran Department of Education based on European Foundation Quality Management (EFQM) Excellence Model. In this study, 8 dimensions of Total Quality Management (TQM) including result-orientation, customer-orientation, leadership and stability in objectives, process- and fact-based management, participation and human resources development, learning, innovation and continuous improvement of corporates' development, and social responsibilities in Tehran Department of Education, were investigated. Applied method in this study is field, and standard questionnaire is used as the data collection instrument. Statistical population of the study totally consists of 120 individuals, namely assistants, heads of departments, chief of groups and experts, and staff officials of the Department of Education. However, based on Cochran formula, the sample size was estimated to 92. The results indicate that the highest and lowest performance levels of the organization has been, respectively, in customers results criterion (78.02%) and staff criteria (44.65%). Although the lowest percent of performance is associated with enablers (staff criterion), the gained score and finally, the performance percent in this scope (50.43%), is more than that of results (49.54%).

**Keywords**: performance appraisal, European foundation quality management Excellence Model

### Introduction

Nowadays, the role of efficiency and appraisal system in the organizations development and enhancement, is known. Appraising organizations performance as a tool to identify the strengths and weaknesses, as well as optimal use of resources and facilities, has gained a special status and drawn great attention. Accordingly, Excellence Models as strong tools in meeting the aforementioned needs of organizations, have attained a great succeed and have been able to be used to great extent in organizational pathology and trend determination to access the excellent human resources. Indeed,

organizational excellence models are a response to the question of: what is an excellent organization? Which objectives does it follow? And what are criteria dominant on theirs behaviors? By applying such models, the organization is able to not only appraise its success in performing improvement plans in different periods of time, but also compare its performance with that of other organizations, particularly the leading ones. Among performance appraisal models, EFQM is known as one of the most in-depth model considered to be a good role model for a number of other countries in designing such awards. EFQM model presents a pattern of an organization which is theoretically and practically superior to others; moreover, it shows how to act in competitive environment for survival and superiority (Najmi and Hosseini 2003, p. 14).
In the present study, the attempt is made to identify strengths and weaknesses of the above-mentioned organization using EFQM Excellence Model and to present practical recommendations to improve such areas.

**Statement of the Problem**
Educational organizations as the most effective and competent social unites have been established to meet their objectives up to the expected level of society. Therefore, all organizational attempts are towards promoting and inspiring behaviors which are effective and generative, from the facet of organization, and Satisfactory and rewarded, from that of organizational staff (Alagheband, 1999; p. 28). The main issue of the preset study is lack of a new and quality-based performance appraisal system in the department of education, and the use of traditional system in performance appraisal, leading the managers' unawareness of strengths and weaknesses crucial in their decision making. Take, for instance, lack of human forces, financial resources, and training methods, having been for long the main challenges of this organization. Due to the wide scope of mission and activities purposes as well as operations domains, using the existing performance appraisal system, directors of education system may not be able to comprehensively identify all shortcomings and improvable areas and to address with the quality of education in the country and prepare it for a succeed presence in the arena of global competition by improving and developing educational capacities. Currently, the studies and investigations shed light upon the fact that the quality of our educational system is not comparable with that of a number of countries and lags behind the rest of the developed world. It appears that by taking advantage of the new approach in performance appraisal and using organizational excellence models as a strong tool, organizational success in performing improvement plans in different time periods is likely to be appraised, and the comparison between the organizations performances may seem feasible.

**Research Theoretical Principles**
EFQM excellence model was established based on 9 areas. Five areas of the model are associated with enablers, representing the components of an organization and their way of interaction. The remaining four areas comprise the performance results of the organization, introducing the desired outcomes derived from the enablers' implementation (Najmi and Hosseini 2003, p. 43).
Leadership area: how leaders determine the aspiration and the mission of the organization and facilitate their way of access. Furthermore, how they establish required values for sustainable success and apply them through the appropriate behavior and activity.

Staff area: how the organization govern, develop and use its total employees potential and knowledge, either individually or by group, at all organizational levels, and, additionally, how it plans such activities towards supporting the policies and effectiveness of processes operations.

