# INTEGRATED INFORMATION AND METHODOLOGICAL SYSTEMS FOR THE DEVELOPMENT OF MANAGERIAL COMPETENCE OF MANAGEMENT PERSONNEL IN THE PROCESS OF PROFESSIONAL DEVELOPMENT

#### Golibjon Otamurodov Ruzimurodovich

Head Scientific and Methodological Center under the Ministry of Higher and Secondary Specialized Education of the Republic of Uzbekistan, UZBEKISTAN E-mail: foniy 02 03@mail.ru

### ABSTRACT

This paper examines the development of managerial competence of the management personnel, integrated information systems, e-learning portal and methodical system, aimed at cognitive level and individual needs of managereal staff, continuous monitoring and andrological principles as well.

**Keywords:** Andragogical principles, continuous monitoring, integrated information and methodological systems, managerial competence.

### INTRODUCTION

The current state of development processes of managerial competencies requires the introduction of best practices of overseas countries into the educational system, innovations including modernizing the content of vocational education to improve the quality of education by using modern, interactive and creative teaching methods and diversification of educational services, as well as widespread implementation of innovative technologies. Therefore, all these show that effective use of information technologies in the development of managerial competence, taking into account the creation of modern information and methodological systems, electronic information educational environment can be achieved and there is a need for targeted research in this sphere.

Managerial competence of higher education institution's management staff is the level of preparedness associated with acquiring necessary knowledge, skills, personal and socially significant qualities, the ability to make the right decisions independently in specific and non-standard situations, independence of management and a sense of responsibility for each of their actions [1].

The development of managerial competence is considered as an integrated process based on the use of modern approaches, innovative technologies, new knowledge, skills and competencies aimed at improving the level and quality of professional skills based on individual needs and qualifications.

In fact, the successful implementation of the task associated with the use of information technologies and information systems in the development of managerial competence of management personnel, today dictates the need for widespread implementation and improvement of information systems in the field of application of advanced methods and forms of training in the system of retraining and professional development.

In the course of our empirical analysis, we analyzed the content of existing training programs for professional development courses for managers of higher education institutions. The content of these programs covers the regulatory and legislative norms for higher education, modernization of educational process and teaching activities in higher education and the introduction of innovative educational technologies, professional competence of education managers, information and communication technologies in management, the creation of electronic information educational environment of higher educational institutions, practice of a foreign language, questions of system analysis and technology management of making the best decisions, as well as the development of a culture quality in higher education.

At the same time, the content of programs, educational and methodological support developed on the basis of these programs is not fully reflected in the topics about integrated information and methodological systems for developing managerial competence of managers, including information systems such as distance learning, webinar technologies, portal technologies, massive open information systems, automated monitoring, electronic portfolio.

In the process of empirical research, it was found that educational and methodological support, developed specifically in the above areas, developed mainly based on the traditional approach, electronic educational resources, multimedia products, video, audio materials, as well as distance educational resources based on interactive-innovative technologies have not been completely formed [4].

As it can be seen from the above analysis, improving the integrated information and methodological system for improving the quality of education, which is currently focused on the development of managerial competence of management personnel is considered as one of the important issues. In this regard, our study analyzed the content, components and andragogic principles of an integrated information and methodological system that serves to develop managerial competence of administrative personnel.

### Materials and methods

Information and methodological system is a set of necessary scientific and pedagogical, information and reference, normative and methodological (qualification requirements, educational plans and programs), educational and methodological (teaching aids, textbooks, electronic learning resources, control and evaluation development, etc.) resources of the educational process used in education.

Implementation of modern information and communication technologies in the process of professional development of management personnel, formation of modern methodology of professional development processes; it is the basis for improving integrated information and methodological systems that improve the quality of organization, management and control of educational processes, individualization of educational processes, identification of effective forms, methods and means of interaction and communication with the audience, as well as the introduction of independent forms of professional development that are aimed at their continuous professional development.

