ITE-VET
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Improving teacher education for applied learning in the field of vocational education (ITE-VET)

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STRUCTURED REPORT

The following report is a result of the ITE-VET project which is part of the Erasmus+ Programme of the European Union.

ITE-VET 2016–2018

Інститут професійно-технічної освіти Національної академії педагогічних наук України

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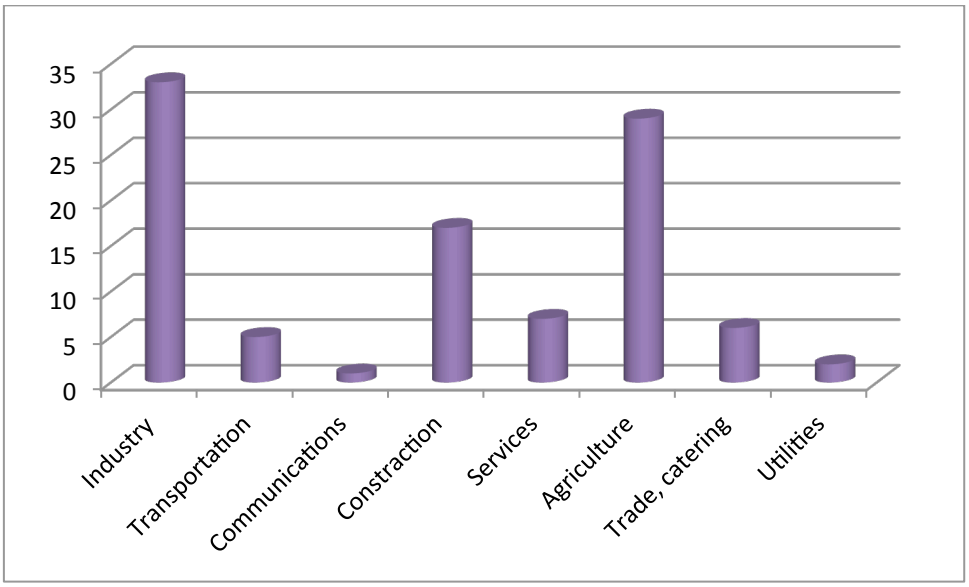
TABLE OF CONTENT

VET SYSTEM IN UKRAINE: OVERVIEW

by IVET of NAES of Ukraine

Ukraine's vocational education and training (VET) system comprises both initial vocational education and training (IVET) and continuing vocational education and training (CVET) components. As of 01.09.2016, the VET network consisted of 926 institutions of which 922 are under the jurisdiction of the Ministry of Education and Science (MoES) and 4 are under jurisdiction of local municipalties. In particular, 113 VET institutions are located in the occupied territory of Donbas (52 in Donetsk and 61 in Lugansk). The structure of VET schools reflects the structure of economy (see below).

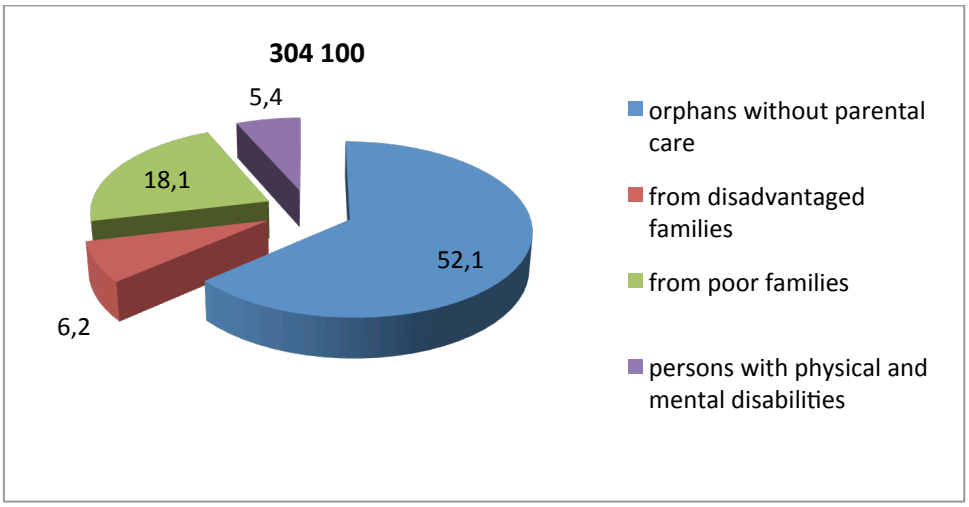


The VET system in Ukraine is structured into two levels according to the students' knowledge and skills: "Skilled Worker" (1-5 years of training) and "junior specialist" (2-3 years of training). The "junior specialist" qualification was also awarded by institutions of the higher education system with I-II accreditation levels, such as vocational colleges and institutes (technical schools).

The total number of graduates from the VET schools in 2015-2016 was 153.2 thousands students.

VET system provides initial vocational education for disadvantaged groups as it shown below. The VET system also plays an important role in supporting socially

disadvantaged population groups, particularly orphans, children not in parental care and people with special needs: these groups are guaranteed preferential treatment when they enrol in vocational schools: Their training and retraining is funded by the state budget; they receive material assistance and rehabilitation during training; and they are guaranteed employment and housing.



As of September 2016, education in Ukraine's VET schools was provided by 37.9 Thousand teachers, including senior instructors of vocational training (45%), teachers of general subjects (21%), teachers of vocational subjects (14%), directors (2%), deputy directors (4.5%), as well as practical psychologists and social workers. The teaching body is characterised by high-level training and continuing professional development:

- one in four teachers has achieved the fourth grade or higher in a blue-collar occupation;
- one in five teachers is skilled in two or more occupations and has received adequate training in both the psychological and pedagogical aspects of education;
- 70% of VET teachers hold a Bachelor or Master Degree, 30% are qualified Junior Specialists, and 90% have information and communications technology (ICT) skills.