Policy and strategy area: how the organization implement its missions as well as goals through a clear procedure concentrated upon the stakeholders' benefits supported by policies, plans, long-term and short-term goals, and processes.

Partnerships and resources area: how organizations identify and lead their either external or internal resources towards supporting their policies, strategies and increased processes operational efficiency.
Processes area: how the organization develop, lead, and improve its processes with the aim of supporting polices, strategy, satisfaction provision, and enhanced value for its clients and other stakeholders.

People area results: what the organization found about its own staff, is determined.

Clients area results: what the organization attains in terms of its external customers.

Society area results: what the organization optimally attains in domains of local, national, and international, is determined.

Key performance area results: what the organization attains in relation to planned performance, is determined (Najmi 2004, p. 73).

**The Research Conceptual Model**
The existing models of performance appraisal may not comprehensively investigate the organization performance. Peter Kueng, for example, emphasizes upon the processes. Kanji (2000, pp.130) or, for example, traditional models, appraise the organization only from the financial facet.
In the present study, it is tried to appraise Tehran Department of Education using a full-fledged model of performance appraisal, namely EFQM, and identify its both weaknesses and strengths in different areas. EFQM model is a broad image of the plan by use of which each organization can promote and improve its various operational and management aspects with an integrated and in-depth framework.

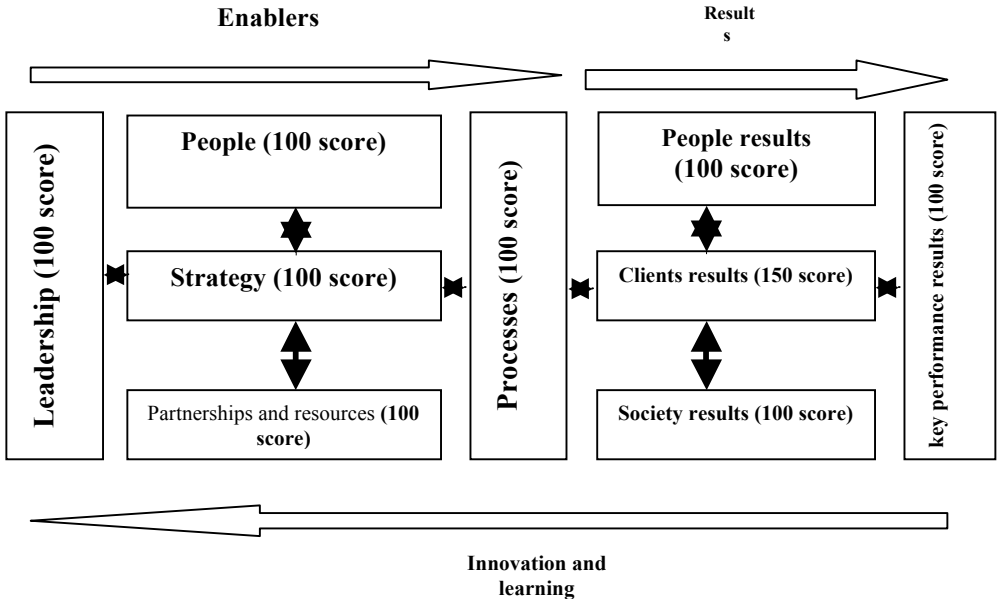


**Figure 1: EFQM excellence Model (2013 ed.)**

Novel quality-based performance appraisal systems are mainly grounded on three main models, namely Deming, Malcolm Baldrige, and EFQM (Hassan zadeh and Rastgou, 2009, p. 27). All organizational excellence models have developed based on quality management philosophy and concepts. The aim of the aforementioned models is to achieve total quality, the case that could be true for all organizations, irrespective of their location, size or unit (Male & Colurcio , 2006 , pp.469-489).
The first quality award in the world was established to honor of Professor Edward Deming in 1950 in Japan. This award formed given the new management theories and economic condition to improve Japan export situation through improving products quality and promoting overall control at the organizational level or controlling total quality in industries and recognizing successful strategies in relation to quality and knowledge promotion in terms of the importance of management and its methods (Razani, 1981, p.53).
After the success of Deming award, Malcolm Baldrige, the U.S. Secretary of Commerce, suggested the establishment of an award to Congress, which was approved as a law after his death. The proposed prize has been awarded to the promoted and pioneer organizations in the industry and services sector since 1988, and to active organizations in health and education sectors, since 1999 (Azar, 2002, p.33).
In 1989, EFQM model was developed by European Foundation for Quality Management and by the cooperation of fourteen reputable European companies and by the UN support. This model appraises organizations more comprehensively; in addition, one of the advantages of this model is to use a strong tool, namely Radar Logic, for rating organizations (Mohebi Moghadam, 2008, p.64).

