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Organization of Professional Training of Communication Management and Communications Specialists

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Abstract

The article substantiates, develops and experimentally verifies the model of the organization of professional training of communication management communications specialists in higher educational institutions in the synergy of functional and purposeful, content and methodological, organizational and technological as well as relevant subsystems. It clarifies and improves conceptual and categorical apparatus that belongs to the scientific thesaurus and vocabulary regarding information security in the field of education, science and innovation of the research apparatus. The communicative and motivational, participative and conative as well as informational and noospheric criteria have been determined. The following levels have been defined: medium, sufficient and high for the professional competence formation of communication management and communications specialists in higher educational institutions. The paper also defines educational and content modules of disciplines for communication management and communication specialists – management and educational policy, methodology of scientific research and training of profes-

sionally oriented disciplines; forms, methods and means for organizing educational and scientific as well as cognitive activity.

Keywords: professional competence, training of communication management and communications specialists, organization of educational process.

General statement of the problem

The legislation of Ukraine defines the top priorities that deal with implementation of the National Informatization Program, including the creation of the legal framework of information and technology support, the personal data and copyrights protection system as well as the development of national standards in the field of digitalization of economy and education, science and innovation. They also include formation of information and telecommunication infrastructure, network and platform organization of institutional activity, system development of the latest broadcast channels, fiber-optic and satellite systems of interactive online communication, development of computer-organized network of education system, science and innovation, as well as academic culture as a general component of the global network of scientific and metric Internet resources. The Program ensures information security measures of social and cultural, educational and scientific forms and systems, web and scientific-metric potential of academic schools of higher educational institutions (hereinafter referred to as HEI), including the personal data protection as an education applicant, scientific and social services, participants in the educational process, interested parties in the quality management system of education and scientific research as well as other involved representatives, including communication management and communications specialists.

Subject of research

The aim of the research is to substantiate theoretically and methodically the organization of professional training of communication management and communications specialists in higher educational institutions. The object of the research is the professional training of communication management and communications specialists in higher educational institutions. The subject of the study is the process of formation of professional competence among communication management and communications specialists in higher educational institutions.

Analysis of recent publications

The scientific and theoretical background of the study related with the formation of professional competence of future communication management and communications specialists in higher educational institutions is presented in the works of the following scientists: V. Andrushchenko, V. Beh, V. Bykov, A. Gurzhii, V. Kremen, V. Madzigon, V. Sydorenko (*philosophy of education*,

educational, humanitarian and social policy and didactics of higher education); H. Bilyavskiy, V. Horlynskiy, N. Demishkant, L. Melnyk, L. Moiseyev, N. Ridei (*lifelong education and sustainable development*); W.J. Duncan, J.E. Meya, F.J. Roethlisberger, G.A. Simon, R. Likert, F. Fiedler, P. Lawrence, J. Lorsch (*fundamental ideas of management*); A. Averin, V. Bakumenko, M. Bilinska, M. Bratko, G. Honcharuk, L. Hogina, R. Dyakiv, L. Kalinina, S. Knyazev, V. Malinovsky, N. Protasova, V. Troshchynskiy (*administration of HEI*). Particularly relevant researches are in psychological and pedagogical as well as philosophical fields in the course of *content analysis* (B. Berelson, P. Meiring, K. Neuendorf, A. Kumar, P.J. Stone, K. Krippendorff, M. White, E. Marsh, S. Stemler, H. Ioffe, L. Yardley) and *event analysis* of the information database of the educational and political phenomena development (I. Artyomov, V. Bakumenko, K. Borishpolets, S. Vyrovyi, S. Lacey, I. Reiterovich, D. Riff, S. Semin, S. Teleshun, O. Tytarenko, B. Watson, F. Fico); *educational process planning* (F. Henri); research of *subject-object and subject-subject relationships* (L. Baxter); *ways of coding* analyzed texts (K. Carli) and visualized images (P. Bell) *in social interaction* of participants of system processes (B. Prasad).