A network of training and practice centres is being developed in vocational schools to provide training in advanced manufacturing technologies. There are 84 training and practice centres in Ukraine today: 44 (67% of the total) in the construction industry, 13 (12%) in the service sector, 7 (10%) in agriculture, 5 (7%) in industry, and 3 (4%) in machine construction.

The basic principles of the legislation regulating VET in Ukraine are equal access to VET education, equal rights to vocational choice, and the provision by the state for VET that responds to social and personal needs. The new legislation creates conditions for a decentralisation of VET, which creates conditions for rapid managerial decision-making in vocational education and its financial provision, strengthening the role of local executive authorities and local self-government bodies in the training of the potential labour force taking into account regional skill needs, redefining the powers of the central executive body that ensures the formulation and implementation of VET state policy in line with decentralisation.

In Ukraine, issues of vocational education at the legislative level are regulated by the "On Vocational Education" Act (1998, amended in 2008, 2012, 2013) which is based on the General frame low "On Education" adopted in 1991.

This document contains the following articles – 40th and 41th – which deal with vocational education and training.

According to Article 40:

1. Vocational education provides citizens with the profession in accordance with their vocations, interests, abilities, as well as pre-professional training, retraining, and raising their qualifications.
2. Vocational education of citizens is carried out on the basis of complete general secondary education or basic general secondary education with the possibility to obtain a full general secondary education course.
3. Citizens in need of social assistance and rehabilitation, as well as citizens studying for certain professions in the list determined by the Cabinet of Ministers

of Ukraine, may receive a profession without basic general secondary education.

4. Professional training or retraining of people with special educational needs in VET schools is carried out at the expense of budgetary funds within the scope of the state order, taking into account medical indications and contraindications for their further employment. The choice of forms and methods of vocational training is carried out in accordance with the findings of specialists of the medical and social expert commission or the medical advisory committee of curative and preventive health care institutions.

According to Article 41:

1. Vocational educational and training institutions include:

a VET school of the corresponding profile;

a VET school of social rehabilitation;

a higher a VET school;

a professional lyceum;

a professional lyceum of the corresponding profile;

a vocational and artistic school;

an artistic vocational school;

a higher art a VET school;

a school-agribusiness;

a higher school-agro-firm;

a VET school-factory;

a center of vocational education and training;

a center of professional education;

an educational and production center;

a center for training and retraining of regular labour force;

a training course center;

a training center;

other types of training institutions providing vocational education or training.

2. VET schools may have daytime, evening classes, create and join to various complexes, associations.
3. VET institutions carry out training, retraining and qualification upgrade for citizens on the basis of state orders, as well as agreements with enterprises, associations, institutions, organizations, individual citizens.
4. VET institutions may have one or several enterprises-customers (institutions, organizations). Relations with those enterprises, institutions and organizations are regulated in accordance with signed agreements.
5. Students of state and communal VET schools of orphan children, children deprived of parental care and children in need of special conditions of education are fully detained by the state. The procedure for providing students of public and communal VET institutions with a scholarship, organizing nutrition for orphans, children deprived of parental care, persons from among them, disabled children/invalids of groups I-III and children from families receiving assistance in accordance with the Law of Ukraine "On State Social Assistance to Low-income Families", is determined by the Cabinet of Ministers of Ukraine.

   Local self-government bodies, in accordance with the law, can provide nutrition for other classes of pupils and provide for corresponding expenditures from local budgets.
6. VET scholls graduates in accordance with their educational-qualification level shall be awarded with the "skilled worker" qualification from the acquired profession of the corresponding category (category).

   High VET schools and centers of vocational education graduates in accordance with their educational and qualification level may be awarded the qualification "junior specialist" only from the accredited area (specialty).
7. Citizens can also get a profession, improve their qualifications, undergo retraining directly at work.

According to Article 6 of the "On Vocational Education" Act (1998, amended in 2008, 2012, 2013), the governing bodies of the vocational education system include:

- the central executive body responsible for setting national policy in the field of education;
- the central executive body responsible for implementing national policy in the field of education;
- the central executive bodies that govern vocational schools, which include the regional and Kyiv city state administrations, as well as departments of vocational education (local governing bodies of vocational education) under their jurisdiction.

On 5th September 2017 the new law of Ukraine "On education" was adopted. This document contains article 15th – which deals with vocational education and training.

According to Article 15:

1. The purpose of professional (vocational) education is to form and develop a person's professional competencies necessary for his/her professional activities on a particular profession in the relevant field, ensuring his/her competitiveness in the labor market, mobility, and lifelong career growth prospects.
2. Professional (vocational) education is acquired on the basis of basic or complete secondary education. The acquisition of professional (vocational) education on the basis of basic secondary education is carried out simultaneously with the acquisition of secondary education and awarding the relevant document on complete secondary education.

   Institutions of professional (vocational) education may also carry out the training of specialists of certain occupations without ensuring full secondary education.

Persons who, for certain reasons, can not at the same time acquire a full secondary education or have no basic secondary education, as well as those who need rehabilitation, are entitled to get professional (vocational) education.

3. Levels of professional (vocational) education are:

the first (initial) level of professional (vocational) education;

the second (basic) level of professional (vocational) education;

the third (higher) level of professional (vocational) education.

4. At the first (initial) level of professional (vocational) education, a person may be qualified at the second level of the National Qualifications Framework.

At the second (basic) level of professional (vocational) education, a person may qualify for the third level of the National Qualifications Framework.

At the third (higher) level of professional (vocational) education, a person may be qualified at the fourth level of the National Qualifications Framework.

Professional (vocational) education establishments have the right to carry out, according to the relevant standards, training of specialists whose competence corresponds to the fifth level of the National Qualifications Framework. The licensing of such educational activities and the accreditation of relevant educational programs are carried out according to the standard procedure.

