



ANALYSIS OF NATIONAL SURVEY RESULTS ON GOVERNANCE IN VOCATIONAL TEACHER EDUCATION IN UKRAINE

Structural Report



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ACRONYMS

HEI – higher education institution

VET – vocational education and training

VTE – vocational teacher education

I. SITUATION WITH VOCATIONAL TEACHER EDUCATION IN UKRAINE: PROBLEMS AND ACHIEVEMENTS

Improving the quality of education in Ukraine within the framework of integration into the European educational and economic space seems possible only if systemic reforms in the field of education are implemented. Such work has been carried out since 2014, as amendments to the Law of Ukraine "On Education" were agreed, which concerned secondary, vocational (vocational and technical) and higher education. Strategic directions of reforming vocational (technical) education and higher pedagogical education are reflected in the Concept of development of pedagogical education and the Concept of state policy in the field of vocational education "Modern vocational education" for the period up to 2027 and a number of other acts and regulations.

Speaking about the system of vocational teacher training, it should be noted that the tendency of devaluation of the vocational teacher status is threatening, which is caused by a number of factors, including the unsatisfactory level of organization of their professional training in higher education institutions (HEIs), weak motivation to self-education, self-improvement and professional development. Researchers note the lack of interconnection of universities with stakeholders, lack of communication for effective coordination of efforts between vocational education institutions, as the main employers for future vocational teachers, higher education institutions that provide their training, and local authorities on the content of education, as well as educational processes and practical training of students, which does not contribute to improving the quality of education. Educational programs for future vocational teacher training often do not or only superficially reflect the specifics of vocational education. Above all, the impact of vocational education institutions on the training of their future teachers at HEIs is considered to be weak.

The situation is not improved by the organization of practical training of future vocational teachers, because, in most cases, their goals, objectives and criteria for assessing the success of their achievement are not clearly defined, structured and consistent. There also is an imbalance of theoretical and practical professional training of teachers, its excessive theorizing and, as a consequence, a lack of readiness for teaching.

In Ukraine, professional standards for teachers of vocational (technical) education have only recently been approved, which are important elements in the interaction between the labor market and education. They are meant to become the basis for the development and assessment of qualifications, a tool for correlating qualifications with the National Qualifications Framework, serving as a guide for the development of educational programs for training, career guidance of citizens.

The development and approval of these important regulations opens the way for change, but does not solve all the existing problems. There is a need for a long and active campaign

to develop an additional regulatory framework and real mechanisms for their implementation with the involvement of representatives of all stakeholders and broad support from government institutions, as well as promotion of reforms among the public and discussion of further steps.

II. RATIONALE OF THE PROJECT PAGOSTE

The above-mentioned problematic issues in the system of professional education in the field of pedagogy in Ukraine, in particular regarding cooperation and interaction for the improvement of the system as a whole and the constant professional development of teachers, have a long history and have developed for decades. They were also emphasized by researchers who conducted research between 2016-2018 within the Erasmus+ project "Improving teacher education in the field of VET (ITE-VET)". The analysis of the results of the survey of more than 800 vocational teachers, conducted in 2017, gave grounds to claim the lack of real cooperation between higher education institutions, vocational (technical) education institutions and employers, and shortcomings of practical training of students. At the same time researchers found out that teachers of vocational education have a significant interest in participating in in-service training events organised by higher education institutions that implement educational programs for teacher training. The majority of survey participants supported the idea of establishing the practice of regular meetings and building close relationships, partnerships, as a fundamental idea of improving the governance of teacher training.

Our current project "New mechanisms of partnership-based governance and standardization of vocational teacher education in Ukraine" (PAGOSTE)" aims at clarifying the current state of partnership in the training of teachers of vocational education and the development of better approaches to the governance of teacher training. The purpose of the project is to introduce new mechanisms of governance of teacher training on a partnership basis, with the mandatory involvement of representatives of vocational education institutions, significant strengthening of their influence, in contrast with the established practice of an exclusive role of universities in teacher training and the central supervisory role of the Ministry of Education and Science of Ukraine.

This project involves efforts to overcome the problem of inconsistency of the content of education, the methods and technologies of training used by higher educational institutions with modern requirements of the labour market, and the demands of students.

In addition, an important envisaged achievement within the project is the justification of the need to create and test the structure of an online platform for communication of educational institutions and other stakeholders. The project might become a platform for experimental implementation and evaluation of the concept of compulsory internship of graduates developed by the Ministry of Education and Science of Ukraine (Ministry of Education and Science of Ukraine, 2018). The results of the project are meant to contribute

to the improvement of the system of professional development of pedagogical staff of vocational education institutions according to the concept of lifelong learning and professionalization of this category of teachers, which is a difficult and important task given that their professional and pedagogical competences influence not only professional training of students, but also the functioning of the whole sphere of vocational education.

III. METHODOLOGY

To clarify the current state of partnership in the training of teachers of vocational education and develop optimal approaches to the governance of their training in April-May 2020, the Institute of Vocational Education and Training of the NAPS of Ukraine conducted a survey of four groups of respondents: research and teaching staff of higher education institutions which carry out training of students in the specialty "Professional Education", HEI students in the specialty "Professional Education", teachers and heads of vocational education institutions.

The survey was conducted online using the web service GoogleForms. This service allows to submit a digital version of the questionnaire in a cloud environment, which makes it available at any time and from anywhere, easily distributed to potential respondents, and it allows to save answers, and to quickly summarize and process the survey results.

At the beginning of the questionnaires, information about the purpose and project within which the survey is conducted was posted. To ensure the objectivity of the answers, the survey was conducted anonymously. The questionnaires contained open-ended and closed-ended questions (some of which provided an opportunity to offer own answers).

The questionnaire for the survey of *research and teaching staff of higher education institutions* that train students in the specialty "Professional Education" included 20 questions related to age, gender, place of residence, place of work, specialization of the educational program, which prepares the level of education, position, scientific and pedagogical experience, an evaluation of the level of cooperation between institutions of vocational education, current and desired areas and forms of partnership, motivation for continuous development of professional and pedagogical competence, participation in training activities on the basis of vocational education institutions, the availability of platforms for professional communication with colleagues from other educational and research institutions.

The questionnaire for surveying *students of higher education in the specialty "Professional Education"* contained 31 questions looking at learning motives, choices of specialty, educational institutions, and the level of student satisfaction with the educational process; moreover, there is a focus on the organization of practical training (training and industrial practice), self-assessment of the level of development of professional competences, the readiness to conduct classes in institutions of vocational education; experience of students'

participation in the discussion of directions, and ways to improve the organization of the educational process by teachers and the administration of the educational institution.

The questionnaire for the survey of *teachers of vocational education institutions* included 35 questions, assessing the level of satisfaction with their own theoretical and practical training for teaching, identifying promising areas for improving the training of vocational teachers in higher education institutions, indicating partners in the organization of educational process, evaluating the effectiveness of cooperation with higher education institutions that train teachers of vocational education, and its feasibility. The questionnaire also included questions about the management of the practice of future teachers and the level of professional and pedagogical training of trainee students. A separate block of questions was devoted to forms of professional development, participation of teachers in professional development activities held on the basis of higher education institutions, interest in developing a common platform for professional communication with colleagues of higher education institutions, educational centers, and research institutions.

The last of the four questionnaires was designed to interview the *heads of vocational education institutions* and contained 29 questions. The questions of this questionnaire, in addition to general demographic data, concerned the satisfaction of respondents with the readiness of teachers of the institution to carry out teaching activities; cooperation with educational institutions on various levels, business structures, employment centers, scientific institutions, public authorities, domestic, foreign and international public organizations, as well as the importance of different areas of cooperation and factors that hinder the deepening of partnerships.

IV. ANALYSIS OF THE RESULTS

GENERAL CHARACTERISTICS OF RESPONDENTS

In total, the first survey covered **274 research and teaching staff members from 25 higher education institutions** that provide training in educational programs in the specialty "Professional Education" in 22 specializations out of 24 possible.

The respondents were representatives from higher education institutions and different age groups (up to 30 years - 7.3%; from 31 to 40 years - 24.4%; from 41 to 50 years - 37.5%; over 50 years - 30.9%) and different duration of professional activity (up to 3 years - 6.9%; 4-10 years - 15.3%; 11-20 years - 36.0%; more than 20 years - 41.8%). The majority of respondents were women (65.5%), which generally corresponds to the gender structure of the teaching staff of higher education institutions.

