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Quality Assessment as a Tool for Teaching Effectiveness

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Abstract: Meaningful evaluation of teaching quality is a complex process. The complexity of quality assessment can be considered from two perspectives. The first concerns the range of formal instruments that enable the effective measurement of quality in education, while the second, arguably more demanding, involves identifying a coherent set of indicators that are relevant for determining the level of educational quality. The integration of these two perspectives results in a valid and reliable evaluation instrument which, if it is to serve as a genuine indicator of current educational quality, must be applied systematically at both the school and classroom levels. Do teachers provide students with sufficient opportunities to express their ideas? Are students given adequate space to receive constructive feedback? Do teachers encourage students to think independently and create cognitive conflicts between existing and new knowledge as a driving force for solving problem-based tasks? Does the classroom environment foster a positive atmosphere that not only embraces diverse opinions and ideas but also promotes active student participation in the learning process while gradually encouraging learners to take responsibility for their own learning? Does the teacher create a psychologically safe classroom environment, free from fear and ridicule, that reflects confidence in every student's ability to make critical judgments and, ultimately, values and encourages critical thinking? The theoretical analysis of mechanisms for assessing the quality of education at the classroom level has substantial pedagogical value, as it may indicate directions for the purposeful regulation of a wide range of pedagogical practices in school settings. Such an approach can contribute to improving both the effectiveness and the overall quality of the didactic system and its individual components.

Keywords: Quality, Critical thinking, Constructive feedback, Positive climate

Introduction

Higher education represents one of the most important areas of public policy, as it significantly influences economic development, innovation potential, and the quality of human capital. Universities and other higher education institutions provide professional preparation for various sectors of society, conduct scientific research, and contribute to addressing current social challenges. Therefore, the quality of higher education represents one of the fundamental conditions for the successful functioning of modern societies (Harvey & Green, 1993).

In recent decades, higher education has undergone significant transformations. The development of information technologies, internationalisation of study, increasing mobility of students and academic staff, as well as growing expectations of employers regarding graduates' professional and transferable competencies have created new challenges for higher education institutions. The traditional model of teaching based primarily on knowledge transmission is gradually being replaced by approaches focused on active learning, critical thinking, problem-solving, and the development of competencies required for lifelong learning (Biggs & Tang, 2011).

An important milestone in the development of higher education quality was the establishment of the European Higher Education Area (EHEA) within the framework of the Bologna Process. Its objectives include improving the comparability of study programs, supporting student and academic mobility, increasing transparency of qualifications, and establishing common principles of quality assurance. The document *Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG 2015)* created a common framework for internal and external quality assurance systems across European higher education institutions (European Association for Quality Assurance in Higher Education [ENQA], 2015).

Contemporary approaches to assessing higher education quality extend beyond traditional indicators of academic achievement. Increasing attention is paid to graduate employability, student satisfaction, research performance, international cooperation, cooperation with professional practice, and the ability of higher education institutions to respond effectively to changing societal needs. Consequently, quality is understood as a complex and dynamic concept encompassing all processes and activities conducted within higher education institutions. The aim of this paper is to analyse the main determinants of higher education quality and to identify factors that significantly influence the effectiveness of the educational process.

Theoretical Background of Higher Education Quality

Quality has become one of the most extensively studied concepts in higher education research. Despite the large number of academic publications addressing this topic, there is no universally accepted definition of quality, as its meaning depends on the perspective of different stakeholders, including students, academic staff, employers, policymakers, and society as a whole. Harvey and Green (1993) identified five main approaches to understanding quality in higher education: quality as exceptional, quality as perfection, quality as fitness for purpose, quality as value for money, and quality as transformation and continuous improvement. The last-mentioned approach has become one of the foundations of modern quality management systems in higher education institutions. Current approaches emphasize that higher education quality is a complex system of interconnected factors. These include the quality of study programs, academic staff expertise, effectiveness of teaching methods, learning resources, research activities, internationalization, digital transformation, and cooperation with external stakeholders.

