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The Role of Electronic Portfolio in Evaluation of Scientific Competence of Professor-Teachers in Higher Educational Institutions

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ABSTRACT: The article raises the question of the urgency of creating an electronic portfolio of achievements and its significance in assessing the activities of scientific and pedagogical workers on the example of a particular institution. A systematic theoretical analysis of approaches to the definition of key concepts «quality» and «quality of education» is presented. The key aspects of educational activity that most significantly affect the quality of higher education are identified, the most significant of which is the quality of the teaching staff of the university. The key components determining the quality of scientific and pedagogical staff of the university are singled out: cognitive, personal, motivational and value. The problem of the ambiguity and objectivity of assessing the quality of the teacher's activity is defined.

The possibilities of the method of the electronic portfolio as a tool for evaluating, focused on the result and development of professional and personal components of pedagogical activity are considered. The experience of using an electronic portfolio for evaluating the quality of teaching activities is described. The results of a study aimed at identifying potential opportunities for an electronic portfolio in the quality management system are presented, as well as conclusions about the impact of the electronic portfolio method on the formation of self-esteem, education of criticality and exactitude, raising the level of claims for high results and developing the professional career of teachers, Improving the quality of the educational process of the university as a whole.

KEYWORDS: Quality; quality of higher education; Quality of staff; Portfolio; Electronic portfolio; Assessment of the quality of the teacher; Unified information educational environment of the university; Self-assessment and self-reflection of professional activity.

I.INTRODUCTION

There is a growing perception that the use of ICT tools, especially e-textbooks and multimedia, in modern teaching can increase the effectiveness of teaching by introducing new technologies into the teaching process and has a number of important advantages. Among these new technologies is the electronic portfolio. The use of different models of e-portfolios has made it possible to make the following recommendations. The e-portfolio of higher education teachers should be focused on the following main types.

Proper planning and implementation of educational, scientific and cultural-educational activities in the organization of their effective work in relation to teachers today, as well as rapid adaptation to modern requirements in the continuous improvement of professional pedagogical skills. requirements are set. In particular, the competitiveness of the teaching staff in the educational process depends on its ability to master advanced educational technologies, adapt to changing and growing professional requirements.

Today, the formation of modern information and communication technologies as an integral part of pedagogical activity and professional competence is considered a priority. For this reason, one of the most important pedagogical tasks is to organize a professional database of teachers and educational communication with students on the basis of electronic resources. Such tasks require the development of an electronic portfolio of teachers.[3,4]

The concept of "portfolio" originated in Western Europe in the XV-XVI centuries, during the Renaissance, architects provided their customers with ready-made construction projects and sketches in a separate folder called

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"portfolio". The documents presented in this folder gave the applicant an impression of the professional qualities of the construction project.

Nowadays, the portfolio is used in the business world to showcase the company's achievements, and in the field of photography and modeling - as a photo album.[1]

The idea of using a portfolio in education originated in the United States in the mid-1980s. After the United States and Canada, the idea of a portfolio became popular in Europe and Japan, and in the early 21st century, the idea became widespread in Russia and is now widespread in Uzbekistan.

We used "portfolio" technology to store, systematize and document the results of the scientific activities of faculty and students.

The term "portfolio" has long been familiar to art professionals: many artists, both now and in past centuries, have created portfolios of their creative work. The portfolios of organizations and enterprises help to popularize the services they provide in the market, making it easier to find customers and consumers of services.

In pedagogical practice, there are three main types of portfolios: "files of documents" - a portfolio of certified (documented) individual achievements; "portfolio of works" - a collection of various creative, design, research works, as well as a description of the main forms and directions of the author's activity; a "review portfolio" is an author's assessment of his or her accomplishments, an analysis of his or her various activities and outcomes, a resume, planning future stages of professional growth, as well as various reviews and more.

Teacher's portfolio is a set of materials that show the ability to solve various problems in the professional activity of the teacher, as well as to assess the level of professionalism of the teacher, and is an individual folder to be evaluated. It is an individual folder that reflects and evaluates professional achievements in different areas of activity over a period of time.[5,8]

There are a number of methods and techniques in determining the scientific activity of professors and teachers of modern higher education institutions. Based on the quality assessment approach, university teachers actively analyze the basic concepts of 'quality' and 'quality of education'. Concludes on the uncertainty of the category of quality of education. At the same time, experts in the field of education quality assessment are generally understood as an integral feature of the education system, which reflects the degree to which the actual achieved learning outcomes meet the regulatory requirements.

According to the UNESCO Program Document, there are three aspects of educational activity that have a significant impact on the quality of higher education.

First, the quality of staff, the high academic qualifications of university teachers and academic staff, and the quality of educational programs, the combination of planning and research, ensure their public demand.[3]

Second, the quality of students has become a reality for mass higher education, which is only the progress made in diversifying curricula to overcome the existing multifaceted gap between secondary and higher education, education and career guidance mechanisms and youth incentives.

Third, the quality of infrastructure and the "quality learning environment" of higher education institutions, including computer networks and modern libraries, can be seen as a priority of national education to enhance their scientific capacity.

Thus, the teaching staff is one of the indicators of the quality of education at the university.