By positions, respondents were distributed as follows: assistants - 10.58%, teachers - 1.82%, senior teachers - 12.41%, associate professors - 55.84%, professors - 10.22%, heads of departments - 8.39% and others - 0.72% (head of the educational and methodical office, deputy director of the institute etc.) (see Figure 1).

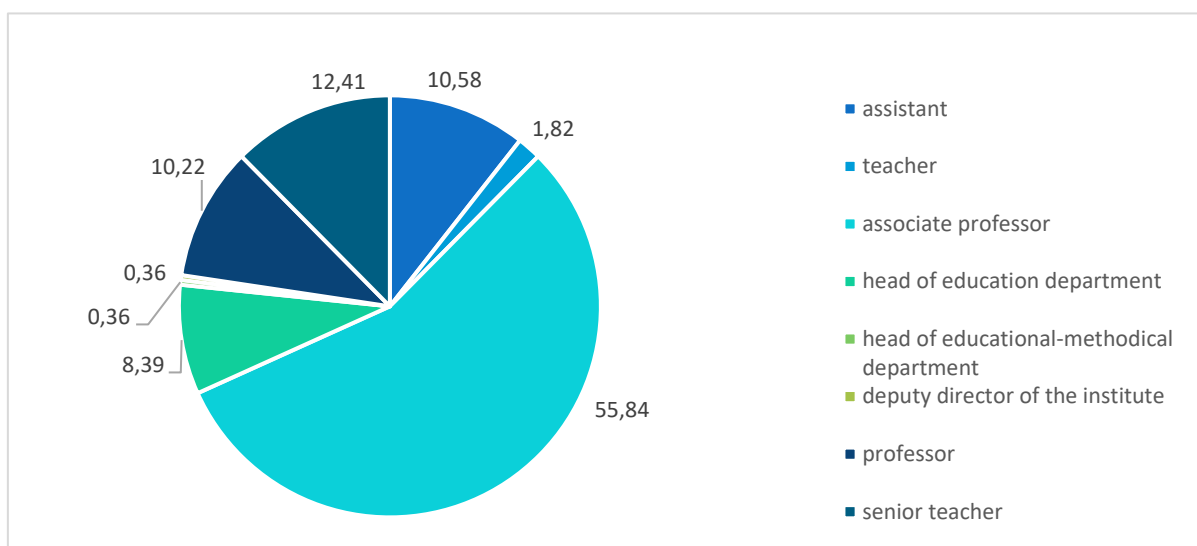


Figure 1. Distribution of respondents by positions, %

More than half of the respondents (59.6%) are teachers of vocational (professional) training. Disciplines of general education and pedagogical training are taught by 21.5% and 18.9% of teachers respectively who took part in the survey.

The group of **HEI students** who took part in the survey numbered 1,277 people. This group consisted of approximately equal numbers of women (51%) and men (49%). More than half of the surveyed HEI students (55%) were young people aged 20-25, 41% of respondents in this group were under the age of 20 - 41%, and 4% over 25. They are students of 25 institutions of higher education, study in educational programs specializing in "Professional Education" with 22 specializations of educational level bachelor (81%) and master (19%). The distribution of respondents by course is quite balanced (from 16 to 26% for each course). Undergraduates of 1 year of study among those surveyed represented 16.7% of the sample, just 1% had spent 2 years of study. Mostly, they are city dwellers (61.3%), 20.3% are from rural areas, the remaining come from urban settlements.

1,402 pedagogical staff members of vocational schools took part in our study (teachers of vocational training, deputy directors of educational work, didactical specialists, senior masters of industrial training, masters of industrial training) from 22 regions of Ukraine and city of Kyiv. The distribution of respondents by position is presented in Figure 2.

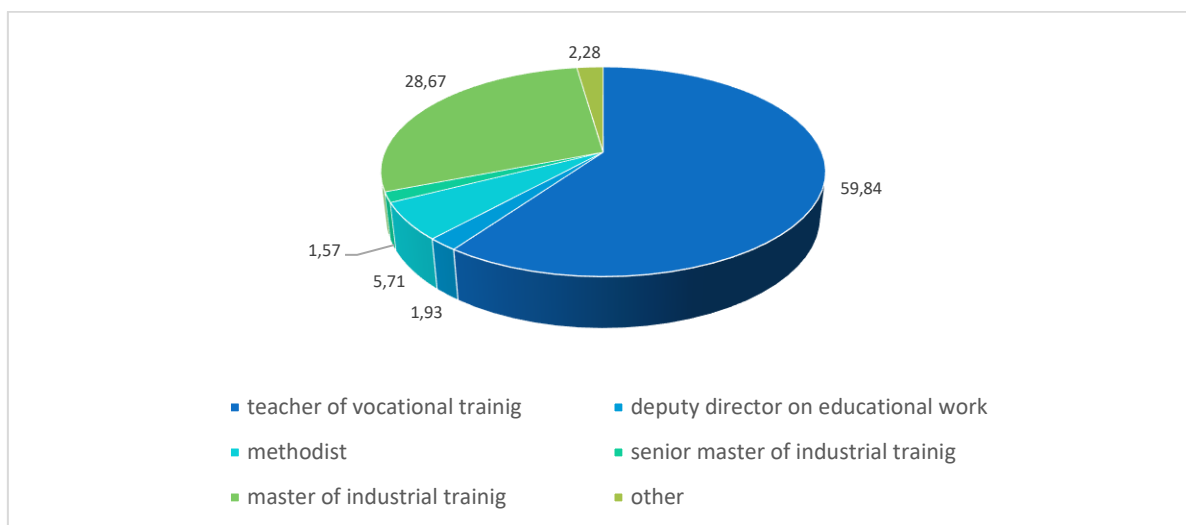


Figure 2. Distribution of respondents by position, %

The vast majority of this group were women (79%), persons with the level of education "Specialist" and above (82.6%), and staff over 30 years of age (89.4%). More than 2/3 of respondents (67.8%) in this group have more than 10 years of teaching experience. 62.8% of the respondents had a pedagogical educational background.

The fourth group of respondents included **163 heads of vocational education institutions** of various profiles from 21 regions of Ukraine and Kyiv, including: higher vocational schools, vocational lyceums, vocational schools, vocational education centers, interschool educational-industrial plants, vocational schools of social rehabilitation, institutes of professional development, interregional centers of professional retraining, educational centers, private institutions of vocational education.

ANALYSIS OF THE RESULTS OF THE SURVEY OF HEI ACADEMIC STAFF WHO TRAIN STUDENTS IN THE SPECIALITY "PROFESSIONAL EDUCATION"

The vast majority of surveyed research and teaching staff of higher education institutions that train students in the specialty "Professional Education" indicated that they cooperate with other higher education institutions (73.1%) and vocational education institutions (71.3%). Among the partners were also enterprises, private entrepreneurs (49.8%), research institutions (30.5%), scientific (methodical) centers of vocational education (26.5%), institutions of postgraduate pedagogical education (26, 5%) and institutions of professional higher education (25.5%), professional associations (unions), the Ministry of Education and Science of Ukraine, employment centers, international organizations, legislative and executive bodies (see Figure 3).