5. A person who has received a professional (vocational) education of an appropriate level may continue his/her education on following levels of education, including a shortened training program, in cases and in accordance with the procedure established by law.

6. Professional (vocational) education establishments provide training, retraining and advanced training for individuals at the expense of state and/or local budgets, as well as agreements with enterprises, institutions, organizations, individuals and/or legal entities.

7. The procedure, conditions, forms and features of obtaining professional (vocational) education are determined by a special law.

Now the draft law "On Professional (Vocational Education)" is being prepared, which is being discussed at various instances.

In Ukraine, the executive bodies involved in education on the national level are the MES and certain other ministries.

- The Ministry of Education and Science (MES), which is coordinated by the Cabinet of Ministers, sets priorities for VET and determines the approaches to be used. Its tasks include the following: draft legislation; define the list of occupations to be trained in vocational schools; develop national standards, standard curricula and education programmes; draft and approve regulations on the formation and development of VET; set up, reorganise and close down public vocational schools; administer the licensing and attestation of vocational schools irrespective of their ownership and subordination; determine the scope of vocational training, retraining and further training in VET schools based on the state order and labour market needs; inspect vocational schools, enterprises, institutions and organisations, irrespective of their ownership and subordination; organise and oversee compliance with laws and regulations on social protection of employees and students in VET schools; administer state property used by subordinate vocational schools; organise VET information support and statistical records; organise VET research and methodological support; implement the latest scientific and technical innovations, new technologies and best practice in the training process; create standards for and provide logistical and financial support to subordinate vocational schools; define model rules for admission to vocational schools irrespective of ownership and subordination.
- The Ministry of Social Policy is the principal executive body responsible for setting and implementing state policy on employment, labour migration, and on-the-job vocational training. Under current legislation, the Ministry’s tasks include the following: monitor the country’s economic activity and labour market trends; coordinate policy on on-the-job vocational training; develop and approve cross-sector job descriptions for managers, experts, specialists,

technicians and skilled workers in the catalogue of job descriptions for skilled workers; coordinate industry-related job descriptions; develop the Classification of Occupations and propose amendments; draft proposals aimed at improving work quota setting and labour organisation; develop and approve crosssectoral work quotas; and organise the activities of the Council for Vocational Guidance.

- The Ministry's capacity is limited and a lot of this work is carried out by Ukraine's State Employment Centre, which has a large network of offices throughout the country. The State Employment Centre is governed by a tripartite Employment Insurance Fund in which the social partners have the same number of votes as the government. The fund is chaired on a rotating basis by one of social partners (currently by the trade unions). The State Employment Centre implements various ALMPs, which include retraining of unemployed people and supporting start-ups. It has also been assigned the task of organising and promoting the recognition and validation of non-formal and informal learning.
- The Ministry of Economic Development and Trade is responsible for the execution of the state order for skills training.
- Other ministries which govern vocational schools (particularly the Ministry of Agriculture) are responsible for the implementation of VET state policy in the vocational schools that fall within their jurisdiction. These ministries are responsible for the following tasks in respect of the schools they govern: develop and determine future planning; establish, restructure and close down schools; determine the skills to be trained, retrained and further trained.

The objectives of the authorities at the regional level in the field of VET are set by both state and regional policy.

- Regional VET governing bodies (the VET departments of Boards of Education of regional state administrations) implement state VET policy. Their remit in this area includes the following: develop and implement regional policies; ensure compliance with VET legislation of subordinate

educational institutions; monitor the fulfilment of the requirements of state standards by vocational schools, enterprises, and institutions licensed to provide training and education; overall management of the training, educational, teaching, economic, financial, and business activities of public vocational schools. They are also responsible for skills training, retraining and further training as well as the organisation of vocational guidance. There are two aspects of governance at the level of VET institutions.

- VET Institutions. The responsibilities of the institutions include the following: organisation of their own educational, training, financial, economic, and business activities; development of working curricula and training programmes based on standard curricula; definition of the regional component of VET content; organisation of on-the-job training in businesses; planning enrolment quotas with VET governing bodies taking into account the state order, labour market needs and input from enterprises and organisations about their future needs.
- Autonomous public bodies associated with vocational schools (general meetings/school staff conferences). These bodies play an advisory role in VET issues within their authority.

In recent years the Ukraine has made further progress, notably in developing new strategic documents:

- The 10-level NQF – significant step towards transforming the Ukrainian education and training system and moving towards a system centred on learning outcomes and responding to labour market demands.
- On Workforce Professional Development Act which regulates issues relating to formal and non-formal vocational training provided directly by employers to employees either in the workplace or in vocational schools on a contractual basis.
- On Employers' Organisations, Associations, their Rights and Activities Guarantees" Act which regulates the role of employers and their organisations in the formation of the state order for skills training and the harmonisation of

national vocational education standards. It also regulates students' remuneration during on-the-job training.

There has been an emphasis on competence-based transformation of educational content. This involved the development of national standards for competence-based vocational training characterised by a shift from standardising the content of training for skilled workers to standardising the outcomes. In total, 306 standards were developed in aggreement with the Federation of Employers of Ukraine and the Ministry of Social Policy.

The National Strategy for Education Development in Ukraine for the period up to 2021, approved by the Decree of the President of Ukraine № 344/2013 dated 25 June 2013, provides for the following:

- development and implementation of vocational education national standards for occupations and cluster qualifications, including the update and approval of an optimised list of skilled occupations (reducing the overall number through integration);
- update and approval of the classifier of occupations (reducing the number of occupations through integration);
- optimisation of the network of VET schools of different types, vocational focus and types of ownership, taking into account population projections, regional specificities and labour market needs, the increasing independence of schools and the creation of industrial and training complexes;
- improvement of the mechanism for state order formation of skills training in order to take into account the current needs of the economy and the regional labour markets as well as the demand from society;
- enhancing the training, retraining and further training of VET teachers;
- introduction of a two-level training in vocational schools: Level one corresponding to „Skilled Worker" and level two for „Junior Specialist" (Master, Technician).

