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Innovative principles of development of methodical competence of modern teacher of vocational education

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Ukrainian pedagogical community active discusses the problem of the competence approach to the activity of modern teacher of vocational school, in connection with the modernization educational processes taking place in Ukraine. The purpose of modernization of domestic vocational education is to combine the traditions of Ukrainian pedagogy and foreign experience in shaping the student's personality, capable of active independent action, which will create a dynamic, mobile, competitive model of the domestic system of vocational training of specialists for various industries and service sectors.

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The content of the article highlights the features of innovation processes in the system of Ukrainian vocational education. The authors reveal the relationship between the growth of the level of innovative competence of the teacher and the effectiveness of the realization of his creative potential in the process of development and implementation of modern educational practices in educational and organizational, scientific and methodical work in vocational education institutions. The article identifies and analyses innovative aspects of development of methodical competence of a vocational education teacher.

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Key words: *educational innovations; methodical competence; vocational education teacher; model of innovative activity; competence of the teacher; innovative methodical activity.*

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Introduction

Education, as one of the most important components of national social development, must respond quickly to social and economic transformations and meet the level of scientific and technological progress of the country. On the other hand, education itself affects all processes and aspects of vital activity of society, as it prepares specialists for various fields, develops the personality of students and forms their certain social and life views. At the same time, social and cultural transformations have formed a number of requirements for the quality of educational processes, their compliance with requests of both students and the requirements of modernity and the state. The approved National Qualifications Framework defines new goals and tasks of vocational training based on the competence approach. All this creates new requirements for the level of professional and pedagogical skills of teachers, one of the main components of which most researchers consider methodical competence. In this context, special attention is paid to the development of methodical competence of teaching staff of vocational education, their readiness for continuous professional improvement. As noted in the Concept of implementation of state policy in the field of vocational education «Modern vocational education» for the period up to 2027, one of the problems is the inconsistency of the content of education and teaching methods requirements of the modern labor market and the needs of the person [6]. The current state, prospects and problems of introduction of innovations in education of Ukraine, readiness of the pedagogical community to accept and implement them in their professional activities are an important point in the implementation of the tasks of reforming domestic vocational education.

Innovative processes in the education system testify to a qualitatively new stage of pedagogical creativity and process of application of its results that is characterized by a tendency to close the gap between the processes of creating pedagogical innovations and the processes of their perception, adequate assessment, development and application. It also helps to overcome the contradictions between the spontaneity of these processes and the possibility and need for conscious management of them.

However, as practice shows, a significant number of teachers of vocational education, taking as a basis for their activities traditional methods, are not fully aware of the importance and necessity of mastering educational innovation, thereby depriving themselves of the opportunity to become attractive to students. The reasons are different. One of them is the inability of a teacher with a sufficiently high level of professional competence to position oneself as a highly qualified teacher-innovator due to inability or unwillingness to realize creative potential in professional activity. On the other hand, it should be noted that some teachers due to unpreparedness to innovate educational activities have a low level of professional reputation, which can negatively affect the image of the entire educational institution in which they work.

Modern education today is on a wave of innovative changes, at the same time remaining a traditional institution of socialization, sanctioned by the state and called to fulfill the public order. However, when both the social order for vocational education and the content of this education change, it is difficult for teachers, who, for the most part, are accustomed to use in their practice of traditional forms and methods of educational and organizational, scientific and methodical activities, to bring their pedagogical activity in line with educational innovations. Thus, a contradictory situation is created, which is characterized, on the one hand, by the natural inertia of the pedagogical community, and on the other hand, its awareness of the inevitability of changes in vocational education.

Theoretical foundations

Recently, the problem of development an innovative component of the methodical competence of teachers is in the center of attention of researchers, because there is the innovative activity of the teacher that plays a leading role in the process of modernization of national education. V. Vvedensky, M. Zhaldak, I. Zyazyun, N. Nychkalo, M.Kornilova, O. Lokshina, L. Vashchenko, O. Ovcharuk, O.Pometun, O. Savchenko, S. Syssoeva, O. Semenog, E. Azimov, N. Bibik, L. Karpova, M. Kademiya, A. Kolomiets and others systematically investigate the issues of development of professional competence of a teacher. A number of scientists (A. Kuzminsky, V. Sydorenko, V. Adolf, N. Tarasenkova, O.Nikolaev, S. Skvortsova, I. Malova, I. Zaichenko, I. Akulenko, O. Lebedeva, O. Zubkov, T. Gushchina, T.Rudenko, L. Mitina, L. Sherstyuk, Y. Gayevets, Y.Tsymbalyuk, etc.) distinguish methodical competence as one of the main components of professional development of teacher. Publications of S. Bolsun, R. Gurevych, L. Danylenko, V. Oliynyk, L. Petrenko, V. Radkevych, L. Sergeeva, N.Chipylenko, L. Shevchuk and others are devoted to the problem of development the creative potential of a modern teacher of vocational education, creation of its positive image and readiness for implementation of innovative methodical activity.