Presentation of the main material

The vocabulary related to information security in the field of education, science and innovation has been systematized. It is interpreted from the author's point of view as: „information and communication security of social and cultural forms of organization, administration, professional training of communication management and communications specialists” that is defined as an integrated system of hardware, software, information and technological support of organizational legal and regulatory means. They must be aimed at ensuring the protection of: informational space of the state, communities, social activities as well as separate citizens guaranteeing them self-esteem and national self-identity. The definition also includes cross-border, regional, national, informational and communication resources, the semantic purpose of information and telecommunication systems of professional training, informing and educating different categories of the public, who are guaranteed the right to access any information, especially educational, scientific and cognitive in the fields of science and knowledge of managing systemic social activity on the basis of sustainability. It is also considered to be an integral component of state sovereignty and national security, which characterizes the state of national interests, state protection in the information field, establishment of communicative harmonization, external and internal interaction.

Thanks to the methodological substantiation of the scientific thesaurus of the research, the definition of “professional competence” has been specified using verbal and non-verbal means to achieve the strategic goal of communica-

tive interaction in professional problem situations, which is singled out as a criterion of the communicative readiness of future communication management and communications specialist with information and communicative skills of establishing connection of professional and communicative interaction. The above mentioned definition is regarded as an integrated result of formation of dynamic complex of communicative qualities, abilities, skills, knowledge, habits, readiness, capabilities and responsibilities, which are necessary and sufficient to ensure communication in the process of performing functional and purposeful professional tasks by future communication management and communications specialists (communicative demonstration of which are the multimodal component of communication, semantic dynamics, accessibility and openness of the universalization of information technology support means). The event analysis was carried out to analyze the double series of processing information base of the communicative interaction of the administrative management organization in the HEI, which is determined by the classification features: managerial predominance of the subject phenomenon of leadership; functional purpose of the management entity; organizational and managerial influences on the object in relation to which the subject acts; transparency in the sequence of the system of analytical and informational monitoring of the status, development of forecasting and modeling of systems of different levels, as well as in the types of organization of the aimed designation.

Content and event analysis established that the main means of technical regulation are international standards of *general impact* of communicative interaction in the quality management system in the field of education regarding the regulation of safety, resource conservation, labor and information protection, verification of laboratory and testing activities and their reliable proof, environmental and energy management with guarantee of social responsibility as harmonized and ratified in regulatory and legal documents related to the implementation of Ukraine to the world organizations of quality regulation and their standardization. Another group of international standards includes special *impact* of information and analytical basis of ensuring communicative interaction in systems of different levels, types of organizations and management according to the aimed designation as well as in different types of using natural resources (social and cultural forms, educational and scientific systems of bio-social, urban, techno and agro purposes). They are similar to international standards of the Open Geospatial Data Consortium (eng. OGC), which regulates the requirements of technical regulation.

Standards of the general and special impact of technical regulation of information and communication technology (hereinafter – ICT) are designed for student-centered learning of portable educational programs, scientific and social services of the academic potential of higher educational institutions, which en-

sure compliance of professional training and organization of the educational process by means of ICT support in accordance with international and state licensing as well as accreditation requirements for the professional competence formation of future communication management and communications specialists under the conditions of harmonization in the fields of education, science and innovation.

The model of the organization of professional training of communication management and communications specialists in higher education institutions has been developed, substantiated and experimentally verified in accordance with the requests of social and economic order for the harmonization in educational, scientific, innovative fields as well as in social activity of sustainable development. It is regarded in *the functional and targeted subsystem* through the implemented fundamentals of methodological *principles*: scientific knowledge of system methodology, organization of the educational process, educational and cognitive activity, system analysis of quality; *semantics of professional training*: administrative management of professional training, educational, scientific, cognitive activity as well as communicative relationship.

