



## Section 3. Economics, organization and management of enterprises, industries, complexes

DOI:10.29013/EJEMS-24-1-19-24



### RESEARCH OF APPLICATION FEASIBILITY OF INTERNATIONAL QUALITY MANAGEMENT MODELS AT AZERBAIJAN HIGHER EDUCATION INSTITUTIONS

*Ilyasov Asiman Rasim*<sup>1</sup>

<sup>1</sup> Baku State University, Advisor to the Rector on Quality Assurance  
Azerbaijan Technological University, Phd Student

---

**Cite:** *Ilyasov A.R. (2023). Research of Application Feasibility of International Quality Management Models at Azerbaijan Higher Education Institutions. European Journal of Economics and Management Sciences 2024, No 1. <https://doi.org/10.29013/EJEMS-24-1-19-24>*

---

#### Abstract

In the field of employment, as well as in the direction of increasing socio-economic indicators until 2030, when analyzing the determined strategic directions of the Republic of Azerbaijan, it is seen that the training of knowledgeable and competent personnel is noted as the main conditioning factor for achieving stable and sustainable economic development. At the same time, according to the relevant legislation of Azerbaijan, the main goal of higher education institutions is to prepare qualified students for the labor market, and for this, higher education institutions should pay attention to the management of the quality of the education system in accordance with the requirements of the labor market. In the world, there are self-approved models applied in quality management in the fields of production and services, and it is possible to apply these models by higher education institutions operating in Azerbaijan (with the exception of specialized higher education institutions).

**Keywords:** *Higher education institutions, labor market, quality assurance, quality management models*

#### Introduction

According to the relevant provisions of the “Law On Education”, educating of competitive students in the local and international labor market is shown as one of the main quality in-

dicators of the educational institutions (Law of the Republic of Azerbaijan, 2009). At the same time, the documents, such as “Azerbaijan 2030: National Priorities for socio-economic development” (Decree of the President of the

Republic of Azerbaijan 2021), “Socio-economic development strategy of the Republic of Azerbaijan in 2022–2026” (Decree of the President of the Republic of Azerbaijan 2022–2026), “Employment Strategy of the Republic of Azerbaijan” (Decree of the President of the Republic of Azerbaijan, 2019–2030) have been mutually analyzed, and it is seen that one of the main tools for the country to achieve stable and sustainable economic development is student training in accordance with the quantitative and qualitative requirements of the labor market. Thus, having the knowledge and skills required by the labor market will increase employment opportunities, as well as the efficiency of labor activities, which in turn will lead to the improvement of the economic indicators of the country and the economic well-being of the population. Thus, international and local scientific studies show that the average monthly salary of people who have quality education in the labor market is higher than other people, and this leads to higher purchasing power and socio-economic well-being in their economic life.

Students who will create added value and boost the country’s economic development by engaging in labor activities should acquire a large part of their skills and competences in higher education institutions. However, international and local studies show that despite the fact that the importance of competent and skilled personnel training according to the requirements of the labor market is emphasized at every opportunity by the higher education institutions operating in the Republic of Azerbaijan, concrete activities and models in this field have not been presented. At the same time, the results of surveys conducted among students studying in higher education institutions operating in the Republic of Azerbaijan show that students do not feel ready for the labor market after graduation. The mentioned issues actualize the issue of quality management of education at higher education institutions.

There are different quality management models in the world. The feasibility of applying these models by higher education institutions operating in the Republic of Azerbaijan should be analyzed taking into account local legislation, education policy and higher education management.

## Methodology

During the research, quality research was conducted and quality management models applied in the international arena in the field of production, service and education were mutually analyzed. The feasibility of applying the mentioned models as a quality management model by Azerbaijani higher education institutions was investigated taking into account respective local legislations and normative legal acts, higher education policy and management.

## Quality Management Models

When looking at international and local researches on quality management, it can be seen that there is no single definition of the concept of quality, as well as the results of the research show that it is impossible to have a single approach to the above mentioned concept. Thus, different definitions have been given to “quality” depending on the characteristics of the field in which it is applied, the expectations of customers, the degree of importance of their satisfaction for the enterprise, as well as the indicators by which enterprises operating in the relevant field compete with each other to increase their income. In modern economic conditions, the main goal of the production and service sectors, which aim to increase their competitiveness by maximizing their income and minimizing their costs, is to achieve an increase in market share by increasing customer satisfaction. For this, there are well-known 4 quality management models accepted in the international arena:

1. Deming Award;
2. Malcolm Baldrige’s Framework for Excellence;
3. EFQM Excellence Framework;
4. ISO quality management standards.