In recent years, there has been a shift from an approach based on educational content to a competence-oriented approach. National VET standards for specific

occupations are now developed on the grounds of a competence-based approach and the emphasis has been transferred from the standardisation of the content of training for skilled workers to its outputs. After the National Qualification Framework (NQF) was adopted by Resolution of Ukraine´s Cabinet of Ministers in 2011, the process of implementing this framework in the VET system got underway. The implementation plan for a National Qualifications Framework development has been developed in ordert o ensure consonance between the educational system and the labour market. A specific methodology for the development of competence-based VET state standards for specific occupations was adopted. The National Classifier of Ukraine "Classification of Occupations" was amended to introduce training for new universal occupations. With a view to training a competitive workforce, progressive Training and Practical Centres dedicated to the introduction of innovative technologies are being set up with the assistance of social partners. Within the VET system, sectoral skills councils are an instrument for dividing responsibility and fostering communication and sharing information between VET institutions and the business community. In order to improve the professional development of VET teachers, the Procedure on the Advanced Training of Pedagogical Workers in VET Institutions (Instruction of the MES, 2014) was adopted. This procedure provides for mandatory advanced training for VET teachers at least once every five years at post-graduate education institutions, universities, VET training centres and in VET schools.

The main targets defined for VET in line with the ideas of efficiency and facing needs of economy are:

- introduction of a scientifically-based system for forecasting labour market trends that can take into account the actual conditions and trends of the economy, and the creation of efficient mechanisms to ensure cooperation between central and regional authorities and social partners with respect to publicly financed investments in VET and skills development;
- change of the management model based on the control of VET institutions' activities to a model based on quality enhancement and management;

- comprehensive financial provision for the VET system;
- social advertising and promotion of VET to enhance the prestige of blue-collar occupations and create a positive image of VET schools, including regional exhibitions of skilled worker occupations and activation of career guidance as well as counselling services for children and young people.

VET TEACHERS' TRAINING SYSTEM IN UKRAINE

by IVET of NAES of Ukraine

Today, 40 thousand teachers work in the system of vocational education and training in Ukraine, that is the 5% share of the pedagogical and scientific-pedagogical staff general number.

Despite the 25-year long decline of VET network from 1246 to 798 (or 36%) schools, the problems of recruiting teaching staff did not come to a solution. In general, in Ukraine the share of vacant staff positions in VET schools was 13% in 2015. Thus, the average availability of teaching staff is 87%.

The main categories of VET schools' teaching staff according to the Law of Ukraine "On Vocational Education", Article 45, include: teachers, vocational teachers, instructors, masters of industrial training, senior masters, senior masters of industrial training, instructors of in-service training, methodists, practical psychologists, social educators, physical education leaders, principals of vocational educational institutions, scientific-methodical and educational institutions, their deputies and other employees involved in the provision of the educational process.

So far, there is a lack of coordination, duplication of concepts "teacher of professional training", "engineer-teacher", due to the peculiarities of the system of vocational-teacher education system in Ukraine.

Also in the Soviet Union, in the 70-s of the last century, the process of active creation of secondary vocational schools as a new type to provide the qualifications for skilled workers began. This period is characterized by intensive formation and development of engineering and teacher education. The concept of "teacher-engineer" describes the double qualification of the qualification of engineering and pedagogical profile.

In the former Soviet Union, the two-level system of engineering teaching staff training was set with:

- secondary qualifications level (masters of industrial training), for which the training was carried out in an industrial-educational universities and colleges;

- higher level (engineer teacher), for which the training was carried out at teaching engineering faculties of technical universities and engineering educational institutions.

By the end of the 20th century there had been significant changes in all countries due to the technological progress, information and technological revolution and socio-economic transformations. That formed the need for new approaches to professional training, development of teachers' professional competence and promoted revision of qualification requirements for VET school teachers and a ifferentiated evaluation of their professional competence.

Thus, the value analysis of concepts "profession", "occupation", "specialization" indicates that the "engineer-teacher" is a specialty within the profession of a "VET teacher". Besides the "engineer teachers", there are "agronomist-teachers", "economist-teachers", "lawyer-teachers" and "doctor-teachers", which all fall unter the umbrella term "VET teacher". Thus, the VET teachers' training is not limited to engineering and pedagogy. It is necessary to train the teachers-economists, teachers-lawyers and others.

In April 2002 the State Classificatory introduced a new profession "VET teacher (according to their training profile)", that involves the combination of training in theoretical subjects and practical (industrial) training cycles.

The qualification profile includes the following characteristics: Tasks and responsibilities of a VET teacher to provide vocational theoretical and practical training, retrain of students (trainees); ensures the implementation of regulations on the organization of the educational process, curriculum, vocational training programs, personal responsibility for creating a safe learning environment in classrooms, laboratories, workshops; provides instruction and individual counselling of students (trainees), prepares work places, provides them with instruments, consumables and supplies. In the period of apprenticeship and industrial practice selects jobs, moves students (trainees) at workstations according to schedule, curriculum and programs; selects bases of apprenticeship and create drafts of agreements with entreprises; provides students (trainees) training up to final qualifying examinations, taking part in their conduction and

arrangement of students (trainees), monitors performance, attendance, performance of internal regulations and behaviours; manages educational activities with students (trainees); plans and accounts training work and reports; supports cooperation with State employment service and employers on the issues of graduates' employment; ensures the adherence by students (trainees) the internal regulations of the institution; works on the development, improvement of organization of educational work with students (trainees); implements practice recommendations pedagogical science, innovative professional training technologies, including modular, achievements in the development of relevant industries; monitors educational process, questioning students (trainees) to improve methods for professional training; examines individual characteristics of students (trainees) and takes them into account during the educational process; improves their professional and educational qualifications.