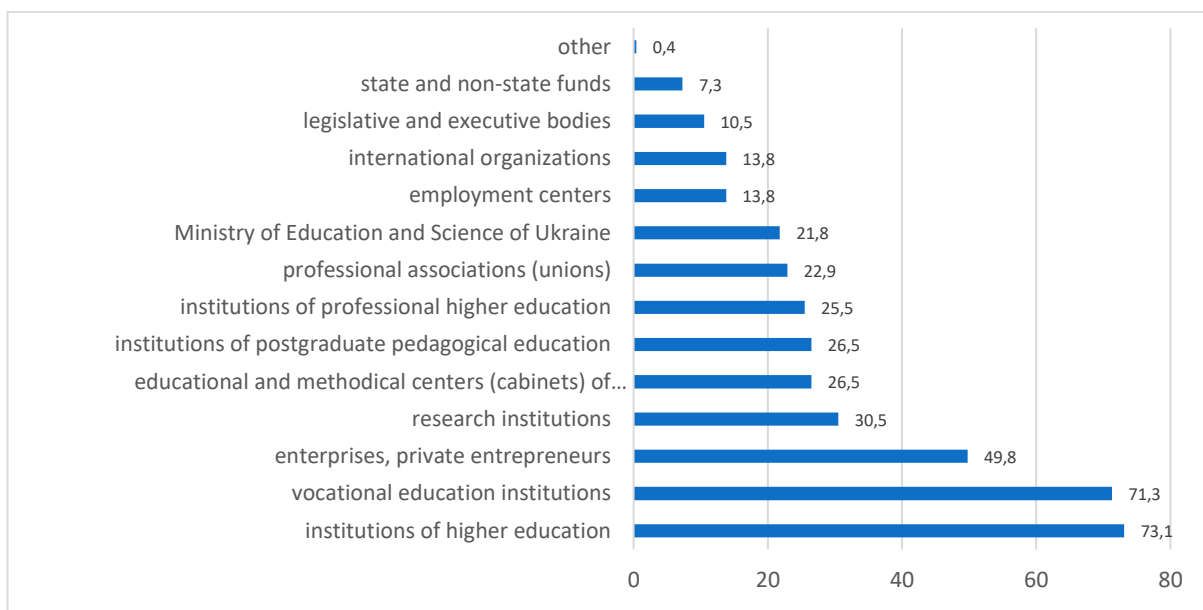


Figure 3. Distribution of respondents' answers about partnership, %

At the same time, 61.5% of HEI representatives rated cooperation with VET institutions as quite satisfactory, and 0.4% were not satisfied. The average rating score of this type of cooperation is 3.53 (on a 4-point scale). The detailed rating of cooperation between HEIs and VET institutions in different areas is presented in Figure 4.



Figure 4. Rating of cooperation with vocational institutions, score points on a 4-points scale

From the point of view of research and pedagogical practice, the most relevant fields for establishing cooperation cover career guidance work (3.76 points), the efficient organization of pedagogical practice for students (3.72 points), and the organization of training and professional development for teachers (3.65 points). These suggestions coincide with the first positions in the evaluation of areas of cooperation that have already been implemented. The joint conducting of classes in the disciplines of vocational (professional) training (3.56 points), the joint implementation of educational (training) projects (3.49

points), and joint organisation of classes in pedagogical disciplines (3.44 points) seem less appropriate.

It should be noted that half of the surveyed teachers (54.2%) believe that it is necessary to involve vocational teachers in conducting classes at HEIs, 19.6% do not approve this idea, while the remaining (26, 2%) did not reply. The idea of involving HEI teachers in conducting classes at VET institutions found much greater support among respondents (76.7%). The share of those who did not answer was also lower - 16.4%.

94.2% of HEI teachers feel the need for continuous development of professional and pedagogical competencies. 67.6% of HEI representatives have some experience of participation in in-service training events held by or at VET institutions. Mostly, these are conferences (70.8%), methodical seminars (58.4%), round tables (43.8%).

96.7% of teachers are satisfied with these trainings. 81.1% of respondents recognize the relevance of participation in in-service training activities held by/at VET institutions. 10.5% of HEI respondents deny such relevance.

Quite comforting is the fact that, according to the respondents, 73.5% of research and teaching staff have the opportunity to constantly communicate on professional issues with colleagues from vocational education institutions (within the framework of joint conferences, vacancy fairs, etc.). At the same time, 9.8% of respondents do not have such an opportunity. A significant proportion of respondents did not reply unanimously, which may indicate a lack of constant use of this opportunity or regular contact with colleagues for various reasons. 89.8% of HEI teachers support creating a specialized online platform for professional and pedagogical communication.

ANALYSIS OF THE RESULTS OF THE SURVEY OF HEI STUDENTS WHO STUDY THE SPECIALITY "PROFESSIONAL EDUCATION"

The first block of questions of the questionnaire for students concerned the motives for choosing a study program (specialty) and the educational institution. According to the results of the survey, the main motives for choosing a study program were as follows: advice from acquaintances, friends, or relatives (28.4% of students); desire to teach (27.5% of students); the prospect of a stable income (27.4% of students); employment opportunities, demand in the labor market (24.5%); prestige of the profession in society (23.8%) (see Figure 5). For most former entrants when choosing an educational institution, the determining factor was the availability of a study program that meets their preferences and interests, and the quality of training.



Figure 5. Distribution of respondents' answers about motives for choosing an educational program (speciality), %

The questionnaire also contained questions about satisfaction with the educational process, teaching disciplines, organization of practical training, ideas for its improvement. The level of satisfaction with training was quite high and reaches 3.45 points on a 4-point scale. 92.5% of students are satisfied with their studies at the chosen educational institution, 6% are dissatisfied. Students are most satisfied with the willingness of teachers to answer questions, provide the necessary support during training (average score - 3.48 points), the availability of educational materials (3.38 points), the willingness of the administration to answer questions and provide the necessary support (3.32 points). The lowest scores of satisfaction by criteria were: participation in international projects during training (3.02 points), accessibility and ease of use of dormitories, canteens, sports facilities (3.10 points), a list of elective subjects (3.13 points). The clarity and accessibility of the teaching material was assessed at 3.38 points; interest of students and motivation to study the discipline by teachers - 3.30 points; availability of feedback from teachers and students - 3.42 points; uniqueness of the content of academic disciplines - 3.20 points. The results of the evaluation of the organization of training and industrial practice are presented in Figure 6.

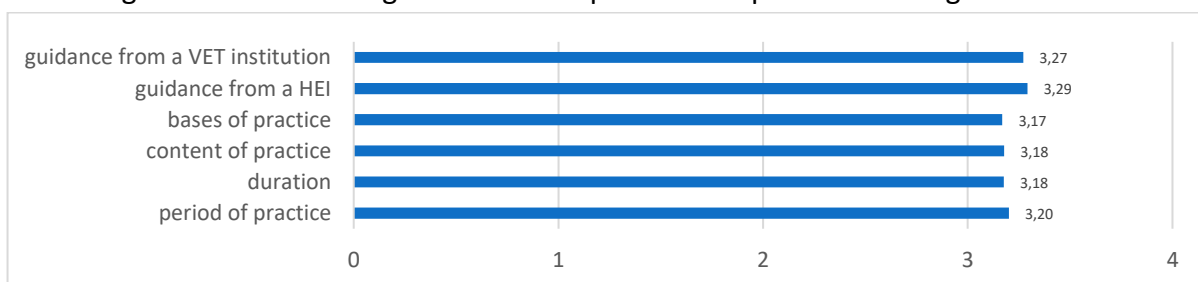


Figure 6. Results of the evaluation of the organization of training and industrial practice, score points on a 4-points scale

83.6% of surveyed students who had such experience positively assessed their own experience of conducting classes during the internship. The average score of such experience reaches the level of 3.29 points (on a 4-point scale). 33.7% of the respondents of this group mentioned a sufficient level of professional and pedagogical knowledge and skills for proper classes. The share of students who, in their opinion, lacked professional knowledge and skills is higher (38.4%) compared to the share of those who lacked pedagogical knowledge and skills (28%). For more than a quarter of the respondents, it was difficult to determine the answer, which indicates the lack of clear criteria for assessing professional and pedagogical activities. 26.1% of students feel very well prepared for classes, 49.4% indicated that they would be inclined to evaluate their readiness as "rather good". A quarter of respondents feel ill-prepared or have difficulties to answer.

Among the submitted proposals for improving professional training prevail those related to strengthening the practical orientation of the educational process (in particular, increasing the number and scope of special disciplines, practical classes, internships, more active involvement of practitioners in the teaching process at HEIs, establishing permanent cooperation with vocational schools, public and private enterprises, modernization of content, methods and teaching facilities, such as technical support, production equipment, materials, the elimination of duplication of educational contents in various disciplines, their consolidation and reduction in terms of contents, an improvement of research work for students, greater motivation to study, encouraging creativity, strengthening their subjectivity (participation in the discussion of content, teaching methods, expanding the list of elective educational components), improving the learning and living conditions of students (rational scheduling, creating appropriate conditions for sports, nutrition etc.).