A significant contribution to higher education theory is the concept of constructive alignment, introduced by Biggs and Tang (2011). According to this concept, intended learning outcomes, teaching methods, and assessment approaches should be mutually aligned. When these components are effectively connected, students achieve deeper understanding, develop critical thinking skills, and are better able to apply acquired knowledge in professional contexts. A major contemporary trend is the shift towards student-centered learning, which represents one of the fundamental principles of the European Higher Education Area. This approach emphasizes students' active participation in the learning process, the development of autonomy, creativity, and competencies necessary for lifelong learning. Students are no longer perceived as passive recipients of information but as active participants in the construction of knowledge. According to the ESG standards (ENQA, 2015), higher education institutions should create conditions supporting high-quality teaching, transparent assessment, regular improvement of study programs, student involvement in decision-making processes, and systematic monitoring of quality. These principles form the basis of modern quality assurance systems in higher education.

The importance of educational quality has increased further following the COVID-19 pandemic, which accelerated the digital transformation of higher education. Online learning platforms, hybrid teaching models, open educational resources, and artificial intelligence tools have become increasingly integrated into academic environments. These developments provide new opportunities for personalized learning and improved access to education while simultaneously creating new requirements for the digital competencies of academic staff and students.

Method

This paper is designed as a review study based on a systematic analysis and synthesis of available scientific literature. The main objective was to identify the key determinants of higher education quality that are currently considered essential from the perspective of international research and European quality assurance standards.

The study applies methods of analysis, comparison, synthesis, and critical interpretation of scientific knowledge. The analysis focuses primarily on scientific articles, academic monographs, and strategic documents addressing higher education pedagogy, quality management in education, and educational policy. The selection of literature was oriented towards relevant domestic and international sources dealing with higher education quality assurance, teaching effectiveness, academic competencies, and institutional development. The analysis focused on six main dimensions of higher education quality:

- academic staff competencies,
- quality of study programs,
- research and development activities,
- learning and teaching infrastructure,
- internationalization of higher education,
- internal quality assurance systems.

This methodological approach enables a comprehensive assessment of higher education quality and allows the identification of factors that significantly influence the effectiveness and sustainability of educational processes within higher education institutions.

Determinants of Higher Education Quality

Academic Staff Competencies

One of the most significant factors determining the quality of higher education is the professional and pedagogical competence of academic staff. The quality of teaching does not depend solely on lecturers' expertise in their respective disciplines but also on their ability to create learning environments that support active engagement, critical thinking, creativity, and independent student work. Contemporary higher education pedagogy emphasizes a transition from traditional teacher-centered approaches towards active learning strategies. Among the most effective methods are problem-based learning, project-based learning, case studies, collaborative learning, simulations, and reflective learning. These approaches increase student engagement and contribute to the development of analytical, communication, and decision-making competencies.

An essential component of academic staff competence is the ability to effectively integrate digital technologies into teaching and learning. The development of online learning platforms, learning management systems (LMS), and artificial intelligence-based educational tools creates new opportunities for personalized learning and flexible educational approaches. However, these developments also require continuous professional development of academic staff in the field of digital competencies. The quality of academic teaching should also be supported through systematic feedback mechanisms, including student evaluations, peer observation, teaching portfolios, and continuous professional development activities.

Quality of Study Programs

Study programs represent the fundamental instrument through which higher education institutions implement their educational mission. Their quality depends on several factors, including the relevance of content, clearly defined learning outcomes, appropriate teaching methods, and effective assessment strategies. Contemporary study programs must reflect developments within scientific disciplines, technological progress, and changing societal and economic needs. Regular curriculum review and innovation are therefore essential for ensuring that students acquire relevant knowledge and competencies applicable in professional practice.

A key principle in the development of modern study programs is the orientation towards learning outcomes. Learning outcomes define what students are expected to know, understand, and be able to demonstrate after completing a course or program. They provide a basis for selecting appropriate teaching methods and assessment procedures. Cooperation between higher education institutions and external stakeholders, including employers, professional organizations, and graduates, plays an important role in improving study program quality. Their feedback helps universities adapt curricula to labor market requirements and increase graduate employability.