The VET teacher should know: fundamentals of engineering, technology, production of the industry, the prospects for its development; organization ways and effective forms of vocational theoretical and practical vocational training, how to use technologies, fundamentals of pedagogy and psychology; regulations relating to the organization of educational-production process in vocational school; safety requirements, rules and norms for safe organization of work, sanitation requirements and other rules and regulations established for that area; labour legislation keystones.

Thus, a VET school teacher, in addition to the training of educational activities, is a specialist in that industry sector for which the students/the staff are trained in a vocational school. So, the system of VET teacher education integrates teaching and professional (special, that is specific branches of economic activity) components.

Qualification requirements:

A VET teacher of the highest category: higher education of relevant professional level (masters, specialist) and psycho-pedagogical training or complete higher engineering pedagogical education (master, specialist). Master (Instructor) of industrial training of the highest category: Experience in the professional activity "VET teacher" on the position of category I for at least 2 years.

A VET teacher of category I: should complete basic higher education of a certain professional level (master, specialist, and bachelor) and psycho-pedagogical training or full or basic higher engineering pedagogical education (master, specialist, and bachelor). Master (Instructor) of industrial training of category I: Experience in the professional activity "VET teacher of category II" for at least 3 years.

A VET teacher of category II: should complete basic higher education of a certain professional profile (master, specialist, bachelor, junior specialist) and psycho-pedagogical training or full or basic high engineering pedagogical education (master, specialist, bachelor, junior expert). Master (Instructor) of industrial training of category II: Experience in the professional activity "VET teacher " with no category for Bachelor, junior specialist - at least 2 years for master's, specialist - at least 1 year.

A VET teacher: should complete basic higher education of a certain professional profile (master, specialist, bachelor, junior specialist) and psycho-pedagogical training or full or basic higher engineering pedagogical education (master, specialist, bachelor, junior expert). Teacher of professional and theoretical training without category. Master (Instructor) of industrial training without category: Workers with skills on relevant professions should be higher than planned for VET school graduates.

Legislation

VET teachers' training is regulated by the Constitution of Ukraine, "National doctrine of education in Ukraine, Laws of Ukraine "On Education", "On Higher Education" (adopted as amended), "On Vocational Education", "On science and scientific and technical activities", "Teacher education concept", the concept of vocational (professional) education, conceptual principles of teacher education and the integration of Ukraine into the European educational space, the Regulation on educational-qualification level (level education), State education standards of normative-legal acts of Ukraine for education and science.

Since 2010, training of VET teachers, including "Economics", has included the following educational and qualification levels: 5,010,104 junior specialists (at the universities of levels I-II of accreditation); 6,010,104 bachelors; 7,010,104 specialists; 8,010,104 masters (at the universities of accreditation III-IV). The exact list of acquired qualifications for every level at national legislation was not clearly described and characterized in various universities.

The decree of the Cabinet of Ministers of Ukraine of 29th April 2015. №266 "On approving the list of disciplines and specialties to train candidates of higher education" approved 015 specialty "Professional education (with specializations)" field of knowledge 01 "Education".

The Law of Ministry of Education and Science of Ukraine from 21.03.2016 № 292 approved the list of specializations of higher education in the field 015 "Professional education (with specializations)," to form and place the state orders, which are not included in the field of "Economics".

015.01	Construction
015.02	Publishing
015.03	Mining
015.04	Woodworking
015.05	Documentation
015.06	Electronics, radio technics and telecommunications
015.07	Electro technics and electro mechanics
015.08	Energy
015.09	Welding
015.10	Computer technologies
015.11	Mechanic engineering
015.12	Metallurgy
015.13	Metrology, Standardization and Certification
015.14	Oil and gas business
015.15	Labour safety
015.16	Service sector
015.17	The technology of consumer goods industry
015.18	Technology of producing and recycling the agricultural goods
015.19	Merchandising
015.20	Transport
015.21	Nutrition technologies
015.22	Chemical technologies

Thus, the training system for VET school teachers in Ukraine today has no clear regulation in the Ukrainian legislation.

The specific features of a VET teacher training in VET schools of Ukraine

Under the current law VET teachers' training is carried out in the following educational qualification levels:

- Junior Specialist – corresponds to Level 5 of National Qualifications Framework (NQF), the European Qualifications Framework for lifelong learning

(The European Qualifications Framework for lifelong learning - "EQF for LLL"), the European qualifications framework for higher education;

- Bachelor – corresponds to level 6 of the National Qualifications Framework (NQF), the European Qualifications Framework for lifelong learning (The European Qualifications Framework for lifelong learning - "EQF for LLL"), Box Qualifications of the European Higher Education Area (The framework of qualifications for the European Higher Education Area- "QF for the EHEA");
- Master – corresponds to level 7 of the National Qualifications Framework (NQF), the European Qualifications Framework for lifelong learning (The European Qualifications Framework for lifelong learning – "EQF for LLL"), Box Qualifications of the European Higher Education Area (The framework of qualifications for the European Higher Education Area - "QF for the EHEA").

The forms of training in higher education institutions according to article 49 of the current Law of Ukraine "On Higher Education" are:

1) Full-time (day, evening);

2) part-time (distance).

Development of state standards of high pedagogical education, including vocational teacher is currently in process. Recently, the scientific advisory board and the scientific-methodical commission of the MES have been formed in order to develop new standards for higher education on the basis of a competence approach. A general framework of standards is defined by the Law of Ukraine "On Higher Education". According to Article 10 of the Law:

1. Higher education – a set of requirements for the content and outcomes of educational activities of higher education and research institutions at each level of higher education within each specialty.
2. Standards of higher education are developed within each specialty according to the National Qualifications Framework and are used for determining and evaluating

the quality of educational content and outcomes of higher education (research institutions).

