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A política de garantia da qualidade da educação eletrônica universitária na Europa e América Latina

La política de aseguramiento de la calidad de la educación virtual universitaria en Europa y América latina

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Abstract: The relevance of the study arises from the contradiction between the rapid development of e-education in different regions of the world, on the one hand, and the insufficient level of adaptation of the quality assessment mechanisms in the field of e-education in certain regions, on the other hand. This article examines and analyzes the international experience of quality assurance of higher education in the format of e-learning in Europe and Latin America. The article identifies the approaches to quality assurance of e-learning in the field of higher education in Europe and Latin America. The study is aimed at analyzing the policy of quality assurance of university e-education in the field of higher education in Europe and Latin America. The analysis of the activities of European and Latin American quality assurance organizations in the field of e-learning has shown that in the context of higher education in Europe and Latin America external quality assurance agencies play an important role in the institutional processes of ensuring the quality of university e-education. The development of a quality assurance system is an important part of the internationalization of educational programs in general and e-learning in particular since it is open and dynamic. The assessment of

the quality of education is not simple; it is an important problem for the related organizations.

Keywords: Higher education, E-education, E-learning, Quality of education, Quality assurance agencies.

Resumo: A relevância do estudo surge da contradição entre o rápido desenvolvimento da e-educação em diferentes regiões do mundo, por um lado, e o nível insuficiente de adaptação dos mecanismos de avaliação da qualidade no domínio da e-educação em determinadas regiões, por outro lado. Este artigo examina e analisa a experiência internacional de garantia da qualidade do ensino superior no formato de e-learning na Europa e na América Latina. O artigo identifica as abordagens para a garantia da qualidade do e-learning no campo da educação superior na Europa e na América Latina. O estudo tem como objetivo analisar a política de garantia da qualidade do e-educação universitária na área de educação superior na Europa e na América Latina. A análise das atividades das organizações de garantia da qualidade europeias e latino-americanas no campo do e-learning mostrou que, no contexto do ensino superior na Europa e na América Latina, as agências externas de garantia da qualidade desempenham um papel importante nos processos institucionais de garantia da qualidade de e-educação universitária. O desenvolvimento de um sistema de garantia de qualidade é uma parte importante da internacionalização dos programas educacionais em geral e do e-learning em particular, uma vez que é aberto e dinâmico. A avaliação da qualidade da educação não é simples; é um problema importante para as organizações relacionadas.

Palavras-chave: Ensino superior, E-educação, E-learning, Qualidade da educação, Agências de garantia de qualidade.

Resumen: La relevancia del estudio surge de la contradicción entre el rápido desarrollo de la e-educación en diferentes regiones del mundo, por un lado, y el insuficiente nivel de adaptación de los mecanismos de evaluación de la calidad en el campo de la e-educación en determinadas regiones, por otra parte. Este artículo examina y analiza la experiencia internacional de aseguramiento de la calidad de la educación superior en el formato de e-learning en Europa y América Latina. El artículo identifica los enfoques para el aseguramiento de la calidad del e-learning en el campo de la educación superior en Europa y América Latina. El estudio tiene como objetivo analizar la política de aseguramiento de la calidad de la educación electrónica universitaria en el ámbito de la educación superior en Europa y América Latina. El análisis de las actividades de las organizaciones europeas y latinoamericanas de aseguramiento de la calidad en el campo del e-learning ha demostrado que en el contexto de la educación superior en Europa y América Latina, las agencias externas de aseguramiento de la calidad juegan un papel importante en los procesos institucionales de aseguramiento de la calidad de la e-educación universitaria. El desarrollo de un sistema de aseguramiento de la calidad es una parte importante de la internacionalización de los programas educativos en general y del e-learning en particular, ya que es abierto y dinámico. La evaluación de la calidad de la educación no es sencilla; es un problema importante para las organizaciones relacionadas.

Palabras clave: Educación más alta, Educación electrónica, Aprendizaje electrónico, Calidad de educación, Agencias de aseguramiento de la calidad.

INTRODUCTION

The development of the information society and the spread of education using information and communication technologies (e-learning) cause a need for quality assurance of higher education in the format of e-learning (e-education). In international practice, there are developments regarding the criteria and functioning of e-learning. The approaches to ensuring the quality of education, mechanisms and indicators for determining its effectiveness have been developed. Quality assurance in the field of higher education is a prerequisite for the educational

activities of higher educational institutions, in particular, e-learning within educational programs (Rabadanova et al., 2020; Bukhteeva et al., 2019).

Today, universities have three areas of providing higher education: higher education as the activity of universities; lifelong education and professional development, which is likely to increase the number of graduates; and open education, which has emerged mainly due to open educational platforms (MOOCs). Universities try to develop policies and strategies to define their profile in these areas, which can complement each other and even overlap (Lai, 2011; Bukhteeva et al., 2019).