The next block of questions was designed to explore the intensity of cooperation and forms of partnerships in which students participate. It turned out that 31.5% of students were often involved in discussions on ways how to improve the organization of the educational process with teachers and the administration of the educational institution, 39.7% sometimes participated in such events. Mostly, it was a discussion initiated by their HEI teacher (52.4% of respondents indicated this form), by the administration of the institution (45.5%) or a student organisation (31.2%); an oral survey conducted by their HEI teacher (36.6%); or correspondence through a trust box (12.7%). 21.7% of students stated that they had no such experience.

The level of satisfaction with cooperation between HEIs and VET institutions was evaluated with 3.38 points. Areas in which it is most appropriate to develop cooperation according to students are: employment of future teachers (47.1%), organization of pedagogical internships (42.3%), conducting classes on professional training (39.2%) (see Figure 7).

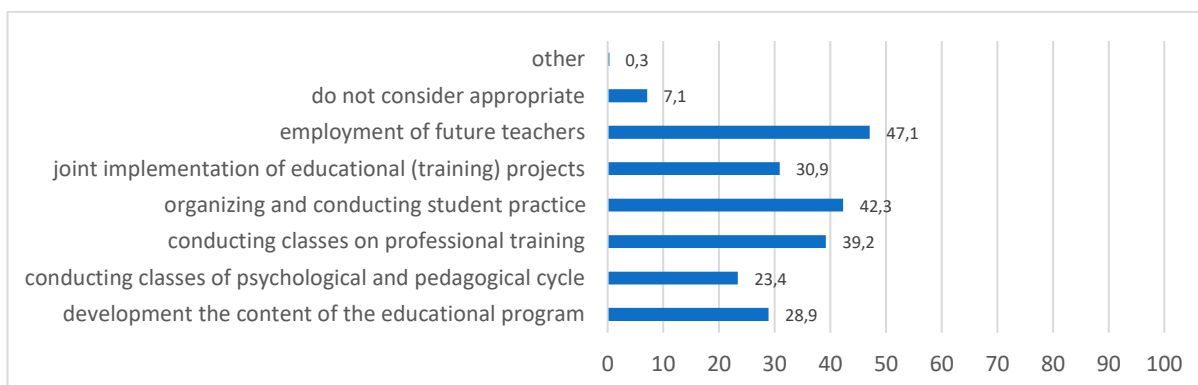


Figure 7. *Distribution of respondents' answers about relevance of cooperation with VET institutions (by areas of cooperation), %*

45.2% of the surveyed students consider it as relevant to involve vocational elements in conducting practical classes at HEIs. They justify their choice by the high practical professional orientation of such teachers, significant experience of professional and pedagogical activities in real condition of vocational education, which leads to improving the quality and relevance of HEI education. In addition, this practice, in their opinion, will promote the mutual development of both students and teachers of different types of educational institutions. It should be noted that a significant part of respondents (40.4%) found it difficult to answer this question.

48.3% of students believe that they have full information about VET institutions, where they can be employed after graduation. 25.6% of students said that this information is limited and 26.1% of respondents indicated absence of such information. According to students' answers, the most popular source of information about events at VET institutions and, accordingly, a platform for its dissemination and cooperation, is communication with HEI teachers and other students (3.35 points out of 4 points), the official website of their HEI (3.24 points) and unofficial web pages dedicated to their HEI and/or groups on social networks (3.08 points). Sources of such information are mostly teachers and other students (for 60.4% of respondents), official websites of institutions (for 54.0%), and official pages of institutions in social networks (for 35.3%). Among other things, the following were named: student scientific association, specialty contests, acquaintances from vocational educational institutions since the time of study, seminars, conferences.

The student questionnaire also contained questions about their current employment, plans for the scope and place of future employment. 31.3% of students involved in the survey constantly combine study with work, 38.9% work from time to time. At the same time, only 22% of participants said that their work fully corresponds to the specialty/study program. The share of students who see themselves in the future as vocational teachers (47%) exceeds the share of those who do not have such plans (36%), 17% of respondents are undecided. 45% of those who do not plan to work at vocational (technical) education

institution indicated that their place of work will not be related to educational activities at all. The detailed distribution of answers on the intentions of future employment is presented in Figure 8.

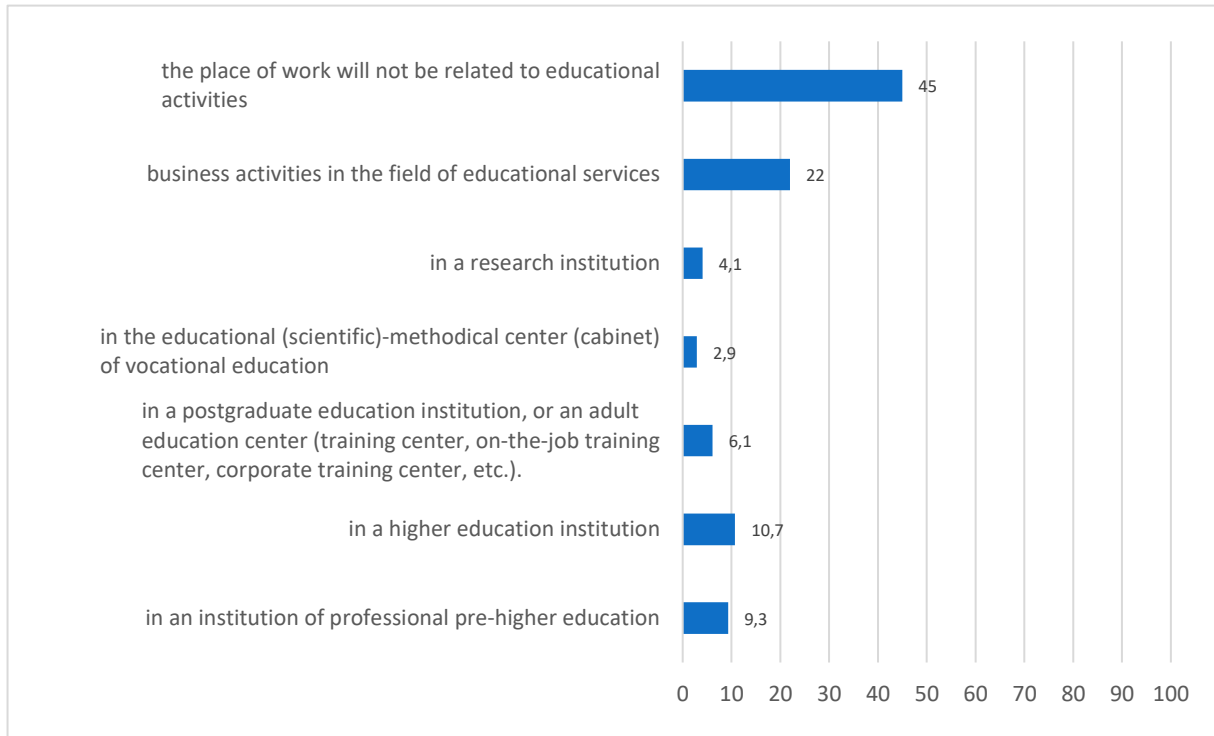


Figure 8. Distribution of respondents' answers on the intentions of future employment, %

ANALYSIS OF THE RESULTS OF THE SURVEY OF VOCATIONAL TEACHERS

The survey of vocational teachers revealed that half of VET teachers (56.2%) are completely satisfied with their level of their education and training. According to the results of teachers' self-assessment, the average assessment rate of readiness reaches the level of 3.55 points on a 4-point scale. Respondents in this group rated the level of theoretical training higher than the level of practical training (3.59 points and 3.48 points, respectively).

The survey participants indicated that at the beginning of their career they lacked pedagogical skills (for 32% of respondents), professional skills in the subject taught (20.2%), professionally significant personal qualities (15.7%), pedagogical knowledge (13.6%), professional knowledge of the subject taught (10.9%). 36.2% of respondents believe that they had a sufficient level of training.