Modern conditions for democratization of society, reforming of vocational education in the context of globalization and European integration, problems and tasks of training highly skilled, competitive workers make new demands to Ukrainian teachers of vocational education. Methodical work in institutions of vocational education of Ukraine requires from teachers innovation in the process of organization and implementation of the educational process in accordance with the social and cultural, scientific and technological development of society.

The purpose of the article is to clarify the essence and practical context of the innovative component of the development of methodical competence of a teacher of vocational education. Achieving the purpose of our research requires solving the following tasks:

- clarification of the essence and role of the innovative aspect of the development of methodical competence of a teacher in the process of his professional activity;
- consideration the model of innovative activity of the teacher in the context of modern processes of reforming vocational education in Ukraine;
- revealing the relationship between the growths of the level of innovative competence of the teacher with the effectiveness of the realization of his creative potential.

Results and Discussion

Exploring the concept of «methodical competence», most scientists have reached a consensus in understanding the essence of this category, such as a system of special scientific, methodical, didactic and methodical knowledge, skills and experience in solving methodical problems, arising during the study of a particular subject. On the other hand, researchers focus on the readiness of the teacher to solve methodical problems in different circumstances. This is what motivates to determine the need to disclose the innovation component, as a basis for methodical activities in terms of modern social and cultural transformations and perspective pedagogical experience.

Thus, V. Sydorenko, exploring methodical competence in the context of means of forming knowledge, skills and attitudes, involves mastering by the teacher of new methodical and pedagogical ideas, educational approaches and technologies, as well as possession of innovative methods, forms and ways of organizing training, etc. [8].

Having studied the interpretation of methodical, professional and methodical, didactical and methodical, methodical and mathematical competencies of modern scientists, Y. Gajevets has determined that one of the components of methodical competence is the readiness to perform professional functions and achieve high results in pedagogical activities. It anticipates the implementation of pedagogical activities with a clear ability to self-realization and continuous self-improvement. Such an approach is possible under the condition of innovative development of the teacher [2].

Another researcher K. Kozhukhov considers methodical competence through the readiness of the teacher to use modern information and teaching technologies, methods and techniques in the educational process, adapting them to different pedagogical situations [10].

L. Sherstyuk, conducted research, has concluded that scientists are almost unanimous in understanding the essence of methodical competence, such as the ability of the person to self-realization and constant self-improvement, readiness to conduct classes in various educational and methodological complexes and to use modern teaching technologies, methods, techniques. This statement is based on the system of subject and scientific, didactical and methodical knowledge and skills, which creates the basis for the ability to act effectively solving methodical problems that arise during the teaching of students in a particular subject.

Based on this, the scientist identifies two components of methodical competence:

1) the ability to carry out traditional pedagogical activities;

2) the ability to design pedagogical innovations.

According to L. Sherstyuk, the innovative component of methodical competence is manifested in the ability of the teacher to implement a complex approach to the design and implementation of innovations in the education system, namely:

- to use tools to assess the situation, educational environment and design the necessary innovations;
- to identify and analyze psychological and pedagogical factors and conditions that hinder innovations, create a favorable social and psychological climate for their implementation;
- to introduce the basics of methodology for building educational technologies that provide an adequate ratio of content, tools, methods and organizational forms of learning;
- to apply modern methods of diagnostics of the level of development of cognitive, emotional and volitional and personal spheres of the student, to estimate new growths in these spheres arising in the course of education and upbringing, in particular with use of innovative technologies [10].

Thus, the research of the essence and content of the methodical competence of the teacher and similar concepts (professional and methodical, didactical and methodical, methodical and mathematical competencies), allows to realize that one of its components is the readiness of the teacher for personal professional and pedagogical development in the context of social and cultural transformations and educational innovations. In addition, the innovative component of methodical competence determines the effectiveness of solving pedagogical problems in the process of professional training. On the other hand, the use of educational innovations and the creation of their own methodical works is the result of a high level of development of methodical competence of the teacher.