**Review of Literature**

In 2006, Jose analyzed self-assessment process based on organizations excellence model in a public university in Spain. He believes that faculties performance should be investigated in three areas, viz. research, education, and services. In his study, Jose tackled with quality appraisal studies in service area, and with analyzing self-assessment process, its advantages and performance as well as its key factors, he found that it is likely to achieve an appropriate model for partial quality in service section (Jose, 2006, pp.176).
Boa-Liusar et al. (2005), published a research in which they studied the interactions and relations of enablers and results criteria in EFQM excellence Model. The results of the hypotheses associated with the impacts of enablers criteria identification on the outcomes, indicated that organization ability in enablers criteria may lead to the attainment of high performance results in different results areas.
Carol et al. (2003), in their study presented a method to prevent staff resistance against changes, and to involve and engage these vital forces in the process of performance improvement. They also suggested some guidelines to remove such a problem, the most significant of which was to engage staff in all implementation stages of different management systems.

Etemadi (2002), in a study entitled “self-assessment based on EFQM model” investigated the opportunities and threats derived from the application of EFQM model in Iranian organizations. He concluded that using new techniques of self-assessment and taking advantage of excellence models such as EFQM, in Iranian organizations, has an undeniable role in developing organizations and releasing them from the state of lethargy.

In his research, Razani (2002) investigated three models of EFQM, Deming, and Malcolm Baldrige and came to the conclusion that EFQM model is more comprehensive compared to the two others.

**Research Methodology**

The preset study is applicable, from the perspective of purpose, and descriptive-survey, from that of methodology. The study is applicable for its results can be used to improve and optimize instruments, methods and models to meet the staff needs and also to promote the performance level of the general administration. The study is descriptive due to the fact that it examines the status quo and describes it without any manipulation. As data collection is done through sampling the society, field research, and the analysis of society responses to the questionnaires, the research methodology is survey with contextualization. As the standard nature of questionnaires, their validity is confirmed. Cronbach's Alpha Reliability Coefficients was 844/0.

Statistical population of the study totally consists of 120 individuals, namely assistants, heads of departments, chief of groups and experts, and staff officials of Tehran Department of Education. The study probability sampling technique is of stratified type. And finally, based on Cochran formula, the sample size was estimated to 92.

**Research Questions**

**Main question:**

How was the performance of Tehran Department of Education in the academic year 2014-2015, based on EFQM model?

**Secondary questions:**

How was the performance of Tehran Department of Education in leadership area?
How was the performance of Tehran Department of Education in policy and strategy area?
How was the performance of Tehran Department of Education in people area?
How was the performance of Tehran Department of Education in partnerships and resources area?
How was the performance of Tehran Department of Education in processes area?
How was the performance of Tehran Department of Education in people results area?
How was the performance of Tehran Department of Education in clients' results area?
How was the performance of Tehran Department of Education in society results area?
How was the performance of Tehran Department of Education in the key performance area?

**Research Hypotheses**

**Main hypothesis:**

Based on EFQM model, the performance of Tehran Department of Education is above the average total points of the model.

**Secondary hypotheses:**

The first hypothesis: the performance of Tehran Department of Education based on the leadership criterion of the EFQM model, is higher than the average level of the respective criterion.

The second hypothesis: the performance of Tehran Department of Education based on the strategy criterion of the EFQM model, is higher than the average level of the respective criterion.