### **1. Deming Award:**

The award was established in 1951 in honor of W. Edwards Deming, who played an irreplaceable role in conducting economic reforms and applying statistical process control (SPC – Statistical Process Control) in Japan from the point of view of production quality management. The purpose of the Deming Prize is to promote the development of quality management systems, as well as the application and development of quality tools

or statistical methods that allow to improve work in organizations ([https://www.kpms.ru/EN\\_general\\_info/EN\\_Deming\\_Prize.htm](https://www.kpms.ru/EN_general_info/EN_Deming_Prize.htm)). This award is considered the first and most prestigious award in the field of quality management.

In order to be awarded the Deming Award, criteria have been established for enterprises in accordance with the relevant directions, and these criteria reveal the quality management model and activities of the enterprise. The first of the mentioned directions is the “Policies”. When we look at that criteria set for the relevant direction, it is seen that the enterprise should have quality management processes, policy documents and long-term and short-term action plans, and these documents should be clear, understandable and accessible, and communication with interested and related persons should be established. When analyzing the criteria defined for “Organization” which is mentioned as the 2<sup>nd</sup> direction, it can be seen that the organizational form of the enterprise should serve the management and increase of quality, participation in management should be ensured, hierarchical vertical and horizontal relations between structures should be clearly defined. The responsibilities and powers of individuals should be clearly defined, and the efficiency of communication with external stakeholders should be ensured. In the criteria for “Information” mentioned as the 3<sup>rd</sup> direction, it is stated that the enterprise should continuously collect internal and external data and analyze the received data using certain tools to make decisions about the next steps. Compliance of the enterprise’s activity with the standards defined in the relevant field was mentioned as the 4<sup>th</sup> direction of Deming’s criteria. Thus, it is noted that the enterprise must take into account the minimum standards set for its activities and continuously monitor the state of compliance with the standards. The criteria of the 5<sup>th</sup> direction mentioned as the direction of human capital improvement and management state that the enterprise should continuously involve human resources in training and development programs, create awareness in them about the concept of quality and standards, and support them for self-realization and development. Quality assurance and

quality monitoring are defined as the 6<sup>th</sup> and 7<sup>th</sup> directions, and the criteria for diagnosing and managing the quality of the processes in the relevant directions are mentioned. However, when looking at the criteria in these directions, it is seen that the relevant criteria apply to enterprises that apply a production chain that wants to increase their income and reduce their costs. As a result of quality monitoring, taking improvement or preventive steps and then diagnosing the effect of these steps are shown as directions 8 and 9. After the activities in the above-mentioned 9 directions, the enterprise should prepare future plans based on the obtained results as the last direction ([https://www.kpms.ru/EN\\_general\\_info/EN\\_Deming\\_Prize.htm](https://www.kpms.ru/EN_general_info/EN_Deming_Prize.htm)). When looking at the criteria of the Deming Award, it can be seen that strategic planning and implementation, quality assurance and monitoring, information management and strategic human resources management are the main directions, which higher education institutions located in Azerbaijan can operate based on these criteria. Because the institutional accreditation evaluation criteria of higher education institutions in the Republic of Azerbaijan also include relevant directions and criteria, and the legislative basis for activities in this direction has also been formed.

## **2. Malcolm Baldrige’s Framework for Excellence (for education):**

The Malcolm Baldrige Award was established by the United States Senate in 1987. The main purpose of establishing this award was to apply the secret of increased competitiveness in Japan and to increase the declining production in the country as a result of the application of Deming’s criteria since 1951. At the same time, by measuring the quality criteria of enterprises and learning and sharing good practices with other partners, it was to influence the increase of quality in the business sector and thus the achievement of customer satisfaction. Applying these criteria, educational research has shown that Baldrige-based organizations outperform their non-Baldrige peers on nearly every critical measure, including higher graduation rates, lower dropout rates, and higher student performance on multiple measures (Decree of the President of the Republic of Azerbaijan, 2019–2030).

**Picture 1.** *Malcolm Baldrige's Framework for Excellence*

Source: <https://baldrigefoundation.org/who-we-are/history.html>

The criteria for the Malcolm Baldrige Framework for Excellence vary across domains. When looking at the criteria in the field of education, it is noted that the enterprise operates in 7 directions for quality management. First of all, there are directions related to the management of the enterprise, where there are criteria for managing the enterprise in accordance with modern requirements. In the other direction, the criteria related to the development, improvement and implementation of the company's strategy were reflected. According to the relevant quality management model, the 3<sup>rd</sup> direction is to study the requirements of customers and involve them as interested parties in the processes. As the 4th direction, criteria for measurement, analysis and data management are given. Effective workforce management and purposeful design of operations are presented as areas 5 and 6, respectively. The last direction mentions the analysis of the implementation results of the aforementioned directions in order to take the next improvement steps and to ensure evidence-based decision-making (Decree of the President of the Republic of Azerbaijan, 2019–2030), which reflects the philosophy of the PDCA and PDSA stages, which is called the Deming cycle. When looking at the Malcolm Baldrige criteria, it can be seen that strategic planning, implementation and management, quality assurance and monitoring, information management and strategic human re-

sources management are the main directions in which higher education institutions located in Azerbaijan can operate based on these criteria. Because the institutional accreditation evaluation criteria of higher education institutions in the Republic of Azerbaijan also include relevant directions and criteria, and the legislative basis for activities in this direction has also been formed.