Among the areas for improving vocational teacher training at HEIs were the following: creating conditions for continuous self-improvement and self-education of teachers and students; improving the quality of the postgraduate education system, functioning of advanced training courses, internships for HEI teachers who train future vocational teachers, development of platforms for online communication and exchange of experience with colleagues; introduction of innovative learning technologies (in particular, interactive

training, e-learning, project-based learning), didactical settings (workshops, webinars) and teaching methods, methods of motivation and stimulation of cognitive activity, digital technologies; constant updating of the content of education, its professional and practical orientation (through constant cooperation with employers on updating educational programs and their compliance with the requirements of the labour market), compliance with the latest achievements in science and education, attention to interdisciplinary links; international partnership, study and implementation of foreign pedagogical experience; strengthening the psychological component of training (age psychology, teamwork, communication skills, inclusion); development of digital competence; improvement of practical training (internships directly at VET institutions and in companies); training and internships in other educational institutions (including foreign), provision of the proper material and technical equipment at VET institutions (modern production equipment, computer equipment, means of communication); strengthening educational work, development of professionally significant personal qualities and the ability to critical thinking and pedagogical creativity.

Regarding partnership issues, the pedagogical staff of VET institutions cooperate to the largest extent with educational and methodical centres (cabinets) of vocational education, and institutions of professional and postgraduate pedagogical education. Only 28.7% of surveyed teachers indicated cooperation with HEIs. At the same time, the average score of cooperation with the HEI is 3.22 points (out of 4 points), which is 0.16 points lower than the score given to this question by HEI staff. According to VET teachers, it is most relevant to develop cooperation with HEIs in such areas as organization of training and professional development of teachers (average score is 3.36 points), career guidance work (3.33 points), professional training (3.32 points). Two of these areas also received the highest marks from representatives of HEIs as worth developing. The least popular are directions of employment of future teachers (2.94 points), joint implementation of educational (training) projects (3.03), joint activities (3.07) (see Figure 9). 27.4% of respondents participated in the development of educational standards.

45.1% of respondents gave a positive answer to the question about the relevance of involving HEI teachers in conducting classes with VET students. Involvement of VET teachers in conducting classes at HEIs for future vocational teachers was considered relevant by 59.3% of respondents. Support for such exchange is greater among HEI teachers. It should also be noted that those who did not decide on the answer to this question in this group were more than in the group of HEI pedagogical staff.

38.6% of the surveyed VET teachers have the experience of leading the practice of students of HEIs studying in the specialty "Professional Education". The average rate of satisfaction with the level of professional and pedagogical training of trainee students is 3.08 points (students' self-assessment - 3.29). The average grade of the theoretical component of

pedagogical training of trainee students reaches 3.09 points, and the practical component - 3.02 points.

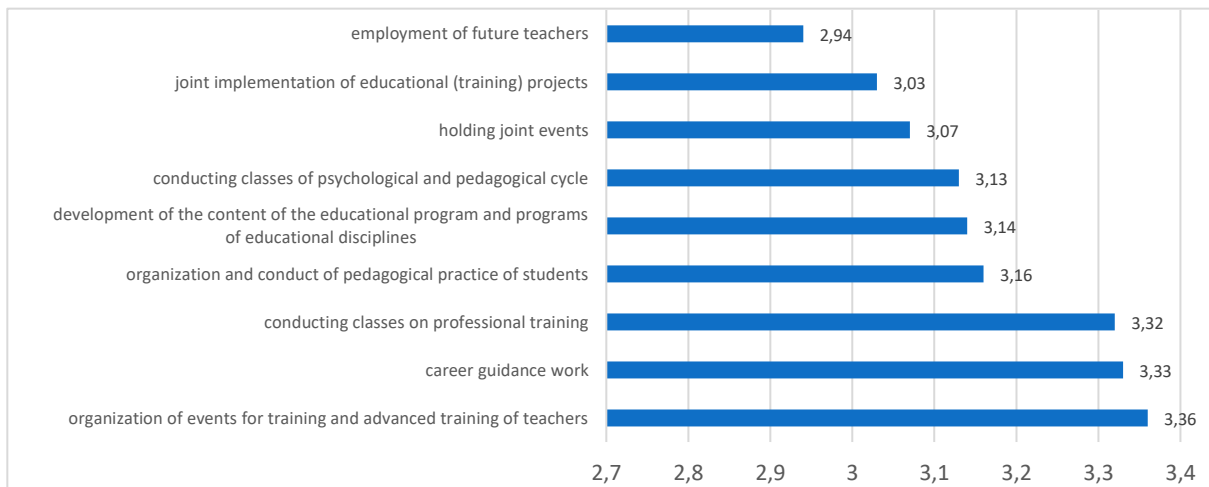


Figure 9. Distribution of respondents' answers about relevance of cooperation with HEIs in which students in the specialty "Professional Education" are trained (by areas of cooperation), score points on a 4-points scale

Teachers from VET institutions who are responsible for practical training reported that student trainees lacked pedagogical skills (40.3% of respondents) and professional skills in the subject taught (36.7%) for proper conduct of classes (students mostly noted the lack of professional knowledge and skills). A quarter of respondents (24.8%) indicated that students had a sufficient level of training (in student responses, this figure reaches the level of 33.7%).

The survey participants were also asked questions related to their attitude to professional development and current forms of professional development. The survey discovered that 90.9% of teachers are aware of the need for continuous development of professional and pedagogical competence. 62.7% of respondents took part in different events to improve professional and pedagogical skills organised by HEIs. The most popular forms of in-service training organised by HEIs are in-service training courses, e-learning courses, conferences, workshops. The average score of satisfaction with the result of participation in them is 3.53 points out of 4 points. HEI teachers are most interested in such forms as workshops (average assessment of the degree of interest - 3.56 points), up-skilling courses (3.45 points), training courses (3.28 points) (see Figure 10). 38.9% of the surveyed teachers believe that they have full information about HEIs in which they can improve their skills and have in service training in the study program "Education/Pedagogy", the limited information is available to 40.2% of respondents. For the most part, the sources of this information are the official websites of institutions, the official pages of institutions on social networks, information from colleagues. These sources of information are also common among HEI students in the specialty "Professional Education".

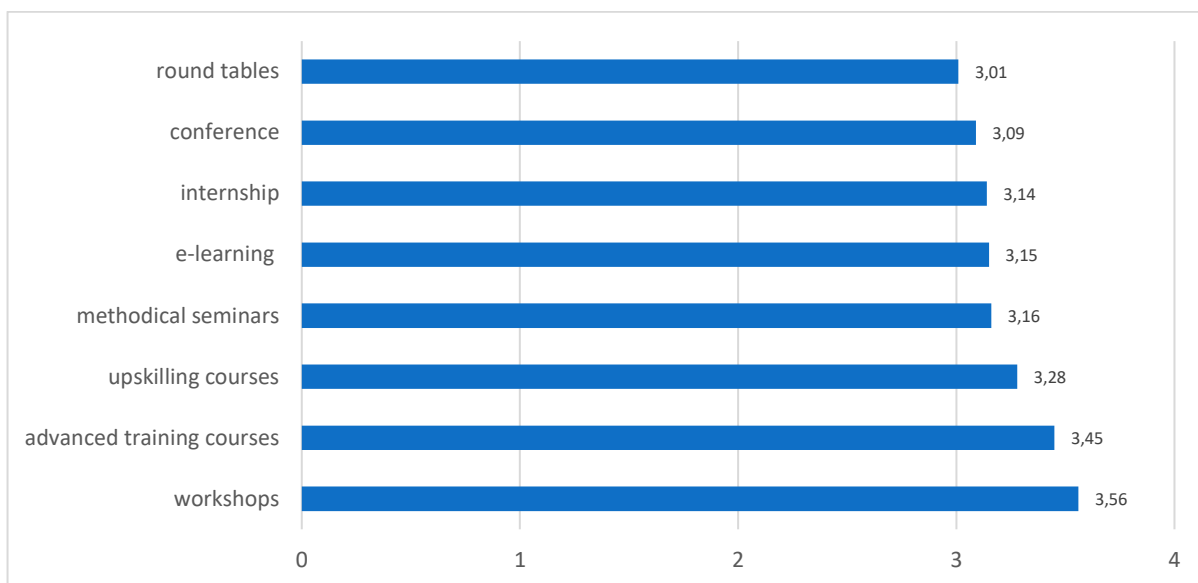


Figure 10. The results of evaluation of forms of professional development by the degree of interest in them, points on a 4-points scale

The possibility of constant communication on professional issues with colleagues from HEIs that train future vocational teachers (within the framework of joint conferences, vacancy fairs, etc.) is reported by 35.8% of respondents (twice as many (73.5%) representatives of HEIs indicated such an opportunity). The share of those who confirmed the feasibility of creating a specialized online platform for such professional communication is 87.4% of the surveyed vocational teachers (among the respondents of the group of HEI academic staff this figure is 89.8%).