The third hypothesis: the performance of Tehran Department of Education based on the people criterion of the EFQM model, is higher than the average level of the respective criterion.

The forth hypothesis: the performance of Tehran Department of Education based on the partnerships and resources criterion of the EFQM model, is higher than the average level of the respective criterion.

The fifth hypothesis: the performance of Tehran Department of Education based on the processes criterion of the EFQM model, is higher than the average level of the respective criterion.

The sixth hypothesis: the performance of Tehran Department of Education based on the clients results criterion of the EFQM model, is higher than the average level of the respective criterion.

The seventh hypothesis: the performance of Tehran Department of Education based on the people results criterion of the EFQM model, is higher than the average level of the respective criterion.

The eighth hypothesis: the performance of Tehran Department of Education based on the society results criterion of the EFQM model, is higher than the average level of the respective criterion.
The ninth hypothesis: the performance of Tehran Department of Education based on the key performance results criterion of the EFQM model, is higher than the average level of the respective criterion.

**Data Analysis**

Given the fact that EFQM criteria determine the overall score of an organization, at first, the secondary hypotheses, and then the main hypothesis, are analyzed. To this end, one sample T-test in SPSS was used after normalizing data.
In the preset study, the average level for comparing the society mean is considered 50 % of each criterion, as the organizations using EFQM model for the first time, have no index for their progress assessment compared to the past, and hence they generally consider 50 % of the each criterion score as the average level (Azar, 1994, p.34).
The first five questions of the questionnaire are about leadership criterion, the outputs of the data analysis using one-sample T-test are presented as follows.

**Table 1: outputs of one-sample T-test for the first hypothesis**

| **One-sample T-test** | | | | | | |
|---|---|---|---|---|---|---|
| **The value of test = 50** | | | | | | |
| **95% confidence interval means** | | **Mean difference** | **Significance level** | **Freedom degree** | **T-value** | |
| Upper limit | Lower limit | | | | | |
| 10/30 | 1/927 | 5/9783 | 0/004 | 91 | 2/931 | v1 |

In the above table, given the fact that significance level is lower than 0.05, it is concluded that the hypothesis considering society mean equals to 50 %, is rejected. Moreover, due to the positive value of upper and lower possible difference at the level of 50 % and also the determined average difference, it is concluded that the society mean is higher that the optimal level and the performance of Tehran Department of Education in leadership criterion is above the average value of the respective criterion. Consequently, the first hypothesis is confirmed.
Similarly, the hypotheses 2, 3, 8, and 9, are rejected; whereas, hypotheses 4, 5, 6, and 7, are confirmed.
Investigating the outputs of one-sample T-test for the main hypothesis, we conclude that the society mean is slightly lower that the optimal level and the performance of Tehran Department of Education as a whole, i.e. the sum of results areas and enablers areas, is slightly lower that the average level. In fact, albeit the performance of Tehran Department of Education is approximately equal to the average level, the main hypothesis is rejected.
After gathering data and computing the average points in each area and also considering the frequency of each question and the attributed point in each area, the acquired points in each area are computed and the following table representing the overall computed results, is prepared.

**Table 2: the performance of Tehran Department of Education**

| The deviation value | The model point | The gained score by the organization | The respective criteria in the questionnaire | Criteria | |
|---|---|---|---|---|---|
| 55/97 | 100 | 55/97 | The role of pattern for vision, values, management performance, active interaction with external stakeholders, teamwork development, change management | Leadership | 1 |
| 46/48 | 100 | 44/47 | Prognosticating stakeholders needs, reviewing internal performance, communicating strategy with stakeholders, implementing and monitoring strategy | Policy and strategy | 2 |
| 44/65 | 100 | 44/65 | People plans based on strategy, people competencies development, empowermentt, effective communications, appreciation and encouragement | People | 3 |
| 52/21 | 100 | 52/21 | Financial support for processes, social phenomenon management, technology application, knowledge sharing | Partnerships and resources | 4 |
| 52/84 | 100 | 52/84 | Key processes management and improvement, innovation in services, prediction above the stakeholders needs, organization-clients management | Processes | 5 |
| 52/01 | 150 | 78/02 | Determine the level of customer satisfaction, approval and recommendation of customers, complaints and suggestions monitoring, organization performance monitoring | Clients results | 6 |
| 51/23 | 100 | 51/23 | Staff satisfaction monitoring, strategy understanding and staff interrelation monitoring, competences, productivity | People results | 7 |
| 46/65 | 100 | 46/65 | The image of a responsible organization, social and environmental consequences, staff social commitments | Society results | 8 |
| 47/87 | 150 | 71/80 | Financial indices for organization health, productivity and organization performance monitoring, innovation performance assessment | Key performance results | 9 |
| 50/43 | 500 | 252/17 | | Total points of enablers | Σ |

