

The Model of Quality Assurance in Education by Implementing E-Learning and Blended Learning

Gabriela-Livia Curpănaru^{1,*}

"Gheorghe Asachi" Technical University of Iasi-Romania, Faculty of Industrial Design and Business Management

**Corresponding author. Email: gabriela.curpanaru@gmail.com*

ABSTRACT

Quality assurance models in education are an essential factor for the successful achievement of education. There is a growing global interest in identifying quality models, both in general and in education. These models are effective tools in the management of educational institutions, provided they are properly implemented. Therefore, an analysis of representative models in terms of education quality management is appropriate. The analysis of the models is based on several coordinates: identifying the characteristic elements, exploring the ways of capitalizing on the models at the level of the school institution, highlighting the advantages and disadvantages. A successful model of quality in school management focuses on the relationships between student, teacher and curriculum, around which revolve the external influences of society, family, labor market requirements, the need for competence and lifelong learning.

Keywords: *Quality, Quality assurance, Models, Education.*

1. INTRODUCTION

Educational technologies have developed rapidly in recent years, which has created new types of teaching-learning-assessment. All three activities, which are the basic components of the educational process, are delivered through a wide range of electronic technologies, from computerized form to full online model. The rapid development of educational technologies has led to the emergence of learning methods, which require reconsideration of quality assurance criteria and standards. It is necessary to adapt the school to the new requirements (Al-Hajraf and Al-Sharhan, 2012): strengthening the infrastructure, creating a single portal with a complete learning management system and collaboration tools, digitizing curricula and converting textbooks into courses, interactive, creating Smart classes, equipping teachers and students with equipment, creating digital libraries, preparing teachers for the use of new technologies. In the future, quality assessment standards in education will certainly address these issues as well. Quality control of e-learning is becoming a new challenge for any education system, due to the novelty and complexity of this concept. The e-learning and blended learning approaches, as well as the large size of the implementation process involve establishing clear, concrete and easy to implement directions of action.

2. CONVENTIONAL LEARNING MODEL

The conventional learning model (Kamsin, 2005) is based on the interaction between teachers, students and content. Given the introduction of technological tools, the greater the interaction between the three elements. A major role is played by students and teachers, as a result of the impact on the content. In this way, teachers will have the ability to use technology to create content and for the student to evaluate the content, thus introducing a whole new dimension in teacher-student interaction. In the traditional learning model, the interaction between the three elements of the system is achieved through interpersonal communication, which allows students and teachers to interact with the third element (content) in the classroom. Instead, the mixed e-learning model causes fundamental relationship changes in an environment where students and teachers interact with content in different ways and in different locations at different times. E-learning can create a false impression of diminishing the role of the teacher. There is a growing need for competence and involvement on the part of teachers. According to the model proposed by the authors, learning does not become a separate teaching process, but is based on a close collaboration between teacher and student. The teacher is directly involved in the learning activity, in order to organize, support and certify the student's work.

3. THE MODEL OF QUALITY ASSURANCE IN EDUCATION BY IMPLEMENTING E-LEARNING AND BLENDED LEARNING

Al-Hajraf and Al-Sharhan (2012) proposed a delivery model for the new e-learning environment. The model for quality assurance in the context of online education is based on the inclusion of e-learning and blended learning in a framework of total quality management. The development of quality standards determines the transformation of the primary environment from a conventional environment to an interactive one, with an infrastructure that allows e-learning and an adequate digital content. According to the new model, the main elements are the learning management system, multimedia-equipped classrooms (smart classrooms) and the network or the Internet. The activities are specific to the blended learning process, because the teacher and the students meet in smart classrooms, and the learning process is guided by the teacher by using the online content accessed by the students, through the network (Internet). A graphical representation of the components of the model developed by Al-Hajraf and Al-Sharhan (2012) is made in Figure 1.



Figure 1 Components of the quality assurance model in education through the implementation of e-learning and blended learning.

The conceptual framework of the presented model is based on 8 dimensions that describe the different fields that the educational management should consider: the competence of the teacher / staff; student / teacher behavior; conventional / digital content; infrastructure; delivery environment; technical assistance services; sustainability / reliability; measuring and evaluation instruments.

Al-Sharhan and Al-Sharhan (2012) developed a scheme with the characteristic elements of the quality

control model in e-learning and blended learning (Figure 2.). At the base of the model construction are the pedagogical principles, in order to highlight the fact that education keeps the same foundations, the changes intervening in the way of teaching, learning and evaluation.