ANALYSIS OF THE RESULTS OF THE SURVEY OF HEADS OF VOCATIONAL EDUCATION INSTITUTIONS

Heads of vocational education institutions are generally satisfied with the training of vocational teachers (the average score is 3.4 points). At the same time, the assessment of the theoretical component of training (4.18 points) was higher than the assessment of the practical component (3.86 points), which is fully consistent with the self-assessments of teachers (respectively 3.59 and 3.48 points). Respondents of this group believe that young teachers lack most of all pedagogical and professional skills. Only 30.7% of directors indicated that young vocational teachers demonstrate a sufficient level of training (see Figure 11).

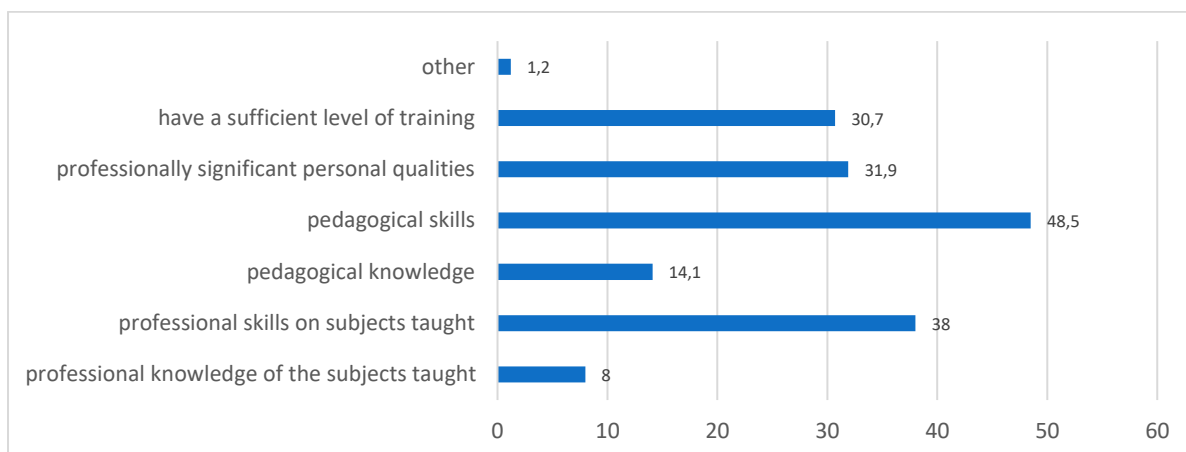


Figure 11. Distribution of respondents' answers regarding the lack of knowledge and/or skills of young future teachers, %

Approximately half of the surveyed vocational school directors (46%) would rather employ a job candidate without pedagogical education, but with work experience. They explain their choice by greater efficiency of practitioners; priority of production experience, professional competencies; theorized training at HEIs; the opportunity to acquire pedagogical knowledge and acquire pedagogical skills in the process by means of e-learning, self-education, up-skilling courses; demand for teachers with experience of practical work in production by VET students; specificity of professional (vocational) education (its practical orientation). 18.4% of respondents would prefer a teacher with pedagogical education but without work experience, explaining their choice with the importance of pedagogical competencies in the educational process; pedagogical influence on the personality development of VET students; the impossibility of ensuring the quality of the educational process without pedagogical knowledge and skills; the importance of the communicative aspect of learning; enhanced opportunities to influence students. A significant proportion of respondents (35.6%) did not have a clear answer to this question, pointing to the importance of both components.

The most meaningful partners for vocational education institutions are educational and methodological centres (cabinets), enterprises, private entrepreneurs and other vocational education institutions. Cooperation with state and non-state foundations, scientific institutions, and international organizations seems to happen more infrequently (see Figure 12).

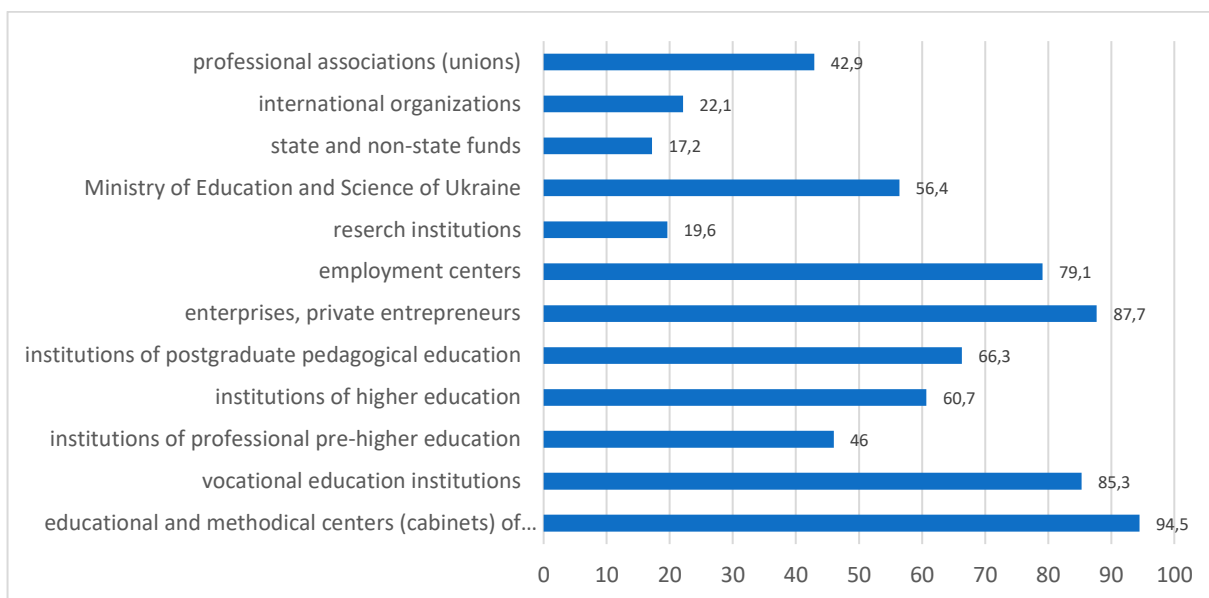


Figure 12. Distribution of responses about partnership, %

According to the survey participants, such areas of cooperation as the organization of production practice of students, modernization of the material and technical facilities of the institution, employment of graduates, etc. are of great importance (see Figure 13).