Research and Development Activities

The integration of education and research represents one of the defining characteristics of high-quality universities. Research activities contribute to the creation of new knowledge, which can subsequently be incorporated into teaching processes. Through this connection, students gain access to current scientific developments and learn to critically evaluate existing knowledge. Student involvement in research projects supports the development of analytical thinking, research skills, methodological competencies, and the ability to address complex problems. Academic staff engaged in research activities contribute to the advancement of scientific knowledge and enrich teaching with contemporary perspectives. The quality of research activities also influences the international reputation of higher education institutions and their position within global academic networks. International research cooperation, scientific publications, and participation in competitive research projects are important indicators of institutional excellence.

Learning and Teaching Infrastructure

Effective higher education requires appropriate material, technological, and organizational conditions. Essential elements include modern classrooms, laboratories, specialized facilities, libraries, information systems, and access to scientific databases. Digital transformation has significantly expanded opportunities for teaching and learning through electronic courses, virtual laboratories, online collaboration platforms, and digital academic resources. These technologies support flexible learning approaches, continuous assessment, and more effective communication between students and academic staff. Investment in infrastructure represents an important prerequisite for improving educational quality. Adequate learning environments enable students to develop both theoretical knowledge and practical skills necessary for successful professional performance.

Internationalization of Higher Education

Internationalization has become one of the strategic priorities of contemporary higher education institutions. International cooperation contributes to knowledge exchange, development of joint research activities, improvement of study programs, and enhancement of academic standards. Important instruments of internationalization include student and staff mobility, joint degree programs, international research projects, and the involvement of foreign experts in teaching activities. Programs such as Erasmus+ support the development of intercultural competencies, language skills, and students' ability to operate effectively in international professional environments. Internationalization also contributes to strengthening research capacity, expanding institutional partnerships, and implementing internationally recognized approaches to teaching and quality management.

Quality Assurance Systems in Higher Education

Quality assurance represents a systematic and continuous process of planning, monitoring, evaluating, and improving all activities performed by higher education institutions. Contemporary universities perceive quality not only as an outcome indicator but also as a strategic principle that influences educational activities, research performance, institutional management, human resource development, and cooperation with external stakeholders. Within the European Higher Education Area, quality assurance systems are based primarily on the principles defined in the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG 2015). These standards emphasize the importance of internal quality assurance systems based on transparency, academic integrity, student-centered learning, stakeholder involvement, and continuous improvement (European Association for Quality Assurance in Higher Education [ENQA], 2015). An effective internal quality assurance system includes:

- development and regular review of study programs,
- evaluation of teaching activities,
- monitoring of learning outcomes,
- collection of feedback from students and graduates,
- assessment of graduate employability,
- professional development of academic staff,
- evaluation of research activities,
- strategic planning and institutional development.

A significant element of quality management is the creation of a quality culture within higher education institutions. Quality culture refers to shared values, attitudes, and practices that encourage continuous improvement and collective responsibility for educational excellence. It requires active involvement of university leadership, academic staff, students, administrative employees, and external partners. In the context of European higher education, internal quality assurance systems should not be understood merely as administrative procedures connected with accreditation processes. Their primary purpose is to support institutional development, improve educational practices, and create conditions for achieving sustainable academic excellence.

Discussion

The analysis of scientific literature indicates that higher education quality is a multidimensional phenomenon resulting from the interaction of various institutional, pedagogical, technological, and social factors. No single factor determines quality independently; rather, quality emerges from the interconnected functioning of teaching, research, management, infrastructure, and external cooperation. One of the most important findings is the central role of academic staff in ensuring educational quality. Professional expertise alone is insufficient; effective teaching requires pedagogical knowledge, communication skills, the ability to use innovative teaching methods, and willingness to engage in continuous professional development. Therefore, systematic support for academic staff development should represent an essential component of institutional quality strategies.