Digital teaching and learning methods can solve the problems of modern higher education and create new opportunities for teaching and learning in both these areas (Sekerin et al., 2018, 2019). They can innovate and even transform higher education regulations during the next years in the following areas (Górska, 2016):

- hybrid education will improve the quality and effectiveness of higher education due to the increased number of student and reduced number of staff;
- hybrid and online education will expand the lifelong education and professional development by offering flexible courses that involve more students and meet the needs of those who face longer careers and career shifts;
- MOOCs are offered only online, they provide massive and open learning opportunities for everybody and involve people in the knowledge society.

With the rapid development of e-learning all over the world, the problem of quality assurance of this format of higher education becomes urgent. However, it is believed that it is necessary to update these processes in the context of e-learning, since the tools used for the quality assurance are considered to be imprecise and, as a consequence, they do not indicate the results of these new educational methods (Gedeon & Khalil, 2015). According to some studies, the education assessment system should consider all its dimensions and areas, as well as the variables of the university phenomenon, from its management and implementation to the results (Zineldin et al., 2011). For this purpose, according to the author, assessment systems are required, which would systematize a huge amount of data obtained in the learning process.

The quality of e-learning is a challenge for higher education institutions in developing countries, including Latin America (Soto et al., 2020). There are several difficulties in the processes of assessment, accreditation or certification of e-education. It indicates a lack of unified criteria, standards or guidelines of the assessment methods implemented by the organizations responsible for these processes (Rama, 2015).

Practically, quality assurance in the field of online education has always been a challenge all over the world. Its methods require mechanisms of guarantee which are different from those usually used in traditional higher education in the aspect related to the processes in general, and to the assessment of learning in particular. It is also worth mentioning that

online higher education does not belong to the property of specialized educational institutions, as it was several decades ago. Almost all state universities and a large number of private ones have opportunities for distance and hybrid education. The latter combines components of online learning with conventional face-to-face education.

Some countries choose to regulate quality assurance basing on different methods and taking for granted the fact that the universities' curricula include such methods. These are often rules introduced by the state and sometimes by specialized agencies. Yet, it is inevitable that the most detailed rules often need to be revised to adapt to the changing environment. In this regard, regulating organizations, governments and agencies should remember that nowadays higher e-education can be a driving force for innovations in the university system, but under the condition that formal regulations do not overshadow it.

In addition to the problem of innovation activity regulation, there is another even more complex task: cross-border or global higher e-education regulation. If there is such an opportunity, the user will enter the global market, where it is possible to find an offer that better suits the needs, expectations and capabilities. The only formula that would benefit everyone is international conventions, and it remains poorly examined. Those promoted by UNESCO both globally and regionally in the field of higher education diploma recognition, open the door to a multi-faceted consensus.

LITERATURE REVIEW

According to the researchers, the quality of education can help to measure the impact of higher education (Amaral & Rosa, 2010). There are various definitions of the quality of education (Table 1).

Table 1
The concept of the quality of education.

| Source | The concept of the quality of education |
|-------------------------------|--|
| Harvey & Williams, 2010 | processes efficiency and correspondence to the results, which allow meeting the expectations of those who are considered to be the clients of education |
| Tam, 2014 | a feature of education, represented by the satisfaction of its clients (students) |
| Srinivasan & Delpryngle, 2007 | in terms of the goal of higher education, the quality of education is not a concept that can be explained; it requires an analysis of its components or dimensions; it becomes one of the main attributes of education |
| Schandler et al., 2015 | a factor that provides each student with confidence in the acquisition of knowledge, skills and competencies that ensure career development; it is also an element that focuses on the constant commitment to excellence and improvement of educational work |
| Akareem & Hossain, 2016 | the interaction of acquired competencies related to the relevant teachers following social requirements |
| Enders & Westerheijden, 2014 | the level of satisfaction of a student with the education provided by an institution |

According to A. Alcántara (2007), quality should involve all activities and functions of education: from teaching, assessment, curriculum, teachers and students to services, infrastructure and equipment.

In the UNESCO reports (2016), the quality of education is defined according to five dimensions:

- 1) relevance: it refers to the goals of education in both political and social contexts;
- 2) significance: education should be meaningful for every person, that is to say, any educational process should be focused on the student;

3) equity: every person should have equal opportunities for access to education, in other words, education is of good quality only when it is accessible;

4) effectiveness: the achievement of the goals proposed in the education systems to the degree that the principles established by the implementation of the goals are guaranteed;

5) efficiency: how education manages the resources that ensure the education systems, that is to say, the result of management and the transparency of this process.