### **3. EFQM Excellence Framework:**

EFQM is a non-profit organization that was first established in Europe and later recognized internationally and has its own quality management model (Law of the Republic of Azerbaijan, 2009). In the EFQM Excellence model, 3 main directions are noted, which are the direction of the enterprise, the execution of processes and results. In the issue mentioned as the direction of the enterprise, the main criteria are defined as the strategic development and management of the enterprise. In the criteria defined as the second direction, the enterprise's involvement of stakeholders, the formation of a sustainable and stable value chain, and the establishment of a transformation environment were mentioned. As the last direction, the results are mentioned, and here the importance of analyzing the strategic results and studying the perceptions of the interested parties is shown.

When the directions and criteria of the EFQM Excellence Framework are analyzed, it appears that activities should be carried out in

the direction of strategic planning, implementation, management and the use and management of information for subsequent decision-making according to this quality model (Law of the Republic of Azerbaijan, 2009). Higher education institutions located in Azer-

baijan can operate based on these criteria, because the institutional accreditation evaluation criteria of higher education institutions in the Republic of Azerbaijan also include relevant directions and criteria, and the legislation for operating in this direction has been formed.

**Picture 2.** *EFQM Excellence Framework:*



Source: <https://efqm.org/the-efqm-model/>

**4. ISO quality management standards:**

ISO defines standards agreed upon by experts around the world and recommended the implementation of the ISO 9001:2015 quality management standard for manufacturing and service industries as well as educational institutions by 2018. However, looking at the criteria and notes on the mentioned standard, it was understood that it is intended for businesses aiming to maximize their income and minimize their costs. At the same time, the relevant standard consistently emphasizes the importance of a customer-centered system, but does not distinguish between the customer and the learner for educational institutions, as in the Mal-

colm Baldrige criteria. Taking all this into account, ISO announced its new standard for educational institutions under the name ISO 21001–2018.

When analyzing the 21001–2018 standard set by ISO for educational institutions, it can be seen that enterprise management, strategic planning, support services, performance evaluation and improvement directions are mainly defined as quality management (<https://baldrigefoundation.org/who-we-are/history.html>). According to these standards, it is possible to come to the same conclusion that the higher education institutions located in Azerbaijan can operate based on these criteria, as there are no restrictive conditions related to these directions.

### Summary

When looking at the directions and criteria established for the 4 quality management models (Deming application award criteria, Malcolm Baldrige Excellence Framework, EFQM Excellence Framework and ISO 21001–2018) adopted in the field of quality management in the world based on a mutual analysis, it can be seen that according to the mentioned 4 quality management models most of the activities and criteria are similar and are as follows:

1. Strategic planning, implementation and management activities;
2. Quality assurance, monitoring and improvement activities;

3. Data collection, processing, analysis and use in decision-making;

4. Efficient allocation and management of resources;

Analyzing the possibility of applying the mentioned quality management models by higher education institutions operating in Azerbaijan, we come to the conclusion that higher education institutions located in Azerbaijan can operate based on these criteria. In addition, the institutional accreditation evaluation criteria of higher education institutions in the Republic of Azerbaijan also include the relevant directions and criteria mentioned in the models analyzed above.

### References

- Decree of the President of the Republic of Azerbaijan on approval of “Azerbaijan 2030: National Priorities for socio-economic development” / Baku city, February 2, 2021.— No. 2469.
- Decree of the President of the Republic of Azerbaijan on the approval of the “Socio-economic development strategy of the Republic of Azerbaijan in 2022–2026” / Baku city, July 22, 2022.— No. 3378.
- Decree of the President of the Republic of Azerbaijan on the approval of the “Employment Strategy of the Republic of Azerbaijan for 2019–2030” / Baku city, October 30, 2018.— No. 602.
- Law of the Republic of Azerbaijan “On Education” / Baku city, June 19, 2009.— No. 833-IIIQ.
- URL: <https://baldrigefoundation.org/who-we-are/history.html>
- URL: <https://efqm.org/the-efqm-model>
- URL: <https://www.iso.org/standard/66266.html>
- URL: [https://www.kpms.ru/EN\\_general\\_info/EN\\_Deming\\_Prize.htm](https://www.kpms.ru/EN_general_info/EN_Deming_Prize.htm)
- asiman.ilyasov@bsu.edu.az

submitted 22.08.2023;

accepted for publication 20.09.2023;

published 8.10.2023

© Ilyasov A. R.

Contact: asiman.ilyasov@bsu.edu.az