| | | | | | |
|---|---|---|---|---|---|
| | | | | area | |
| 49/54 | 500 | 247/71 | | Total points of results area | ∑ |
| 49/99 | 1000 | 499/89 | | Sum | |
| % 49/99 : The ration of organization performance to the total points of the model | | | | | |

**Research Findings**

The results indicate that from the viewpoints of assistants, heads of departments, chief of groups and experts, and staff officials, the organization was succeed up to 55.98%, 44.65%, 46.48%, 52.85%, 52.22%, 46.65%, 51.24%, 52.01%, and 47.87% in, respectively, leadership criterion, people criterion, policy and strategy criterion, processes criterion, partnerships and resources, society results criterion, people results criterion, clients results criterion, and key performance results criterion. Given the results founded, the maximum and the minimum performance (the point gained) by the organization in clients results criterion and people results criterion, were 78.02% and 44.65%, respectively. In spite of the fact that the lowest percent of performance is dedicated to enablers area which, per se, is related to the people criterion, the level of score gained and finally the percent of performance in this area (enablers = 50.43%) are more than that of the results area (49.54%).

In large, the performance score of Tehran Department of Education, is slightly lower than the average total score mean of the EFQM excellence Model.

Regarding the resulted score, albeit the performance of this general administration, in some areas, is slightly higher than the average level; however, in some other areas, namely policy and strategy, society results, key performance results, and staff and human forces is not in a good condition compared to the optimal state. The under-scrutiny organization requires special attention particularly in the area of human forces as the most significant capitals of any single organization.

**Comparison of the Study Results with the Previous Research**

Arab (2010), in a study entitled "Performance Appraisal of Mazandaran Department of Education based on EFQM model", investigated that province Department of Education based on European Foundation for Quality Management. Based on census sampling, the statistical population of the study comprises 64 individuals, viz. assistants, heads of departments, chief of groups and experts, and staff officials of Mazandaran Department of Education. Standard questionnaire of EFQM model and descriptive statistical indices were used to, respectively, collect and analyze data. The results showed that the studied organization, in general, could achieve 51% and 39% of its goals in enablers area and results area, respectively. Comparing these two studies may lead us to the conclusion that Tehran Department of Education could gain 50.43 score in enablers area, which is slightly lower compared with the Mazandaran Department of Education and 49.54% score in results area, representing the better performance of the former rather than the latter. Although, the performance of Tehran Department of Education is wholly better, both educational organizations, as it is proved, lag far behind the optimal results.

**Results and Discussion**

In the present study, the earliest and the most significant measures any organization is supposed to take in its way towards promotion, were investigated. Thenceforth, the status quo of Tehran Department of

Education in terms of performance, was examined, and to this end, the most eminent self-assessment model, i.e. European foundation quality management, was applied. In the present research, the dominance level of excellence indicators from the point of view of managers, experts, and staff, was scrutinized. Firstly, the scores of each indicators was determined using questionnaire. Then, the significance level of differences with the average level of each criterion, in both areas of enablers and results, was examined

Analyses performed using statistical methods were representative of the fact that, there is no significant difference between the current condition and the optimal one. The matter of fact is that, based on this model, the prevailing state of the organization performance has a middle state.

**Applicable recommendations based on the study results in each criterion:**

Leadership criterion

- Organizational managers should support the existing organizational policies and strategies and take into consideration staff feedbacks to improve the organizational strategies.
- Organizational managers should move toward supremacy with the aid of continuous support, leadership and guidance.