The literature review showed that the researchers assess the quality of e-education basing on the following categories: 1) the basis and goals of the model, 2) the admission and graduation, 3) the content of curricula, activities, materials and educational sources, 4) course design and 5) assessment of education (Misuta & Pribilova, 2015). The authors conclude that assessment requires constant innovation, and it must evolve at various stages: creation, development and implementation.

According to researchers, new achievements in education require new measures (Lucas, 2014). If one of the goals of external quality assurance agencies is to support the improvement of teaching and learning, then they should pay attention not only to the results but also to educational processes in universities. The quality of teaching and learning also determines the quality of the results. In systems that focus on institutional quality assurance, quality assurance agencies should provide universities with internal assessment criteria and models, as well as digital teaching and learning methods.

Research hypothesis: in the context of higher education in Europe and Latin America external quality assurance agencies play an important role in the institutional processes of ensuring the quality of university e-education.

The proof of the hypothesis involves several tasks:

1. to analyze the experience of quality assurance agencies in the field of e-learning;
2. to define the basic principles of the activities of quality assurance agencies in the field of e-learning;
3. to identify the practical and applied aspects of the processes of accreditation and quality certification;
4. to examine the activities of quality assurance agencies in the field of e-learning.

The article consists of an introduction, literature review, description of research methods, results of the research and their discussion and conclusion.

METHODS

To achieve the aims set in the work, the following theoretical methods were used:

- descriptive method: to analyze the experience of quality assurance agencies in the field of e-learning;

- method of analysis: to define the basic principles of the activities of quality assurance agencies in the field of e-learning;
- method of synthesis: to identify the practical and applied aspects of the processes of accreditation and quality certification and to examine the activities of quality assurance agencies in the field of e-learning.

RESULTS

The analysis has shown that there are numerous international and national organizations in Europe, which focus on quality standardization in the field of e-learning. Some of these organizations are presented in Table 2.

Table 2
European quality assurance organizations in the field of e-learning

| No. | Name | Year of foundation | Brief description |
|-----|--|--------------------|--|
| 1 | European Association of Distance Teaching Universities, EADTU | 1987 | presents European universities with the opportunities of open and distance learning |
| 2 | International Network for Quality Assurance Agencies in Higher Education, INQAHE | 1991 | a worldwide association of organizations that deals with theoretical and practical solutions in the field of quality assurance in higher education |
| 3 | European Association for Distance Learning, EADL | 1993 | an international organization aimed at disseminating information and ideas about distance education |
| 4 | The European Association for Quality Assurance in Higher Education, ENQA | 2000 | association of European agencies for quality assurance in higher education |
| 5 | European Foundation for Quality in E-Learning, EFQUEL | 2005-2014 | a non-profit association for e-learning quality assurance |
| 6 | Open and Distance Learning Quality Council, ODLQC | 1995 | a British organization for identifying and improving the quality of education, developing quality standards and accreditation of educational programs |
| 7 | National Agency for Quality Assessment and Accreditation, ANECA | 1999 | the Spanish organization for higher education quality assessment, responsible for the assessment, certification and accreditation processes of the Spanish university system to improve and adapt to the European Higher Education Area (EHEA) |
| 8 | European Quality Assurance Network for Informatics Education, EQANIE | 2009 | a non-profit organization, aimed at ensuring the quality of educational programs in the field of informatics education in Europe |

The subsequent analysis has made it possible to compile a similar list of Latin American organizations working on quality standardization in the field of e-learning (Table 3).

Table 3
Latin American quality assurance organizations in the field of e-learning.

| No. | Name | Year of foundation | Brief description |
|-----|--|--------------------|--|
| 1 | Iberoamerican Association of Distance Higher Education, AIEDH | 1980 | a non-government association based in Madrid, aimed at implementing various projects to provide quality and relevant information in the field of distance higher education, as well as exchanging the best practices in this area |
| 2 | National Association of Universities and Higher Education Institutions, ANUIES | 1980 | a non-government association, which united 200 universities of Mexico, participates in the development of programs, plans and national policies in the field of higher education and in the creation of agencies aimed at promoting the development of higher education in the country |
| 3 | Interinstitutional Committee for the Evaluation of Higher Education, CIEES | 1991 | a non-profit and non-government association in Mexico that deals with quality assurance of educational programs and institutions of higher education |
| 4 | Latin American and Caribbean Institute for Quality in Distance Higher Education, CALID | 2005 | an organization that provides advice mainly in the process of self-assessment of programs that need it |
| 5 | National Accreditation Commission, CNA-Chile | 2006 | a Chilean independent organization aimed at checking and improving the quality of universities and educational programs |

DISCUSSION

Let us consider the main areas of the quality assurance activities concerning university e-learning in higher education in Europe.