According to its content, forms and methods, vocational education is called to respond constantly to new social challenges, realities, to take into account trends in scientific and technological progress and prospects for production development. However, the renewal of educational practice, for various reasons, often lags behind the pace of civilization development, social requirements for education. Overcoming this situation determines the need for educational innovations and innovative training in the context of professional development of teachers of vocational education [7].

Innovative learning is a teaching and educational activity focused on dynamic changes in the surrounding world, which is based on the development of various forms of thinking, creative abilities, high social and adaptive capabilities of the person. S. Goncharenko defines readiness for self-education as an integral quality of personality, characterized by the desire to constantly expand the range of perception of life for the purpose of its deeper understanding and ability to systematic educational activity (ability to navigate freely in different sources of information, critically analyze them, independently find answers to all actual questions of life) [3].

Approximately generalized model of innovative learning provides:

- active participation of the student in the learning process;
- opportunities for applied use of knowledge in real conditions;
- presentation of concepts and knowledge in various forms (and not only in text form);
- approach to learning as to a collective rather than individual activity;
- focus on learning process, not on memorizing information [1].

The development of innovative processes in education now is determined by:

- intensive development of information technologies in all spheres of human life;
- updating the content of the philosophy of modern education, the center of which is the universal value dimension of professional activity;
- humanistic-oriented nature of the interaction of participants of the educational process;
- the need to increase the level of responsibility of the teacher for his own professional activity.

In this regard, the innovative activity of the teacher based on the scientific understanding of practical pedagogical experience, organization of purposeful methodical activity focused on change and development of educational process for the purpose of achievement of higher results, obtaining new knowledge, forming a qualitatively different pedagogical practice is extremely important.

As noted in the Concept of implementation of state policy in the field of vocational education, quality assurance of vocational education is carried out by:

- formation of the content of vocational education on a competency basis;
- introduction of internal and external system of quality assurance of education;
- modernization of the educational environment, which provides innovation, accessibility, transparency, flexibility and openness of the educational process, etc. [6].

As we can see, vocational education has recently become more and more innovative, so pedagogical staff of vocational education must be ready for innovative professional development throughout life. Thus, the innovation strategy becomes the basis for the implementation of various forms of activity in the institution of vocational education.

At the stage of origin of innovative activity, its general creative bases the most effective conditions for development of innovative activity of the teacher, formation at it of aspiration to new are created. The basis and content of innovative educational processes is innovative activity, the essence of which is to update the pedagogical process, introduction of new formations in the traditional educational system, which provides the achievement of the highest degree of pedagogical creativity.

First of all the teacher-innovator is the subject and the carrier of the innovation process. Appeal to the analysis of problems of modern education requires solving the problems of evaluation and design of the structure of the formation of innovative activities of the teacher. These tasks

have a deep social and pedagogical content, as their solution depends on the success of reforms in the vocational education system of Ukraine, and, accordingly, the prospects for the development of domestic production and the formation of the national economy. Innovative processes based on different activities are divided into separate stages that ensure the creation and implementation of innovations and combine the term «innovative activity». Its nature changes during the transition from one stage of this process to another.

According to I. Dychkivska, innovative activity, being a complex and multifaceted phenomenon, includes:

- the process of interaction of individuals, aimed at development, transformation of the object, its transfer to a qualitatively new condition;
- systematic activities for the creation, development and application of new educational tools;
- a special kind of creative activity that combines various operations and actions aimed at acquiring new knowledge, technologies and systems. This is a characteristic feature of innovation in the educational field [4].

Innovative methodical activity of the teacher structurally covers external (purpose, means of achievement, object of influence, subject of activity, result) and internal (motivation, content of operation) components. It also performs gnostic (cognitive), design (long-term planning of tasks and ways to solve them), constructive (cooperation of teacher and students), communicative (interaction of teacher with students, colleagues) and organizational (gradual actions of teacher and students) functions.

The main features of innovative methodical activities are a personal approach, creative, research and experimental nature, a strong motivation to find something new in the organization of the educational process.

Most researchers consider that the model of innovation activity contains structural (motivational, creative, technological, reflective) and functional (personality-motivated restructuring of educational programs, formulation of goals and general conceptual approaches, planning stages of experimental work, forecasting difficulties, implementation of new in the pedagogical process, correction and evaluation of innovation activity) components. This model also contains criteria (creative perception of innovations, pedagogical innovative thinking and communication culture) and levels (reproductive, heuristic, creative) [5].