Another important issue is the transformation of study programs towards competence-based education. Modern employers increasingly expect graduates to possess not only specialized knowledge but also transferable skills, including critical thinking, teamwork, communication abilities, digital literacy, creativity, and problem-solving competencies. These skills can be effectively developed through active learning approaches and stronger links between academic education and professional practice.

Digital transformation has significantly influenced the understanding of quality in higher education. The expansion of online and hybrid learning models has created opportunities for greater flexibility, accessibility, and individualization of education. At the same time, it has introduced new challenges related to digital competencies, academic integrity, data protection, and the responsible use of artificial intelligence in educational environments.

Internationalization represents another important dimension of quality enhancement. Student and staff mobility, international research cooperation, and global academic partnerships contribute to knowledge exchange, institutional development, and the improvement of educational standards. Higher education institutions actively involved in international cooperation often demonstrate stronger capacity for innovation and continuous improvement. The findings suggest that effective quality assurance requires a comprehensive institutional approach based on evidence-informed decision-making, regular evaluation of educational processes, stakeholder participation, and a commitment to continuous enhancement.

Conclusion

The quality of higher education is a complex and dynamic concept influenced by numerous interconnected factors, including academic staff competencies, study program quality, research performance, technological infrastructure, international cooperation, and institutional quality assurance systems. The analysis confirms that sustainable improvement of higher education quality requires a holistic approach based on continuous development, evidence-based decision-making, and active involvement of all stakeholders. Universities must continuously adapt to technological changes, societal expectations, and labor market transformations while maintaining their fundamental missions of education, research, and social responsibility. Academic staff remain one of the most important determinants of educational quality. Their expertise, pedagogical competence, and ability to implement innovative approaches directly influence students' learning experiences and outcomes. At the same time, high-quality study programs, effective quality assurance mechanisms, and strong connections between teaching and research create essential conditions for institutional excellence.

Future-oriented higher education institutions will be those capable of combining academic traditions with innovation, digital transformation, international cooperation, and a strong commitment to continuous quality improvement. This study is based on a review and analysis of existing scientific literature and international

policy documents. The main limitation is the absence of original empirical data that would allow direct measurement of quality determinants within specific higher education institutions.

Future research should focus on comparative analyses of quality assurance systems across different countries, evaluation of the impact of digital transformation and artificial intelligence on learning outcomes, and empirical investigation of relationships between teaching quality, student satisfaction, and graduate employability. Further research should also explore the development of academic staff competencies, implementation of student-centered learning approaches, and the effectiveness of institutional quality management models.

Recommendations for Practice

Based on the analysis presented in this paper, several recommendations can be formulated to support the improvement of higher education quality:

- ✓ Strengthen continuous professional development of academic staff, particularly in the areas of innovative teaching methods, digital competencies, assessment strategies, and responsible use of artificial intelligence.
- ✓ Regularly review and update study programs according to developments in scientific disciplines, societal needs, labor market requirements, and feedback from students and graduates.
- ✓ Enhance cooperation with professional practice by involving employers and external experts in curriculum development, teaching activities, and student internships.
- ✓ Promote internationalization strategies through academic mobility, international research cooperation, joint educational programs, and exchange of good practices.
- ✓ Develop a strong institutional quality culture based on shared responsibility, transparency, active participation of stakeholders, and continuous improvement.
- ✓ Use data-driven approaches in quality management, including analysis of student achievement, graduate employment, student satisfaction, and teaching effectiveness.

Implementation of these recommendations may contribute to improving educational outcomes, increasing graduate employability, strengthening research capacity, and enhancing the international competitiveness of higher education institutions.

Scientific Ethics Declaration

* The authors declare that the scientific ethical and legal responsibility of this article published in EPES journal belongs to the authors. Artificial intelligence was used for formal revision and verification of the translation.

Conflict of Interest

* The authors Rusková and Vašková declare that they have no conflicts of interest.

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