The European Association of Distance Teaching Universities (EADTU) is the leading institutional association of European university modernization programs. The association includes 200 universities and about three million students. It is aimed at creating a European learning area following the Bologna declaration. The basic principles of the association include:

- student-centered education in a high-quality e-learning environment;

- openness to learners because of flexible and inclusive structures and methods;
- e-learning and mobility.

The main activities of EADTU include:

- Online, Open and Flexible (OOF) Education, support of cooperation and development of new teaching methods and techniques;
- organizational events for the exchange of experience;
- cooperation on issues concerning support e-learning by European organizations and national governments;
- research and innovation; open education and MOOCs; virtual mobility; skills and performance; education quality assurance;
- platform for the annual EADTU conference devoted to OOF Education;
- such services as an information center for trends of OOF Education and EU e-learning policies (Ossiannilsson et al., 2015).

With the support of the European Union, the “Quality Assessment for E-learning: A Benchmarking Approach” was developed, which included an overview of the six main components of the quality assurance process – strategic management, curriculum development, course development, educational materials delivery, staff support, student support (Prisacariu, 2015).

In 2003, EADTU introduced the eBologna project, aimed at creating a European electronic network for the implementation of the Bologna Process. The key elements are lifelong education; the introduction of online and hybrid education in the form of international cooperation; the use of e-learning for the distribution and accessibility of European education; the development of virtual mobility.

The Bologna Process defined a general approach to quality assurance in education. The European Association for Quality Assurance in Higher Education (ENQA) developed Standards and Guidelines for Quality Assurance in the European Higher Education Area (the “ESG”), which specifies the main requirements for the quality system of educational institutions (European Commission/EACEA/Eurydice, 2018a).

The European agencies have already taken important steps to assess innovations and improve the quality of digital education, but there is still a lot to be done in other countries. Only a minority of institutions provide external agencies with criteria, indicators, guidelines or examples of best practices for the improvement of the educational process. ENQA can help the institutions to exchange experiences and best practices and to develop and share certain criteria, indicators, guidelines and frameworks.

Such criteria, indicators and guidelines are published by the institutions of Cyprus, Ireland and the UK. In the UK, the Quality Code for Higher Education regulate teaching and learning processes in general, including e-learning. These guidelines provide the basis for the exchange of quality assurance criteria and indicators, as well as the quality assurance framework, guidelines and criteria developed by international associations (Vlachopoulos, 2016).

The EADTU research on e-education accreditation and collaboration with ENQA within the SEQUENT project resulted in the cooperation between the two organizations. They created EADTU-ENQA educational activities on hybrid and online education. Now, this is the basis for a structured dialogue between EADTU, ENQA and governments.

Today, ENQA plays an active role in responding to the latest developments in e-education by creating Working Groups on e-Learning, which has led to the publication of the “Quality Assurance and e-Learning” report. The report concludes that, on the one hand, quality assurance agencies should develop external review methods that consider the specific nature of e-learning, while, on the other hand, traditional institutions providing e-learning or hybrid programs should review their quality assurance systems to ensure the quality of their teaching and learning processes (Simonson, 2015).

Until 2014, the European e-learning quality assurance organization was the European Foundation for Quality in E-Learning (EFQUEL), created with the support of the European Center for the Development of Vocational Training (CEDEFOP) (2005-2014). The main activity of the organization was the educational one: seminars, short-term courses, summer schools under the Global Cooperation program (Albor et al., 2014).

The main activities of the foundation are UNIQUE Certification, ECB-Check and Sevaq+ which is a tool for designing and running self-assessment and shared-assessment processes in e-learning.

The international UNIQUE Certification is a quality label awarded to Higher Education Institutions, for the quality use of ICT (Information and Communication Technologies). It is aimed at promoting higher education reforms in Europe with the help of a quality assurance system in the field of e-learning. The main task is the creation of a pan-European system of accreditation of higher educational institutions, the activities of which are connected with e-learning. The result of the activity is the institutional accreditation process, which made it possible to assess the quality of e-learning education of various institutions. In 2012, the method was expanded, which made it possible to assess not only the educational institution but also its departments (European Commission/ EACEA/Eurydice, 2018b).

The main aim of the ECB-Check is to a quality label for e-learning programs, based on an independent assessment of programs and educational institutions that provide e-learning.

The ECB-Check is based on the following principles:

- support of the ongoing mutual self-assessment processes;
- cooperation with other institutions within the ECB-Check Framework;
- creation and support of open network cooperation for the experience exchange and improvement of education with the help of ICT.

The aims of ECB-Check activity are the following:

- the distribution of information on the activities of ECB-Check all over the world;
- certification aimed at ensuring the quality of e-learning;
- ongoing process of capacity building;
- improvement of the quality assurance and management of ECB-Check.