3. A Standard of Higher Education defines such requirements for educational programs:

   1) the amount of ECTS credits that is necessary for obtaining the relevant degree of higher education;

   2) a list of competencies of a graduate;

   3) normative content of higher education training graduates, formulated in terms of learning outcomes;

   4) certification of candidates;

   5) requirements for internal quality assurance;

   6) the requirements of professional standards (if any).

The advantages of the new requirements are the significant reduction in the total standard that according to preliminary estimates could be to 8 - 12 pages, unlike previous educational and professional programs and educational qualification characteristics, the amount of which in some cases reached 200 - 300 pages.

The formation of the curriculum it is needed to take into account the requirements of approved standards of higher education in terms of educational qualification characteristics for the respective speciality and educational qualification level at the current time on the development list. The Curriculum of a specific profession determines the list of compulsory disciplines (maximum 75% of the total ECTS credits). The total ammount of selective disciplines must be at least 25% of the total ECTS credits.

Next to the prescribed disciplines, a list of other professionally-oriented disciplines, which are offered to the students' free choice, may be established. The organizational regulation of the educational process determines the share of secific disciplines in the different professions, as well as the percentage to which the students may choose from other disciplines.

The average share of total training time for disciplines of different cycles are represented in Table 1.

Table 1.

Share of disciplines of different cycles in the total trqaining time

The title of the cycle	Time share on training programme		
	Junior specialist	Bachelor	Master
Humanitarian and social-economic disciplines	20±5%	20±5%	10+5%
Mathematics and natural-scientific (fundamental) disciplines	20±5%	20±5%	20+5%
Professional (general vocational) and practical training	60±10%	60±10%	70+10%
General training time (*ECTS* credits)	**180-240**	**180-240**	**90-120**

The professional development of teachers is provided by the system of postgraduate education (SPE) covering SHEIs "University of Education Management" of NAES of Ukraine, 27 regional postgraduate education institutions and other relevant university departments.

The system of postgraduate education is established with forms of students' course work with VET school teachers:

- full-time training of first cycle for newly appointed teachers;
- full-time training of second and third cycle - for teachers with different work experience;
- study on modular system;
- part-time form of training;
- individual counselling from the teachers of the department, Methodist of the centre during the training course;
- individual (distance) system of teachers training;
- specialized, problematic courses to prepare teachers to use new training technologies.

According to Article 46 of the current Law of Ukraine "On Vocational Education" the training of VET schools and institutions' teaching staff is provided in higher educational institutions and in their specialized departments, as well as industrial and educational colleges, colleges of engineering-pedagogical universities.

In the industrial-pedagogical technical schools and colleges junior specialists and bachelors are trained, particularly in Anton Makarenko Kyiv industrial pedagogical college, Donetsk industrial pedagogical college, Rubezhansky industrial-pedagogical college, Kharkov industrial-pedagogical college. The basic institution of VET teachers training at the level of junior specialist is Anton Makarenko Kyiv industry pedagogical college.

Training of VET teachers in higher educational institutions in Ukraine is based on:

- specialized engineering and educational institutions (Ukrainian Engineering and Pedagogical Academy in Kharkiv, Crimean Engineering and Pedagogical University);
- plytechnic HEIs (Vinnitsa Polytechnic University);
- pedagogical HEIs (Berdyansk State Pedagogical University, Kotsiubynskyi Vinnitsa State Pedagogical University, G. Skovoroda Pereyaslav-Khmelnitsky Pedagogical University, Gnatyuk Ternopil National Pedagogical University, Tychina Uman State Pedagogical University);
- academic universities (University of Luhansk, Khmelnytsky State University, Kherson State University);
- specialized institutions (Kyiv National Economic University, Kyiv National University of Technology and Design, Poltava Agricultural University, Uman State Agrarian University).

The basic Engineering-pedagogical university, the Ukrainian Engineering and the Pedagogical Academy, which is the Training Centre of the future VET teacher training, constantly verifies educational standards in this field. According to the decision of the International Organization for Engineering Education (IGIP) on 12 September 2000 in Paris this university is accredited as an educational institution

that cmplies with the European model of teacher-engineer training (ING-PAED IGIP).

The data for the 2015-2016 state statistics on the number of students who studied for the occupation "Professional education" (with specializations) are presented in Table 2.

Table 2

The contingent of students on occupation «Professional education» (on specialisation)

Education-qualification level	Quantity of students	% of total students – future teachers
«Junior specialist»	254	4.76
«Bachelor»	98	24.44
«Master» (specialists and masters)	1558	12.71

Teaching economics in VET schools in the block of general subjects include general subjects of study course "Principles of Economics", which is designed for 35 hours (1 hour per week). Other economic subjects are offered in selectives. Due to the limited amount of hours of the economy the subjects are often taught by teachers with no relevant economic education. However, this amount of hours is clearly insufficient because of the need to prepare vocational students to effective economic activity in business properties.

Lately, the inclusion of vocational education and training into the training institutions of levels I-II of accreditation (colleges, technical schools) that have special economic training departments was discussed. In this connection, the need for training of VET teachers on economics will be increased significantly.

The occupation of "Professional Education: Economy is provided in Ukrainian HEIs via binary bachelors training that provides dual qualification "VET teacher" and "an expert in economics" (or in a specific economic specialization). Initial positions that a graduate can posess according to the educational qualification of "Bachelor" in this field: teacher of training institutions I-II levels of accreditation, curator, educator, teacher of dormitory, educator in vocational school, instructor of industrial training, master of education, master of training centre, teacher-trainee,

engineer mentor, leader industrial practices, training laboratory manager, designer, economist, marketing manager on purchases, sales manager, logistic and so on.