The quality of master's degree training at the university depends on the pedagogical competence of the scientific and pedagogical staff of the university, their qualifications, scientific activities.[2]

Summarizing the research conducted in this area, we can say that the quality of teaching is understood as a constantly growing level of teaching activity of the teacher, characterized by high results of student training. In the educational process, as well as the main components that determine the quality of research and teaching staff universities include:

Cognitive - the ability to know the normative documents and apply theoretical knowledge in the practice of their activities in the direction of the specialist, in accordance with his job responsibilities;

Personal - efficiency in decision-making, accuracy in documentation, responsibility of the specialist, expediency;

Motivational value - the motivational direction of the employee to acquire knowledge, skills and abilities, depending on the position, pay for the competent performance of their duties, promotion.

The problem of always assessing the quality of professional activity of teachers and the teaching staff in general has always been one of the most pressing and at the same time one of the most difficult problems in the relationship within the professional pedagogical community. The problem with the objectivity of assessment is that pedagogical activity is a type of creative activity, where there are different options for assessing its effectiveness and

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quality. This situation leads to the existence of different approaches to creating evaluation models that differ significantly from each other,

There are external and internal teacher quality assessment systems. External evaluation systems include international, national and regional evaluation systems, which are implemented in the form of teacher certification, inservice training and internships. Intra-university evaluation systems, including the organization of educational activities, research activities, exchange of experience, registration of student achievements, etc.[4,6,7]

The most important task of the system of evaluating the quality of scientific activity of teachers is to focus on strengthening the motivation of teachers for high achievements and career growth. A modern quality assessment system should be a "mechanism for mobilizing internal resources in the field of vocational education" Optimization of organizational forms, economic and management mechanisms, the use of various forms of higher education in general is an important factor in the quality assessment system. It should be noted that the existing models of quality assessment of university teachers are informational, technological, scientific, based on the efficient use of organizational resources; development of social partnership system in higher education [6].

The e-portfolio of teachers is one of the examples of support for the introduction of information technology and teacher certification in higher education and also serves as a tool for results and development-oriented assessment [9,10].

The role and functions of the portfolio in the educational environment are discussed in the following works: I.A. Knyash, as a means of control by IP Pastukhova [11]; as a means of tracking individual achievements and as an alternative technology for tracking learning outcomes in the works of TG Novikova, MA Pinskaya, AS Prutchenkov [12; 13] and others; as a means of self-management and self-assessment of the student, as well as to determine his reserve capacity [11; 14; 15]. IAMatveeva proposed a systematic assessment of the quality of education in relation to higher education based on the "portfolio-process" model, which includes three types of portfolios: teacher portfolio, student portfolio and higher education portfolio. [16]. This analysis is presented in the works of VT Gurova and VP Zeleeva [17,19,20].

Examining the software ideas and ideas of the above teachers on the requirements for the content of the portfolio, it can be concluded that the portfolio includes not only information on autobiography and professional qualifications, quality rating, but also professional concept, o'samples of study materials, lesson descriptions, lesson plans, lesson videos, feedback from students, colleagues and administration about the teacher's work. Accordingly, the more fully the various aspects of a teacher's activity are reflected in his or her portfolio, the more likely he or she is to predict the quality of teaching, the teacher's academic performance, and the expected outcomes of the above requirements.

At the same time, the criteria for quantitative assessment of the scientific activity of university teachers and students are not sufficiently developed. Therefore, it is important to systematize and document the scientific achievements of teachers and students, as well as to develop technologies to determine the effectiveness of research and teaching activities of faculty and the rating of research work of university students.

Having studied the experience of teachers and specialists in this field, we have developed our own structure and content, taking into account the role and quality of the electronic portfolio in the evaluation of scientific activities of professors and teachers of the Tashkent University of Information Technology named after Muhammad al-Khwarizmi. teacher activity, development of the teaching profession. To develop it, an expert commission consisting of the Deputy Director for Research and Innovation, the Dean of the Faculty, heads of departments, a quality engineer was formed. The first project was brought to the attention of professors and teachers and was actively discussed in the departments. Uniform requirements for content have been developed taking into account all comments and additions.

Structure of the electronic portfolio of scientific activities of professors and teachers of the Tashkent University of Information Technologies named after Muhammad al-Khwarizmi:

- 1. General information about the teaching staff;
 - 2. Documents on education;
 - 3. Documents on professional development;
 - 4. Awards, diplomas;
 - 5. Electronic journal of the teacher;
 - 6. Information on the results of the rating of the work of the teaching staff;
 - 7. List of scientific works and educational-methodical works.

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II. CONCLUSION

If every university teacher has a comprehensive electronic portfolio and collects all the important materials, it is possible to achieve didactic effectiveness, which is important in the organization of the educational process. In addition, the educator can use her e-portfolio independently, as well as use the best developments of other teachers and IT professionals. Thus, when creating an e-portfolio and filling it with content, every university teacher has the opportunity to grow their professional skills, teach computer skills and improve their knowledge in their subject. Thus, the proposed e-portfolio is of particular importance in monitoring the professional activities of teachers, the dissemination of best pedagogical practices, the organization of virtual communication between teachers and students, the creation of opportunities for effective use of educational resources. In addition, educators will have the opportunity to demonstrate and analyze important professional results, and the information collected in the portfolio will be used as a teacher's professional certificate.

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