The community is open and has an educational course “Open ECB-Check”, where it is possible to obtain a certificate and become an ECB-Check Reviewer.

In 2012, the Open ECB-Check quality label for e-learning was introduced. The assessment takes place according to basic criteria, which include: information about the program and teachers; target audience; the quality and content of the program; the general structure of the program; media platform; the effectiveness of the use of software; report of the institution (Srivastava & Agarwal, 2013).

Let us consider in detail the activities of the European Quality Assurance Network for Informatics Education (EQANIE), which include the development of criteria and procedures for quality assessment and assurance of educational programs in informatics; development and provision of the Euro-Inf Quality Label for accredited educational programs in informatics; organization of the educational training; preparation and publication of the results of research on quality assurance in informatics education.

One of the tasks is the compilation of the lists of educational programs with the Euro-Inf Quality Label, the assistance to the development of national and regional accreditation organizations and the organization of educational seminars, masterclasses and conferences. However, the main activity is the accreditation of the educational program. Both EQANIE itself and its authorized organizations can carry out the accreditation program. Today, the authorized organizations include the National Agency for Quality Assessment and Accreditation (ANECA) in Spain, the Accreditation Agency for Study Programmes in Engineering, Informatics, Natural Sciences and Mathematics (ASIIN) in Germany and the British Computer Society (BCS) in the UK (Morard et al., 2014).

The accreditation process is initiated when the higher education institution submits an application containing preliminary information about the program. The initial assessment is carried out directly by the EQANIE Secretariat and members of the Accreditation Committee. In case of a positive assessment, the auditors (EQANIE representatives and invited experts) review the institution's self-assessment report. Each program is assessed according to the following: how the expected learning outcomes meet the requirements of the final results of the Euro-Inf; the availability of the necessary resources; the level of qualifications of students who will be educated; assessment methods and quality control procedures. After it, the auditors report back to the Accreditation Committee and provide their advice. The decision of the Accreditation Committee can be as follows:

- the program is accredited for 5 years with recommendations;

- the program may be accredited under certain conditions (conditions and deadlines are indicated);
- the accreditation procedure is suspended until the basic requirements are met;
- the program is not accredited (Nen, 2014).

The accredited program gets the Euro-Inf Quality Label and it is added to the list of accredited programs available on the EQANIE website. The Euro-Inf is aimed at creating a basis for a European accreditation system for educational programs in informatics. Besides, the Framework Standards and Accreditation Criteria were created, which were tested and further developed after test accreditations of the European higher education institutions. EQANIE keeps up with the times: in 2015 the Accreditation Committee changed the Framework Standards, and in 2016 the main body of the Framework Standards document was updated according to the Standards and Guidelines for Quality Assurance in the European Higher Education Area (2015, Brussels, Belgium) (Szabo, 2015).

The advantages of the EQANIE membership are:

- influence on the further development of standards and basic principles for improving the quality of the informatics program in higher education in Europe;
- opportunities for professional exchange in the field of IT education;
- access to information about events and changes in the field of IT education;
- participation in international projects related to quality assurance in education.

The Epprobate quality label for eLearning courseware was developed in 2012 by the Learning Agency Network (LANETO), the Walloon Telecommunications Agency (AWT) and the e-Learning Quality Service Center (eLQSC). The main goal of the project was to improve the quality and certification of educational materials used in e-learning.

The main goals of Epprobate are:

- development of a quality label for e-learning;
- increased recognition of e-learning by providing an international quality mark;
- facilitating the process of quality assurance for e-learning;
- creation of an international network of reviewers (pedagogical specialists, experts) and national partner organizations.

Four main criteria are used for the quality assessment: course design (information about the course content); target audience; media platform; content (intellectual property rights, legal compliance). Since 2012, the international Epprobate quality label for eLearning courseware has been used in 35 countries in Europe, Africa, Asia, Asia-Pacific, North and South America (Bremer, 2012).

The experience of the National Agency for Quality Assessment and Accreditation (ANECA) and the Iberoamerican Association of Distance Higher Education (AIESAD) is of particular importance for assessing the quality of e-learning in Latin America. To achieve the

goals, ANECA develops assessments for master's degree and doctorate; academic institutions and processes; faculty members and for the professors' research using the Spanish National Commission for Research Evaluation (CNEAI) (Ríos, 2015).

ANECA organizes the assessment, certification and accreditation activities through several processes: teacher assessment programs, degree assessment programs and institutional assessment programs. There are three procedures:

- audit guides university centers in the development of internal quality assurance systems;
- institutional accreditation evaluates university centers' applications for institutional accreditation;
- DOCENTIA helps universities create assessment systems for their teachers (Arribas Diaz & Martínez-Mediano, 2015).