Despite the great need for such training, it is still extremely limited in Ukraine. In recent years it has been widely carried out in the Eastern part of Ukraine: the University of Luhansk (licensed since 2013 to the amount of 25 full-time and 25 part-time students), the Ukrainian Engineering and Pedagogical Academy in Kharkov (licensed from 2013 in the amount of 60 full-time and 80 part-time students) and other universities. In Kyiv and Kyiv region the training of "Professional Education Economy" is available only in the Kyiv National Economic University (licensed amount: 50 full-time students), G. Skovoroda Pereyaslav-Khmelnitsky state pedagogical university (licensed amount 40 full-time and 25 part-time students) and Anton Makarenko Kyiv industrial-pedagogical college (licensed amount: 20 full-time and 20 part-time students).

Problems:

- The lack of clear description of vocational education teachers training.
- Externalism of existing standards of development for vocational education teachers training.
- Absence of certainty of content of economic education in vocational schools, the need for teachers' training for VET system.
- The lack of a holistic concept of VET teachers' training in economics, including binary concept of training that combines economic and educational specialization.
- Incompleted mechanism and technologies of production and pedagogical practices of teachers training.
- Weak prestige of teacher professional in society.

Scientific and methodological support of VET teachers' development by the Institute of VET of NAES of Ukraine

The researchers of the Institute of Vocational education and training of NAES of Ukraine carries out the scientific and methodological support of teachers' training. In particular, it has developed and implemented the model of information-analytical competence of teaching staff in vocational training during the free-of-training period. The trainings for VET teaching staff have been implemented:

- the development of their readiness to develop and use technologies of developing personal and professional training (simulation-game training module-rating, problem-based learning, design, coaching, case, collective mental activity, critical thinking);
- the creation and use of electronic educational resources.

The distant training of teachers' ecological competence development and use of eco-oriented technologies is already in place.

COMPARATIVE ANALYSIS ON ORDERS OF STUDY OF FUTURE TEACHERS' TRAINING ON ECONOMY DISCIPLINES FOR VET SCHOOLS IN HEI, UKRAINE

According to the decree of the Cabinet of Ministers of Ukraine of 29 April 2015 r. Number 266 "On approval of the list of disciplines and specialties, which trains candidates of higher education" preparation of VET teachers meets industry of knowledge 01 – Education, specialty 015 – professional education (for specializations).

According to the Law of Ukraine "On Higher Education" (2014) training of future VET teachers in HEI is carried out at the following levels (Table. 1).

Table 1

Levels of training of future VET teachers in HEI

Specifications	Levels of higher education				
	Initial (short cycle)	First (Bachelor)	Second (Master)	Third (Educational-scientific)	Scientific
Level of National Qualification Framework	5	6	7	8	9
Quantity of ECTS	90-120	180-240	90-120	30-60	-
Duration of training, years	1.5-2	3-4	1.5-2	4	2
Degree	Junior Bachelor	Bachelor	Master	PhD	Doctor of Science

In Ukraine, the preparation of future VET teachers on the specialty "Professional Education (economics)" is carried out by 8 universities.

We compared the licensing and the actual admission quantity of students in the specialty "Professional Education (economics)" (Table 2).

In Ukraine, there are more than 800 VET schools, in each of which there are sets of economic disciplines, and over 300 technical schools and colleges (including economic direction). The need of highly professional VET teachers in economics disciplines does not comply with the actual quantity of admission of students in the specialty "Professional Education (economics)".

Table 2

Preparation of future VET teachers on the specialty "Professional Education (economics)": license and the actual quantity of admission in 2016

HEI	Form of training	License / actual volume of admission (2016 p.)		
		Bachelor	Specialist	Master
Berdyansk State Pedagogical University	Full-time	50 / 0	50 / 0	10 / 0
	External	50 / 0	50 / 0	10 / 0
Drohobych State Pedagogical University named after Ivan Franko	Full-time	25 / 0	-	-
	External	25 / 0	-	-
Bila Tserkva Institute for continuous professional education SHEE "University of Educational Management"	Full-time	30 / 0	-	-
	External	-	-	-
Vadym Hetman Kyiv National Economic University	Full-time	50 / 10	-	-
	External	-	-	-
State Institution " Taras Shevchenko Lugansk National University"	Full-time	25 / 0	20 / 0	-
	External	25 / 0	-	-
Mukachevo State University	Full-time	30 / 3	-	-
	External	-	-	-
SHEE "Perejaslav-Khmelnytsky State Pedagogical University named after Grygoriy Skovoroda	Full-time	40 / 0	-	-
	External	25 / 6	-	-
Ukrainian Engineering Pedagogics Academy	Full-time	60 / 1	50 / 7	15 / 10
	External	60 / 11	50 / 23	10 / 4
Total	Full-time	**310 / 14**	**120 / 7**	**25 / 10**
	External	**185 / 17**	**100 / 23**	**20 / 4**

The main reasons for the low participation rates are the overall decline in student recruitment in recent years in many fields, the problem of unattractiveness of VET teachers work in the country as a whole due to low-wages, strained conditions, ineffectiveness of social security and so on, the lack of students' awareness on the content of such training and its benefits, imperfections of existing curricula.

In the study, we compared orders of study and curricula for bachelors' program on "Professional Education (economics)" provided by 4 Ukrainian HEI: Ukrainian Engineering Pedagogics Academy, Vadym Hetman Kyiv National Economic University, Mukachevo State University, SHEE "Perejaslav-Khmelnytsky State Pedagogical University named after Grygoriy Skovoroda.

It was revealed that HEI has different definitions of qualifications which bachelor students gain in the specialization "Professional Education (economics)" (Table 3).

Table 3

Qualification of bachelors in the specialization "Professional Education (economics)"

HEI	Qualification
Ukrainian Engineering Pedagogics Academy	Expert in Economics, Marketing and Management, Teacher of Practical Training in Economics
Vadym Hetman Kyiv National Economic University	Teacher of Vocational Education in Economics, a Specialist in Economics
Mukachevo State University	Teacher of Economics, Accounting and Audit
SHEE "Perejaslav-Khmelnytsky State Pedagogical University named after Grygoriy Skovoroda	Teacher Vocational Education in Economics, Economist

As we can see, the common feature is the binary nature of training provided both in educational and economic fields. It is clear that in this way, that university attract more students to study. However, such an approach is dangerous because not all students who choose this profession will seek for a job in the field of education.