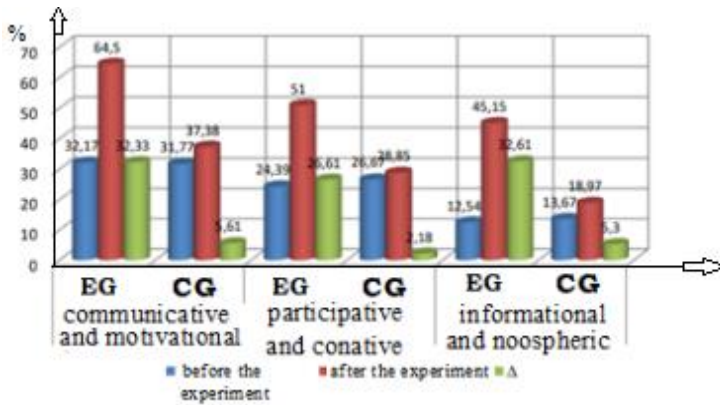
The content and methodological subsystem with the developed educational and content modules of technological support disciplines for communication management specialists as well as for information and communication relationship (informational and analytical monitoring of the educational process, information and technological support, ICT in education and social activity) has been substantiated. It also includes management and educational policy (educational management and policy, communication management, personnel management, information and communication management, computer engineering and software, telecommunications and radio engineering, information technology marketing and entrepreneurship). The subsystem also involves methodologies of scientific research and training of professionally oriented specialized disciplines. Management is among them (field of knowledge 073) which covers methodologies of pedagogical, social, psychological and communicative, public management, information and digital, system analysis of the constituent components quality of the research methodology, statistics, enterprise economics, teaching methods of telecommunications engineering, information and communication technology of communication relationship and telecommunications, postal communication, computing and programming technology, information and analytical monitoring, educational monitoring and metrics of quality policy, logistics of communication relationship, Internet marketing, ethics of business communication management as well as rhetoric).

According to Ford's method, the organizational and technological subsystem is specified in the components of the system and process implementation of educational technologies, ICT management, partial management procedures for

the realization of higher educational institutions academic potential, algorithms of technological organization of educational process (information and analytical, administrative and organizational as well as relevant) institutional regulations of higher educational institutions. 296 people took part in the experiment at the stages of pedagogical research (motivational, communicative interaction, audit, ascertaining, formative, conative as well as relevant). The incentive and motivational stage of communicative interaction involved checking the state of students' motivational reflection aimed at ensuring success (goals) or fear of failure to achieve the tasks according to the improved A. Rean's questionnaire.

Thanks to the modified method of diagnosing the motivational level of ensuring social communication and overcoming frustration (according to L. Wasserman and V. Boyko) with the applied rubric questionnaire, the degree of dissatisfaction was identified – interaction, which made it possible to evaluate its social and communicative support of the individual's life activities with the results of percentage division (in %) of very high level – 17, increased – 20, moderate – 18, uncertain – 15, reduced – 10. Very low level and no satisfaction made up a total of 20% of respondents. The audit stage was devoted to the screening of the components of professional competence of future communication management and communications specialists by audit diagnosis of integral, general and special components. Medium, sufficient and high levels have been determined, which made it possible to distinguish and diagnose professional abilities, skills and capabilities according to the state standards in the field of knowledge 07 “Management and administration” specialty 073 “Management” of education seekers involved in the pedagogical experiment. The audit stage of the pedagogical research proved the stability of high, sufficient and medium levels of the professional competence components of future communication management and communications specialists, which were synchronized and evenly distributed between the experimental (hereinafter – EG) and control (hereinafter – CG) groups. *The ascertainment stage* established the state of the entry level of the professional competence formation among future communication management and communications specialists in higher education institutions according to the above stated criteria. According to the survey data, the level of formation of the components of professional competence among the students at the ascertainment stage was almost aliquot. The verification of the levels of formation of professional competence among future communication management and communications specialists in higher education institutions was held at the formative and conative stage according to the communication and motivational criterion. It was studied in the context of the positive impact of the developed educational and content modules of the disciplines on the delta of level growth. The generalization of the results on the formative and conative stage of the pedagogical experiment testified the dynamics of the levels transformation of professional compe-

tence formation of future communication management and communications specialists in higher education institutions in EG (Graph 1).



Graph 1. Levels of formation of professional competence among future communication management and communications specialists in higher educational institutions at the formative and conative stage of the experiment in EG and CG

Significant differences in the obtained results in the EG and CG groups and between them were confirmed by K. Pearson’s test (χ^2) with a reliable probability of 0.95 in favor of the EG group, which proves the effectiveness of the developed model. The relevant stage of the research was organized using expert evaluation of the implementation and establishing the reliability of the effectiveness of the applied modules and the model. Expert opinions, which were conducted according to the protocol of the examination of the dynamics of the professional competence formation among communication management and communications specialists, confirmed the positive experimental results which were evaluated at 85 points on a 100-point scale.