The institutional assessment is a program that implements the process of the accreditation of educational institutions with activities in universities dependent on autonomous communities (ANECA is responsible for the accreditation of the latter), universities established in autonomous communities without external evaluation, registered in the European Quality Assurance Register for Higher Education (EQAR), and the National University of Distance Education.

In Latin America, institutional accreditation is carried out by state organizations. For example, in Chile, institutional accreditation is carried out by the National Accreditation Commission (CNA-Chile), which is responsible for verifying and promoting the quality of higher education through:

- institutional accreditation of autonomous universities, professional institutions and technical educational centers;
- applications for authorization submitted by agencies responsible for accreditation and monitoring of bachelor's and master's degree programs in the field of healthcare;
- maintaining publicly available information systems that contain appropriate decisions about the accreditation and authorization processes.

The comparison of CNA-Chile and ANECA quality standards by J. Domínguez identifies the following similar criteria:

- learning process: it is presented in an understandable form, which demonstrates the consistency of the learning process, curriculum and pedagogical strategies; there are procedures for updating the learning process and taking into account the views of external reviews of the learning process;
- the curriculum: it is updatable and flexible; professional practices do not overload the curriculum;
- graduates and employers: graduates tracking policy, operational policy ensuring communication with former students, information about their work and availability of consultations with employers;

- learning outcomes: indicators of the progress, monitoring of students' learning path, availability of indicators of teacher performance, completion date;
- teaching practice: appropriate teaching methods, monitoring of educational processes and mechanisms for verifying the achieved competencies (Domínguez, 2016).

The next Latin American organizations for assessing the quality of educational programs (including online education) and universities, in general, is the Interinstitutional Committees for the Evaluation of Higher Education (CIEES), created in 1991 by the National Coordination for the Higher Education Planning (CONPES) (CIEES, 2018a, 2018b). CIEES include nine committees, which differ in area, and each of them includes about 12 scientists from all types of universities from all states of the country. The function of CIEES is to assess the quality of the educational programs of the university.

Another organization that regulates higher education in Mexico is the National Association of Universities and Higher Education Institutions (ANUIES), which sets standards and criteria for graduates in collaboration with the National Council of Science and Technology (Conacyt), which offers a system for assessing the quality of educational programs not included in school education.

The Latin American and Caribbean Institute for Quality in Distance Higher Education (CALED) presents the Quality Score Card (Tarjeta de puntuación, SCCQAP), which is the assessment of the online Bachelor's degree programs. The beginning of its activity was the project of the virtual center for the development of quality standards in Latin America and the Caribbean. Consequently, a Congress on Quality and International Accreditation in Distance Higher Education was held in October 2005 at the Private Technical University of Loja (Ecuador), awakening the interest of a large number of institutions, who resolved to create CALED.

Today, CALED offers universities its self-assessment guide for distance learning programs, allowing universities to assess themselves using 9 criteria, 30 sub-criteria, 79 goals, 149 standards and 333 indicators.

The analysis of assessment systems and literature review made it possible to identify eight aspects (categories) of assessments, used by most of the Latin American organizations responsible for the quality assurance of e-education. All this allowed identifying common elements that these organizations share.

The first cluster of assessments focuses on an educational model that includes criteria related to curricula, programs, learning processes, profiling and course design. This is followed by a cluster of assessments related to the results of the model, where it is supposed to evaluate the effectiveness of educational programs with the final effectiveness index, coverage and transcendence of the institution and the model itself. The third cluster of assessments refers to students, and the following aspects are taken into account: the admission processes, each student's profiles, student support programs, learning path, etc. Besides, another cluster of

assessments is used to assess the staff, it classifies the formation and results of academic courses, the assessment of the teachers and their performance.

The emphasis is placed on the tools that contribute to the education of future professionals, which is the assessment of infrastructure: the availability of equipment, laboratories, facilities, technologies, platforms, libraries, etc. It also includes registration functions, databases, portals, information systems, policies and rules, etc., which are grouped into a cluster of service and administrative processes assessment.

The present analysis makes it possible to note that the evaluators focus on the university's commitment to the environment and the quality of universities, and criteria can be included in the assessment of social responsibility. The last cluster of assessments is aimed at assessing communication mechanisms and relates to the exchanging processes and mobility.

CONCLUSION

The following conclusions can be drawn from the study.

The development of a quality assurance system is an important part of the internationalization of educational programs in general and e-learning in particular since it is open and dynamic. Quality and effectiveness assurance of e-learning is regulated by educational institutions and regulatory organizations: specialized quality agencies.

Thus, the results of the study confirmed the hypothesis that in the context of higher education in Europe and Latin America external quality assurance agencies play an important role in the institutional processes of ensuring the quality of university e-education.