The motivational component of innovative methodical activity of the teacher can be considered in two directions. Firstly, in terms of the place of professional motivation in the overall structure of motives; secondly, in the assessment of the teacher's attitude to change (needs for pedagogical innovations) and the need for their perception, which determines the content of the creative orientation of his professional activity.

Types of motives of the teacher for implementation of innovative methodical activity, generally, are connected with personal incentives: level of professional growth, increasing the efficiency of the educational process, self-affirmation and personal self-realization.

The second component of innovative methodical activity of the teacher is creative. Ukrainian philosophy distinguishes between the essence of the concepts of «creation» and

«creativity». Creation is a procedural and productive concept; creativity is a special property of an individual, his creative features and possibilities (personal potential).

The authors of the model of innovative methodical activity affirm that the creativity of the teacher arises based on imitation of pedagogical experience, concepts and ideas with a gradual decrease in the share of copying components. Thus, creativity develops from imitation that is copying through creative imitation to direct creation. This is the way from adaptation to pedagogical innovation and its transformation, which is the essence of the innovative activity of the teacher.

The technological component of innovative methodical activity of the teacher can be presented by the following actions:

- personal and motivated processing of already existing educational processes, their independent interpretation, isolation and classification of problematic pedagogical situations, active search for information on educational innovations;
- professional and motivated analysis of their own abilities to create or master new ideas, concepts, theories and decision-making on their use;
- formulation of goals and general conceptual approaches to the stages of experimental work;
- implementation of innovative actions: introduction of innovation into the educational process and tracking the progress of its development and implementation;
- control and correction of innovation implementation and all innovation activity, evaluation of implementation results, reflection of teacher's self-realization.

The reflective component of innovative methodical activity is connected with the teacher's awareness of the set of methods and tools in terms of their adequacy to the goals of educational activity, its object and result. Reflection as an activity in the aspect of introducing innovations involves the analysis of changes in operating conditions. The teacher-innovator must be able to share his own and others' assessments of the consequences of innovation, to predict the prospects for further action.

Thus, the real implementation of innovative methodical activities is built on the conceptual basis of educational innovation, including diagnosis, prediction, development of an experimental program or action program, analysis of its realization, activity implementation of the innovation program, tracking the progress and results of implementation, correction and reflection of innovative actions [9].

Readiness for innovative methodical activity is the basis for the formation of an innovative position of a teacher of vocational education. The structure of it is a complex integrative formation, which covers a variety of qualities, properties, knowledge, skills of the person. One of the important components of professional readiness is a prerequisite for the effective activity of the teacher, the maximum realization of his capabilities and the disclosure of creative potential. Features of personal development, professional orientation, professional education, upbringing and self-upbringing, professional self-determination of the teacher, cause readiness for innovative activity.

In general, the strategy of development of both the system of vocational education and a specific institution of

vocational education today should be innovative. It should be based on modern legislative and regulatory support, scientifically based criteria for assessing the quality of the educational process, state standards of vocational education, the results of monitoring the supply and demand of the needs of the regional labor market in skilled workers. An innovative culture is formed which is characterized by a focus on the individual, the ability to change, openness to communication both internally and with the external environment as a result of the correct choice of development strategy in vocational education institutions. Solidarity in values and views on education is inherent in the participants of the educational process of the institution, which allows cooperating effectively in the conditions of constant constructive dialogue and mutual coordination of positions, to update systematically approaches to the organization of educational process.

Conclusions

One of the main tasks of reforming the system of vocational education in Ukraine is the training and development of highly qualified teachers, an important point of professional and pedagogical development of which is methodical competence. This approach will solve the problem of inconsistency of teaching methods with the requirements of the modern labor market and the needs of the individual, as noted in the Concept of implementation of state policy in the field of vocational education «Modern vocational education» for the period up to 2027.

The solution of the issue of effective professional development of pedagogical staff is closely connected with the models of innovative methodical support of educational processes of vocational education. Taking into account the innovative component of the development of methodical competence and didactic conditions of its formation, we can conclude about the importance of this competence in the professional development of a teacher of vocational education. The specificity of methodical competence in the context of professional development of a teacher of vocational education is to make a creative learning environment, in which students learn to think creatively and develop independently.

Trends in the development of education in Ukraine, taking into account the European integration aspects, have necessitated the deployment of innovative processes in the system of vocational education, which is a priority area today in the social and economic, spiritual and cultural growth of Ukrainian statehood. Due to changes in the activities of the teacher with a focus on educational innovation and his readiness to realize personal creative potential, it is possible to achieve qualitative changes in the educational process of vocational education institutions, to bring the results of their activities closer to the standards of the European educational space.

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