Integrated information and methodological system is a managed and dynamic system designed to provide convenient educational services to the subjects of the educational process, based on current trends in the modernization of education and information and communication technologies. In the context of the research problem, the integrated information and methodological system is an integrated model consisting of a hierarchical relationship of modern information and communication technologies, forms, methods and means of teaching and learning [3].

The integrated information and methodological system is the main criterion for variability, modularity, adaptability, manageability of economic and social effectiveness of training, covering content-structural, process-oriented, methodological and technological, qualimetric components of management that arise at the cognitive level, development indicators and corporate-individual needs of trainees, as well as their creative potential.

The problem of our study is that an integrated methodological system used to automate all the activities of professional development processes and includes all of the workflows, i.e. the activity of trainees from the planning of professional development processes to monitoring after completing training.

At the same time, the integration system is an automated system that meets the various needs of users and supports a single procedure for interacting with the user, including a way of presenting information.

In our opinion, the components of improving integrated information and methodological systems and contributing to the development of managerial competence such as:

- quality of teaching materials for self-study;

- organizational and management structure that ensures effective and efficient exchange of information between trainees;

- organization of tutoring services that provide independent learning of scientific and pedagogical information, performance of educational tasks by trainees;

- importance of mechanisms for evaluating results and monitoring their quality.

All these contribute to the development of managerial competence in the following areas:

integration of quantitative and qualitative indicators of achieved and planned results into professional activities;

the promotion of active professional activities;

ensuring transparency and openness of information related to professional activities;

changing and improving the universal matrix of cultural, professional, professional and practical competencies;

expanding the scope of cooperation and entering the virtual labor market;

providing meaningful interaction with various managers in the network;

development of multimedia competence and ensuring the introduction of information technologies in the educational process;

the development of reflective skills of self-assessment;

the conditions are created that provide opportunities such as the formation of the aim of educational, organizational, scientific and methodological activities, a holistic perception of the planning and management process.

In the process of our research, the Internet portal www.bimm.uz was analyzed, which was developed in order to improve the retraining and professional development of managerial and pedagogical personnel of higher educational institutions, create integrated information and methodological support, monitor the quality of education and applied by the Head scientific and methodological center under the Ministry of Higher and Secondary Specialized Education [7].

www.bimm.uz - the information and education portal of the Head scientific and methodological center, which creates an open system of information and educational conditions for centers for retraining and professional development of higher educational institutions' pedagogical staff and ensures interaction of these centers, providing access to various information resources, developing information and modern educational technology.

This portal includes the educational process of professional courses, a system for monitoring of professional activities of trainees (management staff), a platform for organizing distance training courses, an electronic library that includes legal documents related to educational processes, curricula and programs, training materials, an electronic portfolio system that records the professional activities of trainees, and consists of media webinars, which serve to improve the activities of retraining and professional development institutions and promote the accumulated experience [12].



Fig. 1. Structure of the integrated information and methodological system.

In the course of the study, a survey was conducted on the content, structure and understanding of integrated information and methodological systems serving the development of managerial competence of higher management personnel of higher educational institutions.

As a result of the survey of managerial personnel, including 55% of respondents of the first category (Vice-rectors), 47% of the second category (deans) and 45% of the third category (heads of departments), it was revealed that the knowledge and skills related to integrated information and methodological systems were not sufficiently formed.

The first category (Vice-rectors)	The second category (Deans)	The third category (Heads of departments)
55%	47%	45%
The level of formed knowledge and skills related to the integrated information and methodological systems		

The analysis shows that, firstly, the managerial staff of higher educational institutions, did not have a holistic view of integrated information and methodological systems, and secondly, the content and components of the existing information and methodological systems did not meet the requirements of competency-oriented and personality-oriented approaches, thirdly, in the content and components of existing information and methodological systems, the requirements of competency-based guidelines were not taken into account personality-oriented approaches, the didactic capabilities of integrated information systems were not systematically used in the formation of the managerial competence of managerial personnel [13].