The main tasks of such agencies are:

- professional assistance in identifying the correspondence of educational programs to international standards;
- development of recommendations for educational institutions aimed at improving e-learning;
- methodological assistance in the e-learning educational programs accreditation.

In the global practice, there are enough developments for quality assurance in the field of e-learning. Therefore, there is a need to spread information about the activities of quality assurance agencies dealing with e-education. The information on the activities of member agencies and the access to a database of accredited programs will be helpful for higher education institutions since it is possible to improve the quality and reduce the cost for preparing courses by using approved standards and positive developments. The international accreditation and quality certification will provide an opportunity to join the process of internationalization, which is especially important for e-learning which is open and develops constantly. The correspondence of national educational programs to international requirements and accreditation of international quality agencies will contribute to the quality assurance

processes in e-education and increase the competitiveness of educational institutions.

The results of the analysis make it possible to conclude that the assessment of the quality of education is not simple; it is an important problem for the related organizations. One of the main reasons for this is associated with constant technological changes and innovations. In this regard, along with innovations and changes in the education system, the methods for assessing the quality of e-education should also be restructured. To keep up with the times and support further innovation with the help of online and distance education, higher education institutions, quality assurance agencies and governments need to cooperate.

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REFERENCES

- Akareem, H. S., & Hossain, S. S. (2016). Determinants of education quality: what makes students' perception different? *Open Review of Educational Research*, 3(1), 52-67. <http://dx.doi.org/10.1080/23265507.2016.1155167>
- Albor, G. R., Lorduy, V. G., & Dau, M. A. (2014). Quality of higher education for distance and virtual learning. *Investigación & Desarrollo*, 22(1), 79-120.
- Alcántara, A. (2007). Dimensiones de calidad en la educación superior. *Reencuentro*, 50, 21-27.
- Amaral, A., & Rosa, M. (2010). Recent trends in quality assurance. *Quality in Higher Education*, 16(1), 59-61. <http://dx.doi.org/10.1080/13538321003679515>
- Arribas Diaz, J. A., & Martínez-Mediano, C. (2015). El programa AUDIT de la ANECA y las normas internacionales ISO 9000. *Análisis comparativo. Educación XXI*, 18(2), 375-395.
- Bremer, C. (2012). Enhancing e-learning quality through the application of the AKUE procedure model. *Journal of Computer Assisted Learning*, 28(1), 15-26. <http://dx.doi.org/10.1111/j.1365-2729.2011.00444.x>
- Bukhteeva, E. E., Zimovina, O. A., Shishov, S. E., Rabadanova, R. S., & Polozhentseva, I. V. (2019). Practical and theoretical grounds of a student's autonomous learning activities in professional education. *Amazonia Investiga*, 8(20), 575-581
- CIEES. (2018a). Proceso general para la evaluación y acreditación de programas educativos de educación superior. Available: <https://www.ciees.edu.mx/documentos/proceso-general-para-la-evaluacion-y-acreditacion-de-programas-educativos-de-educacion-superior.pdf>
- CIEES. (2018b). Proceso general para la evaluación de instituciones de educación superior. Available: https://www.uv.mx/planeacioninstitucional/files/2020/10/CIEES_Proceso-general_2018_r.pdf