These changes are perceived as a way to improve the quality of teaching, as an opportunity to enrich and diversify it, depending on individual needs and external requirements. The quality of the infrastructure, equipment and support needed to achieve e-learning or blended learning is an elementary condition, without which such a model would not be possible. The implementation of the model requires a considerable material effort, not only due to the investments involved in building a good infrastructure, but also due to maintenance and upgrade costs, as a result of the accelerated development of technology.

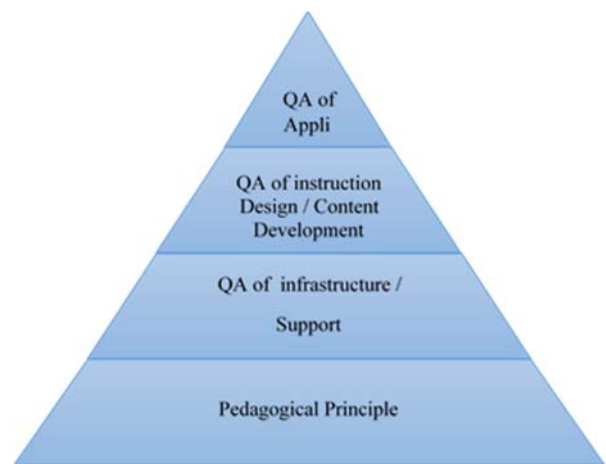


Figure 2 Characteristic elements of the quality assurance model in education through the implementation of e-learning and blended learning.

Al-Hajraf and Al-Sharhan (2012) emphasize the importance of a balanced approach to quality assessment, as a far too simple approach will lack flexibility, while a complex one will consume a lot of time and resources. The model proposed by the authors for evaluating the quality of education includes four levels that must be followed sequentially and evolutionarily: evaluation of reaction, evaluation of learning, evaluation of behavior and evaluation of results.

4. CONCLUSIONS

There is a need for changes in attitudes and perceptions on the part of all those involved, be they students or teachers, as well as a reconsideration of society's position towards the school. Performance evaluation and measurement according to quality standards are the tools that will establish the directions of action and ways to expand the model.

AUTHORS’ CONTRIBUTIONS

A good education requires a quality design of training and tailored contents. The curriculum, the school curricula, the design of the classroom activity must be put in accordance with the requirements of an education in which the simple face-to-face communication of the teacher with the student is long overdue. The quality of applications, their accuracy, relevance, accessibility and timeliness, as well as data security, are also particularly important aspects in such a model. The advantages and disadvantages of the quality assurance model in education are summarized in Table 1.

Table 1. Advantages and disadvantages of the quality assurance model in education through the implementation of e-learning and blended learning

Benefits	Disadvantage
<ul style="list-style-type: none"> - the integration of the educational process and the formation of a monitoring system similar to the accreditation procedures, as a result of the implementation of an adequate quality assurance system; - ensuring the responsibility of educational systems and institutions; - encouraging the constant improvement of the learning process and, therefore, of the entire educational system; - forming a solid foundation for effective higher education 	<ul style="list-style-type: none"> - making major financial investments, which the authorities postpone or even refuse, determined by the implementation of elearning in schools from disadvantaged backgrounds; - the appearance of blockages that prevent the application of measures in some educational units, such as the reluctance and resistance to change of some teachers;

ACKNOWLEDGMENTS

The article is published at the 2021 International Conference on Modern Management and Education Research (MMER2021), which will be held on July 4-5, 2021, Shanghai, China.

REFERENCES

[1] Al-Hajraf, H., & Al-Sharhan, S. (2012). Total Quality Management (TQM) of Blended E-Learning Systems: A New Integrated Model and Framework. *Literacy Information and Computer Education Journal (LICEJ)*, 3(1), 591-598.

[2] Al-Hajraf, H., & Al-Sharhan, S. (2010). A New Efficient E-Learning Model and Framework for K12 Implementation, In the proceedings of the Fifth

Int. Conf. on Digital Information management ICDIM 2010, Leakehead University, Thunderbay, Canada, 2010.

[3] Al-Sharhan, S., Al-Hunaiyyan, S., &Gueaieb, W. (2006). Success factors for an efficient blended learning. *Proceedings of the 10th LASTED International Conference on Internet and Multimedia Systems and Applications*. Honolulu, Hawaii, USA, pp.77-82.

[4] Kamsin, A. (2005). Is E-Learning the Solution and Substitute for Conventional Learning?. *International Journal of the Computer, the Internet and Management*, 13(3), 79-89.