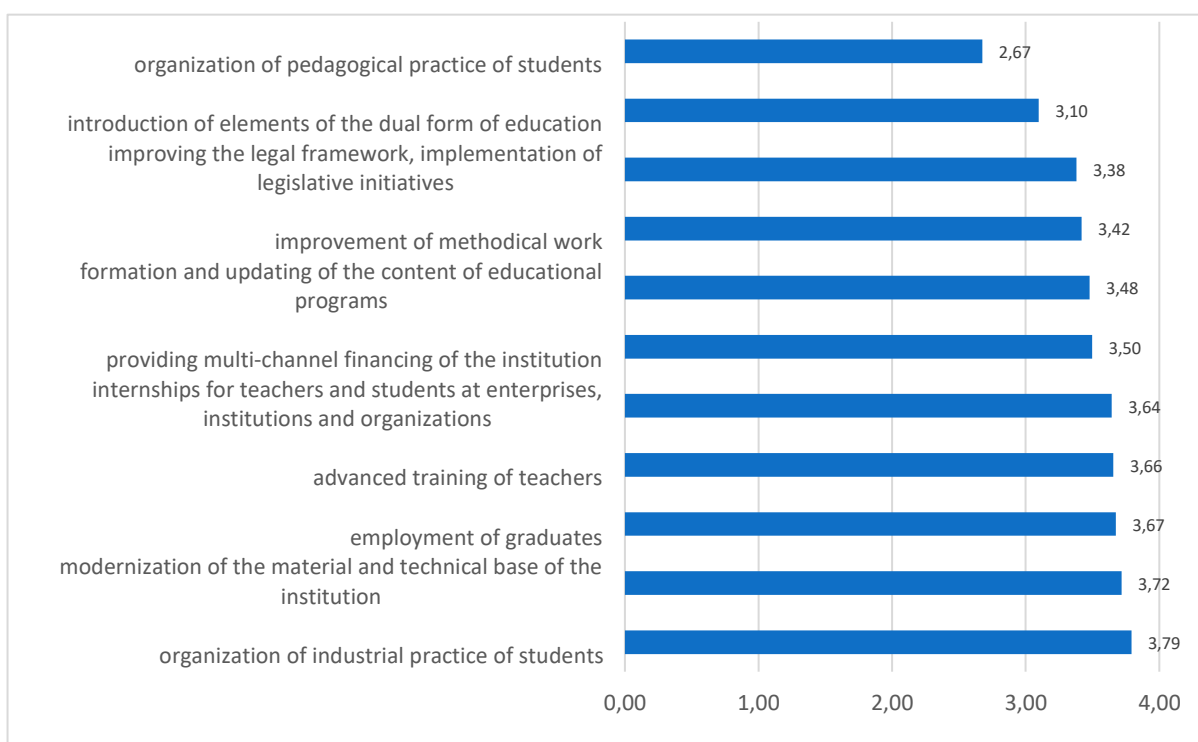


Figure 13. Evaluation of partnership areas by the degree of their significance, %

With regard to cooperation with HEIs which provide vocational teacher education (speciality “Professional Education), the vocational school management rated it with 3.12 points (on a

4-point scale). Vocational teachers rated such cooperation with 3.22 points. Mostly such cooperation concerns career guidance work, professional development of VET teachers, and practical training of HEI students (see Figure 14).

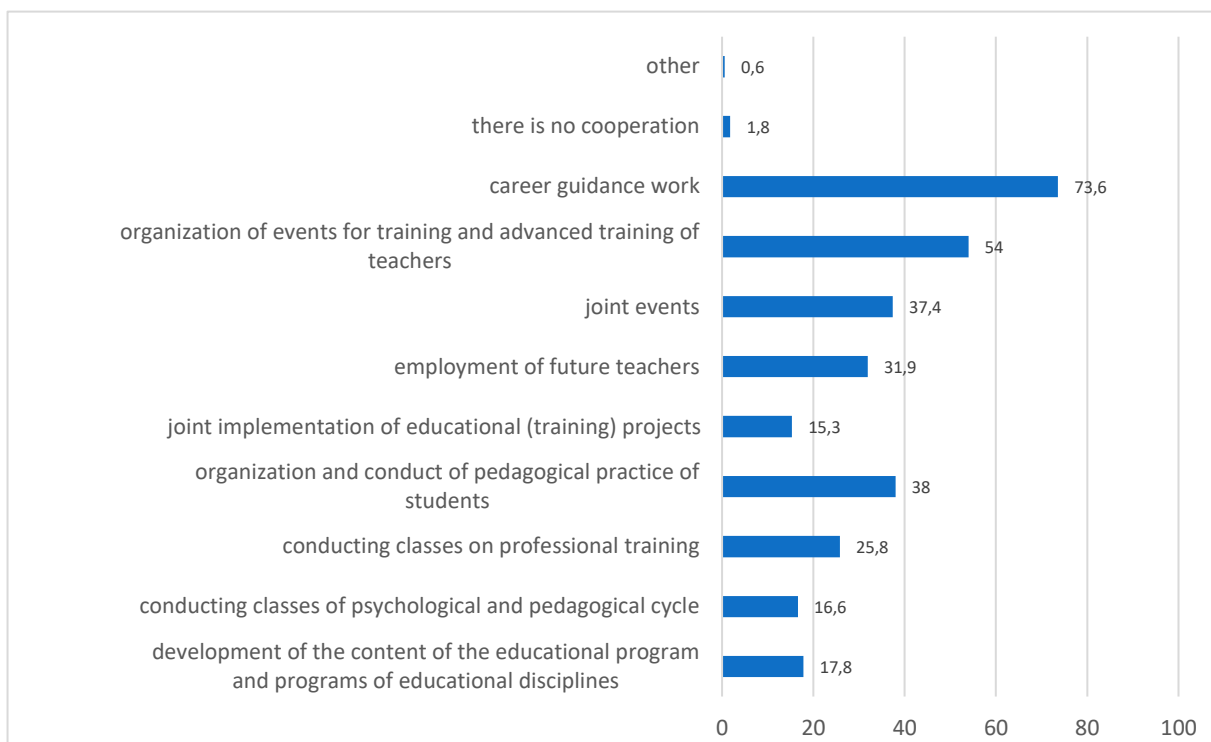


Figure 14. *Distribution of respondents' answers on areas of cooperation with HEIs, %*

According to the survey results, the most relevant seems to be cooperation in the area of organizing events for training and retraining of VET teachers, career guidance work and conducting training sessions. Among the factors that hinder cooperation, the survey participants most often indicated insufficient awareness of opportunities for cooperation (42.3%), lack of initiatives from HEIs (41.1) and territorial remoteness (39.3%).

More than half of the respondents (53.4%) stated that it is relevant to involve HEI teachers in conducting classes in vocational educational institutions. For the group of VET pedagogical staff, this share is 45.1%. The idea of involving vocational teachers in conducting classes at HEIs was supported by even 65% of vocational school directors (in comparison to 50.3% of VET teachers).

57.1% of the heads of vocational educational institutions noted that HEI students can have pedagogical practice at their institutions. The average score of satisfaction with the quality of HEI students' education and training is 2.99 points (on a 4-points scale). The theoretical component of pedagogical and professional training of HEI students was higher evaluated than the practical one, here the points are 3.7 points and 2.08 points respectively.

According to the observations of management staff of vocational educational institutions about students undertaking internships, there seems to exist a lack of pedagogical skills and professional skills in the subjects taught (see Figure 15).

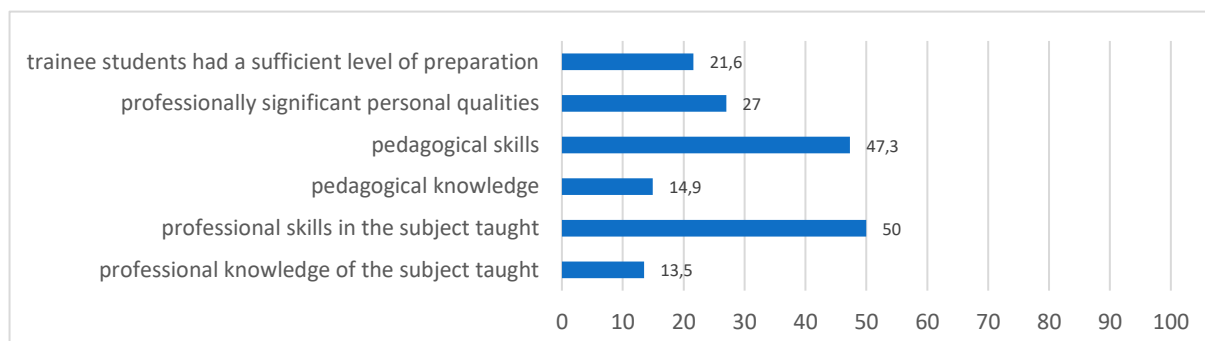


Figure 15. Distribution of respondents' answers regarding the lack of knowledge and/or skills of trainee students for conduction classes at VET institutions, %

More than 95% of the respondents in this group agreed that vocational teachers of their VET institution need continuous development of professional and pedagogical competences. 75.5% of them confirmed that vocational teachers take part in professional development activities held at/by HEIs. Mostly, such cooperation takes place in the form of advanced training courses, e-learning courses and conferences (this was noted by both heads of VET institutions and VET teachers) and is highly valued (average score of satisfaction with the results of participation in such events by managers is 3.47 points (on a 4-points scale), score of pedagogical staff is 3.53 points).

According to the answers of the surveyed VET management staff, it is eminently important to train teachers in up-skilling courses, workshops and internships. Other forms of professional development also received high scores (at least 3.28 points on a 4-points scale) (see Figure 16).