- Domínguez, J. (2016). Proceso de acreditación de carreras universitarias en el contexto iberoamericano. In: Rama, C., Domínguez, J. (Coord.). El aseguramiento de la calidad de la Educación Virtual. Perú: Universidad Católica Los Ángeles de Chimbote, pp. 43-53.
- Enders, J., & Westerheijden, D. F. (2014). The Dutch way of new public management. A critical perspective on quality assurance in higher education. *Policy and Society*, 33(3), 189-198. <http://dx.doi.org/10.1016/j.polsoc.2014.07.004>
- European Commission/EACEA/Eurydice. (2018a). The European higher education area in 2018: Bologna process implementation report. Luxembourg: Publications Office of the European Union.
- European Commission/EACEA/Eurydice. (2018b). Structural indicators for monitoring education and training systems in Europe – 2018. Eurydice Report. Luxembourg: Publications Office of the European Union.
- Gedeon, P., & Khalil, L. (2015). Management of the transition to e-learning in higher education based on competence quotient. *Procedia Computer Science*, 65, 324-332. <https://doi.org/10.1016/j.procs.2015.09.091>
- Górska, D. (2016). E-learning in higher education. The Person and the Challenges, 6(2), 35–43. <http://dx.doi.org/10.15633/pch.1868>
- Harvey, L., & Williams, J. (2010). Fifteen years of quality in higher education. *Quality in Higher Education*, 16(1), 3–36. <http://dx.doi.org/10.1080/13538321003679457>
- Lai, K. - W. (2011). Digital technology and the culture of teaching and learning in higher education. *Australasian Journal of Educational Technology*, 27(8), 1263-1275. <https://doi.org/10.14742/ajet.892>
- Lucas, L. (2014). Academic resistance to quality assurance processes in higher education in the UK. *Policy and Society*, 33(3), 215-224. <http://dx.doi.org/10.1016/j.polsoc.2014.09.006>
- Misut, M., & Pribilova, K. (2015). Measuring of quality in the context of e-learning. *Procedia - Social and Behavioral Sciences*, 177, 312-319. <http://dx.doi.org/10.1016/j.sbspro.2015.02.347>
- Morard, B., Stancu, I., & Stancu, A. (2014). E-learning in organizations vs. universities: competition or cooperation? In: 2014 3rd International Conference on Business, Management and Governance IPEDR, vol. 82, Singapore, pp. 50-58.
- Nen, M. (2014). The improvement in the quality of learning In Europe's higher education institutions. *Management and Marketing Journal*, 1, 75-83.
- Ossiannilsson, E., Williams, K., Camilleri, A. F., & Brown, M. (2015). Quality models in online and open education around the globe. State of the art and recommendations. Oslo: International Council for Open and Distance Education, 52 p.
- Prisacariu, A. (2015). New perspectives of quality assurance in European higher education. *Procedia - Social and Behavioral Sciences*, 180, 119-126. <http://dx.doi.org/10.1016/j.sbspro.2015.02.094>
- Rabadanova, R. S., Bogatyreva, S. N., Artemieva, S. I., Aralova, E. V., Polozhentseva, I. V., & Pisarevsky, K. L. (2020). Key features of human nutrition behavior. *Revista Inclusiones*, 7(S1-1), 170-181.
- Rama, C. (2015). Las complejidades de evaluar y acreditar la educación a distancia. In: Morocho, M., Rama, C. (Coord.). Los problemas de la

- evaluación de la educación a distancia en América Latina y el Caribe. Loja, Ecuador: Universidad Técnica Particular de Loja, pp. 9-16.
- Ríos, C. (2015). Quality assurance in higher education in Spain: an overview of the accreditation system international research and review. *Journal of Phi Beta Delta Honor Society for International Scholars*, 5(1), 25-45.
- Schindler, L., Puls-Elvidge, S., Welzant, H., & Crawford, L. (2015). Definitions of quality in higher education: a synthesis of the literature. *Higher Learning Research Communications*, 5(3), 3-13.
- Sekerin, V. D., Gorokhova, A. E., Dudin, M. N., Danko, T. P., & Nikolaykin, N. I. (2018). Applying interactive marketing methods to improve the quality of university educational services. *Quality-Access to Success*, 19(163), 37-42.
- Sekerin, V. D., Dudin, M. N., Gorokhova, A. E., Gaiduk, V. I., & Volkov, V. I. (2019). Creation of a virtual image: digital technology of the 21st century. *Amazonia Investiga*, 8(20), 340-348.
- Simonson, M. (2015). Accreditation and quality in distance education. *Distance Learning*, 12(1), 27-28.
- Soto, G. G. Y., López, G. R. I., & Armando, L. R. (2020). Calidad en la educación superior en línea: un análisis teórico. *Revista Educación*, 44(2), 1-16. <http://doi.org/10.15517/revedu.v44i2.39714>
- Srikanthan, G., & Dalrymple, J. (2007). A conceptual overview of a holistic model for quality in higher education. *International Journal of Educational Management*, 21(3), 173–193. <http://dx.doi.org/10.1108/09513540710738647>
- Srivastava, E., & Agarwal, N. (2013). E-learning: new trend in education and training. *International Journal of Advanced Research*, 1(8), 797-810.
- Szabo, M. (2015). International quality reviews with an EQAR-registered agency. In: Curaj, A., Matei, L., Pricopie, R., Salmi, J., Scott, P. (Eds.). *The European higher education area*. Cham: Springer, pp. 639-663. https://doi.org/10.1007/978-3-319-20877-0_41
- Tam, M. (2014). Outcomes-based approach to quality assessment and curriculum improvement in higher education. *Quality Assurance in Education*, 22(2), 158–168. <http://dx.doi.org/10.1108/QAE-09-2011-0059>
- Vlachopoulos, D. (2016). Assuring quality in e-learning course design: the roadmap. *International Review of Research in Open and Distributed Learning*, 17(6), 184-205. <http://dx.doi.org/10.19173/irrodl.v17i6.2784>
- Zineldin, M., Akdag, H., & Vasicheva, V. (2011). Assessing quality in higher education: New criteria for evaluating students' satisfaction. *Quality in Higher Education*, 17(2), 231–243. <http://dx.doi.org/10.1080/13538322.2011.582796>

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