Conclusion

The article has revealed the theoretical and methodical principles of professional training of communication management and communications specialists which are defined as special professionally-oriented training with information and telecommunication support for communicative interaction according to the functional and purposeful aim in communicative types of social relations at the levels of the organization of communication, the transfer of information and analytical data based on harmonization in the fields of education, science and innovation. They are also founded on the following approaches: methodological (systemic, structural and functional, program-targeted, informational-innovative); educational and cognitive (transparent, participatory, diversive, bilingual, quality

management). The principles of scientific knowledge of system methodology (fundamental and philosophical, general, specific, scientific), the organization of the educational process (sequence, continuity, systematicity, prognostication and innovativeness), educational and cognitive activity (historical retrospective in the fields of science and knowledge, the potential of the level of knowledge), system analysis (system hierarchy, elementalism, general interaction of development, integrity, systematicity, formalism, normativity, goal setting). Information and communication manager of the new generation is a professionally oriented or mobile specialist who thinks progressively and innovatively, determined to work in a team with personal responsibility, motivated by the positive result of performing professionally oriented communicative tasks of harmonizing social activities in the field of education, science and innovation. Professional training of communication management and communications specialists is conducted in organizational and pedagogical conditions: student-centered ICT environment with acceptable means of technological support that enables the accommodation of multimodality, polysemantics, continuity, consistency, context, the connection of theory with the practice of scientific knowledge between the provider and the recipient of educational-scientific, portable, student-centered services of network, mixed, mobile as well as distance learning of divisional, translational, kaleidoscopic forms of organizing the educational process.

The formation of professional competence of future communication management and communications specialists in higher educational institutions is possible under the following organizational and pedagogical conditions: favorable ICT environment for student-centered learning of portable and educational programs of scientific and social services (cloud technologies that depend on type of system catalog, web metric services of coverage and functionality in the context of service access to IT); harmonization in the fields of education, science and innovation (global cross-border, regional, national academic potential of scientific heritage and mobility of academic community members, development of modern methodological directions of the prevailing social development paradigms based on sustainability with prolonged employment throughout life). They also include implementation of the policy of vocational training in the system of management of the education quality, safety, resource conservation, labor and information protection, verification of laboratory and testing activities and their reliable proof, environmental and energy management with a guarantee of social responsibility. The model of the organization of professional training of future communication management and communications specialists in higher educational institutions has been verified. During the formative and conative stage of the pedagogical experiment, it was found that for $\alpha = 0.05$, all observed values of the χ^2 criterion exceed its critical value. Therefore, it can be asserted with 95% confidence that the communication management and communications

specialists in EG (compared to CG) had a significant (24.47%) increase in high and sufficient levels of the professional competence formation. The results of the study gave grounds for substantiating proposals regarding the prospects of professional training of future communication management and communications specialists in higher educational institutions.

References

- Ridei, N.M., Tytova, N.M., Diegtiar, O.A., Pavlenko, D.H., Slabetskyi, O.M. (2021). Administrative Management of Improvement Processes of Socio-Cultural Forms Based on Principles of Sustainable Development of Education. *Journal of Higher Education Theory and Practice*, 21(14), 102–111. <https://doi.org/10.33423/jhetp.v21i14.4814>.
- Ridei, N.M., Tytova, N.M., Tymoshenko, V.I., Moroz, V.V., Bibik, N.V. (2021). Improvement of Methodological Approaches to Determining Directions of Financial Security of Ukraine. *Universal Journal of Accounting and Finance*, 9(4), 613–622. doi: 10.13189/ujaf.2021.090409.
- Ridei, N., Titova, N., Viktorova, L., Tsymbal, S. (2022). The problem of public administration of socio-cultural forms of organization in the field of education, science, innovation: current problems and vectors of development. *Financial and credit activity: problems of theory and practice*, 6(41), 418–426. <https://doi.org/10.18371/fcapt.v6i41.251470>.