We know that the information-methodical system is necessary for organizing tasks that will ensure the formation of necessary skills among students, along with the qualification requirements of retraining and advanced training courses, to determine the amount of knowledge that they need to master and represent them in a logical system. It must comply with the principles of continuity and consistency and, finally, the principle of system city. The following didactic requirements are important:

- the information resources provided must be reliable, relevant and relevant to the current state of the subject, systematic and consistent, demonstrative and practical;

providing training materials in the best possible way for ease of use and research;

- the description of training materials must be personalized.

In accordance with these principles, the study identified the structure of an integrated information and methodological system that serves to develop the managerial competence of management personnel in the process of professional development.

Based on the author's approach, the following components of the integrated information and methodological system were developed, which were improved during our research:

- vertical portal technology (niche portal), i.e. activity

aimed at presenting information on specific thematic areas based on the needs of the audience. Within the framework of retraining and professional development courses for managerial staff, tutor-consulting services were introduced; training courses for professional development were organized, focused on the most frequently Asked questions in their management activities.

- online group projects were implemented through the introduction of educational, methodological, socio-educational, scientific and innovative Internet associations (Internet communities), that is, the organization of forums, webinars of group interaction in the online mode of an audience arising from interests.

- the activity of the portal media.bimm.uz, which is open source software and a component of mass open online courses (multimedia products), was improved.

To improve the integrated information and methodological system, it must first meet the requirements of andragogy.

The main difficulty in adult education is directly related to such factors as fear of failure, difficulties in mastering new requirements in the field of science and specialization, insufficient knowledge of information and communication technologies and a foreign language, and insufficient competence in information processing strategies. On the basis of andragogic approach, the development of managerial competence processes of higher educational institutions ' senior management personnel provides for absolute improvement of their professional level and qualifications, self-management, professional motivation, stimulation of creative potential, as well as full use of personal opportunities that affect the effectiveness of professional activities. At the same time, predicting a "social portrait of the audience" in advance, creating an information base taking into account needs, pedagogical assistance, it is

desirable to determine the content of information and methodological support, the structure of the educational process, in particular, the choice of innovative forms, methods and teaching tools that will contribute to the development of professional and managerial competencies of students and the creation of a joint free creative environment.

## CONCLUSION

In conclusion, we note that in the process of professional development of management personnel, organizational and pedagogical conditions and motivations are formed for the development of managerial competence of management personnel based on the use of alternative and differentiated professional development programs and an integrated electronic portfolio-information system based on diagnostics and continuous monitoring of professional performance results. Thus, innovative components of the integrated information and methodological system-electronic portfolio, development of individual educational trainings-personal learning environment-PLE, media education tools (smart Media-Facebook, Twitter, Flicker, YouTube, etc. D.) and scientific and methodological support training qualification recognized as appropriate through the development of programs, skills development, blended learning technologies and managerial competences on the basis of wide implementation of the open information and educational resources, learning activities and the system of tutoring.