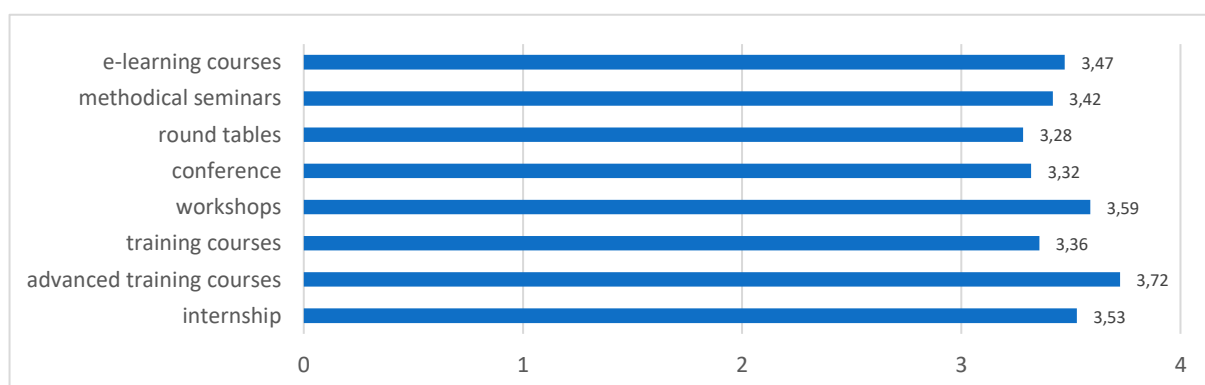


Figure 16. Evaluation of the relevance of the participation of VET teachers in in-service training activities (by forms), score points on a 4-points scale.

56.4% of vocational school management staff indicated that they have opportunities to constantly communicate on professional issues with HEI colleagues. The idea of creating a specialized platform for professional communication was supported by 95% of respondents.

V. DISCUSSIONS

Results of research indicate that teachers pointed to an over-regulation of their activities and the educational processes in general, which inhibits creativity and does not promote the free professional development of both future and current vocational teachers. There is a lack of real mechanisms for implementing creative ideas, supporting initiative and stimulating leadership, ingenuity and partnership, establishing horizontal links, freedom of pedagogical thought and action, faith in and trust in the profession of a teacher, which is the main resource for educational development.

It seems necessary to gradually abandon the command-administrative mechanism of education development in Ukraine. An important task might be to unite people around constructive ideas, create a developing educational environment for mutual exchange and mutual enrichment, support of individuality and diversity through partnerships and more inter-institutional interaction.

The comparison of the results of the survey of vocational teachers, vocational school management staff and HEI teachers allows to assert the unanimity of the respondents in assessing the feasibility of cooperation between educational institutions of different types. The average scores in the groups of respondents range from 3.2 to 3.6 on a 4-point scale, which indicates the existence of a proportion of teachers who either do not see the point in organizing cooperation, or have doubts about the need to make efforts in this direction.

The results of the survey also indicate that the idea of involvement of vocational teachers in conducting classes at HEIs is ambiguously perceived by educators. This remains debatable and requires a careful study. On the one hand, from 50% (in the group of vocational teachers) to 65% (in the group of VET management staff) respondents were in favor of its unequivocal support. On the other hand, between 26% (in the groups of VET management staff and HEI academic staff) and 30% (in the group of vocational teachers) indicated that it was difficult for them to reply to this question, while between 9% and 20% (in the group of HEI academic staff) of the survey participants denied the relevance of such steps.

This statement to some extent corresponds with the idea of involving HEIs teachers in conducting classes at vocational institutions. From 16% (in the group of HEI academic staff) to 33% (in the group of vocational teachers) do not have a definite position on this issue. This proposal is unequivocally approved by 53% (in the group of vocational school management staff) and 77% (in the group of HEI academic staff) respectively.

63% of vocational teachers took part in in-service training events held at/by HEIs (76% of the surveyed heads of vocational institutions confirmed their participation in such activities). 68% of HEI academic staff were participants in in-service training activities at/by VET institutions. From 51% to 61% of the representatives of the three groups of respondents are quite satisfied with the participation in such events. Their relevance is assessed in different groups at the level of 3.23 - 3.46 points on a 4-points scale. Obviously, the potential of this form of cooperation is not fully used, such work does not affect most of the teaching staff of educational institutions. There is obviously a need to review and discuss its content and methods and forms of institutional support.

Vocational teachers tend to apply educational technologies without understanding the relevant mechanisms and patterns of learning and teaching processes, hope for a positive result, but instead get the opposite. Among teachers and students there is a demand for the formation of digital culture and the widespread introduction of digital technologies and e-learning. However, e-learning is effective given the high level of motivation of learners, otherwise it is ineffective. The level of motivation of students and teachers, the motivational potential of the educational institution, family, society are factors that seem to be of particular importance.

The vast majority of those who were guided by external motives for entering an educational institution or choosing an educational program demotivate those who really want to learn. In order to find an effective motivation strategy, it is necessary to constantly monitor the dynamics of levels of motivational orientation to learning and teaching. Based on this analysis of the strengths of the subjects of the educational process, teaching and learning styles, motivational profiles, teachers and managers of HEIs that train future teachers of vocational training will be able to build effective differentiation strategies, personalized training or professional development programs, create productive system of stimulating students to study, self-education and teachers - to pedagogical creativity, self-development. Currently, only 51% to 63% of respondents engaged in pedagogical activities have no doubts about the need for continuous development of their own professional and pedagogical competence. From 31% to 40% of the surveyed HEI academic staff and vocational institutions management staff are inclined to recognize this need.

Ukraine needs an education that focuses on internal values and is based on them, nurtures a sense of dignity of students and develops the authority of the teacher horizontally. What is needed is both governance, and a clear educational policy, leaders with ambitious goals, strategic, long-term planning to build up a modern vocational education system.

VI. RECOMMENDATIONS FOR IMPROVEMENT

In general, the results of the survey showed some imperfections of the existing system of vocational teacher education and training, in particular, at HEIs, and the need to introduce

new mechanisms for governance in this area. Despite the fact that quality of such training received high points from HEI students, pedagogical and scientific-pedagogical staff, respondents of all groups noted that there was too much theory involved in the training and pointed to the insufficient level of pedagogical and professional skills of HEI students-trainees and young teachers.

Opportunities for cooperation with international organizations, employment centres, trade unions in such important areas as employment of HEI and VET students, joint implementation of educational projects, exchange of teaching staff, joint training, professional development, teacher training, and the organization of practical training are not fully used. Training, including in the workplace, in order to master future skills of vocational teachers is of great importance. The importance and prospects of these areas are clearly underestimated. At the same time, all groups of respondents are well aware of the need for continuous development of professional and pedagogical competence.

To strengthen the quality of training, it is necessary to improve teaching methods, organize practical training of students and the system of in-service training through close cooperation, expansion of partnerships between institutions of vocational and higher education and other stakeholders. When organizing the educational process under modern conditions and taking into account the specifics of vocational training, it is advisable to create a wide range of selective educational components that would meet the needs of HEI students, involve them in discussing the content and methods of teaching, but also by reducing the share of traditional forms and methods. The importance of good material, the dissemination of the practice of using training technologies, and workshops, webinars, which boost the subjectivity of all participants, were confirmed by the survey results. There is a request from HEI students and vocational teachers to strengthen the psychological component of training, educational work through partnership, the formation of professionally significant personal qualities, the ability to think critically and pedagogical creativity. In addition, the issue of formation of a digital culture, the development of the ability to use modern digital technologies for educational purposes (specialized online courses, webinars, e-learning) is extremely important.

It is important to focus on improving the competence of HEI academic staff who train future vocational teachers of vocational training, and creating conditions for continuous self-improvement and development of professional skills of vocational teachers as well. The mutual professional exchange between experienced teachers and scientists has the potential to lead to and increased motivation of HEI students to pursue a teaching career. The motivational aspect seems to be extremely important as a third of the surveyed students do not see themselves in the teaching profession in the future.

The idea of mutual exchange of pedagogical and scientific-pedagogical staff for conducting classes has significant support among current and future vocational teachers. Teachers have



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positively evaluated their experience of participation in in-service training activities, including in-service training courses at/by HEIs, conferences, seminars. It is important to expand and diversify the forms of such work, create an online platform for professional communication, exchange experiences, receive methodological support, study international experience, and find domestic and foreign partners for joint educational projects.



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