Staff criterion

- The organization is recommended to pay more attention to the staff recruitment criterion, to adapt the employed staff to the organizational requirements.
- Educational plans are recommended to be designed and implemented to remove training need of staff in terms of progress and quality.

Processes criterion

- Organization management is recommended to hold training classes to not only promote the staff information, but also to aware them of the organization issues and problems as well as the cause of low-quality services.
- It is suggested to form a specialized committee to receive recommendations and critiques in terms of proposed services and also to improve processes and to implement them after analyzing.

Clients Results Criterion

- Staff have to receive effective feedbacks on their performance to be able to much better meet the needs of clients.
- Establishing a way to effectively communicate people
- Evaluating people satisfaction with the organization performance, and consequently analyzing and improving it

Staff Results Criterion

- The organization is recommended to draw more attention to factors such as absence, displacement and turnover of employees to become aware of their level of satisfactory.
- The organization is recommended to use its staff and their comments in removing the organizational problems, and hence to pave the way for their job satisfaction.
- Encouraging staff to individual and group participation and providing an appreciation system for staff

The performance Results Criterion

- General administration has to apply appropriate management on its financial and physical taxes to effectively take advantage of them

- A method for computing the lost resources and unessential costs in the organization.

**References**

Adel, A. (1994). Inferential statistical techniques in management and behavioral research. Journal of management knowledge. Vol. 3, No. 26, pp. 28-39

Adel, A., & Safari, S. (summer 2002). Excellence model sampling with the data *envelopment analysis approach.* Qom Higher Education Complex. 4th year. No.13, pp. 31-46.

Arab, V. (2010). Mazandaran Department of Education based on the EFQM model. M.A. thesis of governmental management. Islamic Azad University, Firoozkooh Branch.

C. Boa-Liusar and et al. (2005). " To What Extent Do Enablers Explain Result in EFQM Model", International Journal of Quality and Reliability. Vol12, No 1, pp 337-350

Hassan Zadeh, H. R., & Rastgou, M. (2009). Organizational Excellence model and the way of their deployment in the organization. Tehran: Mehr Aria publishing.

Heras Inaki and Marti Casadesus (2006). " The impact of qualitymanagement in European companies performance " The case of the Spanish companies, European Business Review. Vol 18 No.2 pp. 114-131.

Jose.J.(2006)." An EFQM model self assessment exercise at a Spanish university", Journal of Educational Administration, Vol .44 no.2 ,pp.170-188

Kanji, Gopal (2000), "TQM in Malaysian higher education institution, Total Quality Management & Business Excellence, Vol. 9 No.4 pp. 130-132

Khaiatan Yazdi, M. (2005). Designing Excellence model of educational organization based on the EFQM model. M.A. thesis of Imam Sadegh University, Faculty of Islamic Studies and Management.

Khorasani, S. T. (2014, August). Design-Driven Integrated-Comprehensive Model CDFS Strategic Relationships. In ASME 2014 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference (pp. V004T06A020-V004T06A020). American Society of Mechanical Engineers.

Kueng, Peter, (2000), Process Performance Measurement System, Total Qualty Management, Vol.11, No.1.pp. 67- 85.

Male Cristina and Colurcio Maria. (2006) "The evolving path of TQM: towards business excellence and stakcholder value", International Journal of Quality & Reliability Management, Vol.23,No.5,pp.469-489

Mohebi Moghadam, A. A. (2008). EFQM Excellence *model: techniques and procedures.* Tehran: Yase Behesht publishing.

Najmi, M. & Hsseini, S. (2003). *EFQM Excellence model: from idea to practice.* Tehran: Ronas publishing.

Najmi, M. & Hsseini, S. (2014). *EFQM Excellence model 2013: from idea to practice.* Tehran: Industrial Management Organization publication.

Peikar, M. R. (2003). *Organizational excellence and quality awards*. Tehran: Sonboleh publishing.

Razani, A. H. (2002). Familiarity with important organizational *Excellence* models (familiarity with EFQM model). Tehran: Imam publishing.