## REFERENCES

- Balaban I., Ravet S. and Sobodić A. (2019) E-Portfolio Maturity Framework. In: Auer M., Tsiatsos T. (eds) The Challenges of the Digital Transformation in Education. ICL 2018. Advances in Intelligent Systems and Computing, vol 917. Springer, Cham. DOI: https://doi.org/10.1007/978-3-030-11935-5\_45
- [2] M.T. Mirsolieva, "Improving the mechanisms of development of professional competence of managers and pedagogical staff of higher education institutions," DSc. dissertation, Doctor of Science in Pedagogy, Tashkent, 2019.
- [3] A.M. Magrupov, "Perfection of mechanisms of integration of strategic and functional management in the system of higher education," DSc. author's abstract. Doctor of Science in Pedagogy, Tashkent, 2017.
- [4] Ye.I. Kudryavtseva, "Competency and management: competences in management, managers' competences, competence management," Monograph, Saint Petersburg, 2012.
- [5] U.Sh. Begimkulov, Бегимкулов У.Ш. "Theory and practice of organization and management of informatization of pedagogical processes," DSc. dissertation, Doctor of Science in Pedagogy, Tashkent, 2007.
- [6] T. B. Grebenuk, S.V. Nesina, Pedagogy of individuality in diagrams and tables, Manual, Kazan, 2019.
- [7] G. Kiselev, R. Bochkova, Information technologies in pedagogical science, Moscow, 2018, 408 p.
- [8] T. Shoymardonov, The content of professional activity of pedagogical personnel in the environment of modern information and communication technologies and its monitoring, Manual, Yangi Kitob, Tashkent, 2016.
- [9] Mirsoliyeva M.T. The improvement of the teacher's professional competence is the improvement of the education quality in higher educational institutions // International Scientific Journal Theoretical & Applied Science. – Philadelphia, USA, 2018. - № 03(59). – P. 14-18.

[10] Otamurodov G'.R. Structural-functional role of e-portfolio in assessing professionalpedagogical capacity of administrative cadres of higher educational establishments (HEE) // "European research: innovation in science, education and technology" XLVIII International correspondence scientific and practical conference. - ISSN 978-1-948507-74-5 DIO: 10.20861/2304-2338-2019-48 January 24-25, 2019 London, United Kingdom.

- [11] Otamurodov G'.R. Improving methods of the administrator's motivation in management of high education institutions // ISSN 2056-5852. European Journal of Research and Reflection in Educational Sciences. - United Kingdom, 2016. №8. – P. 84-88.
- [12]Beckers, J., Dolmans, D. and van Merriënboer, J. 2016. E-Portfolios enhancing students' self-directed learning: A systematic review of influencing factors. Australasian Journal of Educational Technology, 32 (2), 32-46. DOI: https://doi.org/10.14742/ajet.2528
- [13] Bisovsky, G. and Schaffert, S. 2009. Learning and teaching with e-portfolios: Experiences in and challenges for adult education. International Journal of Emerging Technologies in Learning. 4 (1), 13-15. DOI: https://doi.org/10.3991/ijet.v4i1.822
- [14] Ismadiyarov Y. U. The current state of innovative management in the system of higher pedagogical education // Pedagogy, 2017, No. 4. S. 63-68.
- [15] Hauser, F., Gruber, H., Mottok, J., Reuter, R. "Research competence: Modification of a questionnaire to measure research competence at universities of applied scienes" IEEE Global Engineering Education Conference Educon pp.109-117/2018
- [16] Ciesielkiewicz, M. 2019. Education for employability: the ePortfolio from school principals' perspective. On the Horizon. Volume 27, Issue 1, 11 March 2019, 46-56. DOI: https://doi.org/10.1108/OTH-01-2019-0001
- [17]Fuglík, V. and Tocháček, D. 2019. Using an e-portfolio to support the learning process of lower-secondary school pupils when choosing a career. E-Learning and Digital Media, 16 (1), 15-25. DOI: https://doi.org/10.1177%2F2042753018811868
- [18] Habeeb, K.M. and Ebrahim, A.H. 2019. Impact of e-portfolios on academic staff assessment and student performance on learning science concepts in kindergarten. Education and Information Technologies. Volume 24, Issue 2, 1661-1679. DOI: https://doi.org/10.1007/s10639-018-9846-8
- [19]Falcon V.A. Improving the mechanism for regulating the training of specialists with higher education // Problems of the formation of a market economy: Inter. sciences. Sat -M.: Finance, 2011. - P.41-51.
- [20] Rowley, J. 2016. ePortfolios in Australian Universities. Springer, Singapore. P. 203. DOI: https://doi.org/ 10.1007/978-981-10-1732-2