According to the Act of Ministry of Education and Science of Ukraine № 897 from 11.10.2007 "On creation of working groups on the development of industry standards for higher education" the HEI that is responsible for developing standards of training according to the educational qualification of a Bachelor in "Professional education (for profile)" is the Ukrainian Engineering Pedagogics Academy (Kharkiv).

According to the "State Classifier of professions DK 003": 2010 teacher of professional education in economics may hold the following positions: teacher in training institutions of levels I-II of accreditation, curator, educator, dormitory teacher, educator vocational educational institution, instructor of industrial training, instructor of manufacturing training of workers, teacher of practical disciplines, teacher of practical disciplines of training center, teacher-trainee, engineer-manager, head of manufacturing practice, head of educational laboratory, economist, economist of marketing, manager of purchases, sales manager, manager of logistics etc.

Orders of study provide compulsory and elective disciplines. The electives are to some parts chosen by the institutions and partly by the students. There are 3 types of disciplines provided: humanitarian and socio-economic disciplines; mathemati-

cal and natural-science disciplines; professional (professionally oriented) and practical training. The normative amount of preparation is defined in the ECTS, with one ECTS corresponding to 30 academic hours.

Comparison of training in different HEI is presented in Table 4.

Table 4

Comparison of the totel training time distribution in the Bachelors Programs on the specialization "Professional Education (economics)" (In credit points (ECTS))

Indicators	Ukrainian Engineering Pedagogics Academy	Vadym Hetman Kyiv National Economic University	Mukachevo State University	SHEE "Perejaslav-Khmelnytsky State Pedagogical University named after Grygoriy Skovoroda	Average
Total amount	240	240	240	240	240
Compulsories	156	180	156	156	162
Including humanitarian and socio-economic disciplines	16	20	16	28	20
Including mathematical and natural-science disciplines	39	45	39	43	41,5
Including professional (professionally oriented) and practical training	101	115	101	85	100.5
Electives	84	60	84	84	78
Including disciplines on the choice of HEI	59	40	59	56	54
Including disciplines on the choice of student	25	20	25	28	25

We compared the lists of disciplines (Table 5).

Table 5

Comparative analysis of sets of disciplines (in ECTS)

Type of discipline	Ukrainian Engineering Pedagogics Academy	Vadym Hetman Kyiv National Economic University	Mukachevo State University	SHEE "Perejaslav-Khmelnytsky State Pedagogical University named after Grygoriy Skovoroda
Humanitarian and socio-economic disciplines	Foreign language (5) History of Ukraine (3) History of Ukrainian Culture (2) Ukrainian Language (Professional) (3) Philosophy (3) Sport Training (0)	Foreign language (10) History of Ukrainian Society (4) Ukrainian Language and Literature (3) Philosophy (3) Sport Training (0)	Foreign language (5) History of Ukraine (3) History of Ukrainian Culture (2) Ukrainian Language (Professional) (3) Philosophy (3) Sport Training (0)	Foreign language (Professional) (5) History of Ukraine (3) History of Ukrainian Culture (2) Ukrainian Language (Professional) (3) Philosophy (3) Sport Training (0) Valeology (2) Law (3) Sociology (2) Politology (2) Labor Law (3)
Mathematical and natural-science disciplines	Informatics and Computing (5,5) Higher mathematics (14) History of Economics (3) Macroeconomics (3) Microeconomics (2,5) Finance (4) Physics (3,5) Ecology (1,5) Engineering and computer graphics (2)	Informatics (4) Higher mathematics (6) Theory of Probability and Mathematical Statistics (4) History of Economics (3) Macroeconomics (4) Microeconomics (4) Finance (4) Political Economy (5) Safety (Occupational Safety) (3)	Informatics and Computing (4,5) Higher mathematics (7) Theory of Probability and Mathematical Statistics (5) History of Economics (3) Macroeconomics (3) Microeconomics (2,5) Finance (4) Ecology (2) Accounting (8)	Informatics (6) Mathematics (12): - Higher mathematics (7) - Theory of Probability and Mathematical Statistics (5) History of Economics (5) Macroeconomics (4) Microeconomics (4) Political Economy (5) Economic-mathematical methods and models (7):

		Business Economics (4) Marketing (4)		- Optimization Methods and Models (4) - Econometrics (3)
Professional (professionally oriented) and practical training	Psychology (4,5) Age and Educational Psychology (1,5) Safety (Occupational Safety) (2) Psychology of work (2) Methodological principles of vocational education (2) Didactics in vocational education (2,5) Theory and methods of educational work (1,5) Didactic design (3) Training Technologies (2,5) Fundamentals of engineering pedagogical creativity (1,5) Communication processes in educational activities (1,5) Creative learning technologies (2) Rhetoric (1,5) Introduction to profession (1,5) Theoretical and legal foundations of education (1,5) Business Economics (5) Business Strategy (5) Company Capacity Building (4,5) Financial Accounting (5)	Psychology (5) Age and Educational Psychology (3) Psychology of work (3) Methodology and Didactics of Vocational Education(4) Theory and methods of educational work (4) Methodics of vocational education (4) Fundamentals of pedagogical creativity (4) Communication processes in educational activities (4) Teaching rhetoric (4) Introduction to profession (5) Theoretical and legal foundations of education (3) Management of the project activities in education (3) Business strategy (4) Financial Accounting (3) Economic analysis (3) Organization of production (4) Economics and innovation development (3) International Economics (5)	Psychology (4,5) Age and Educational Psychology (1,5) Safety (Occupational Safety) (1,5) Basics of Safety (1,5) Psychology of work (2) Methodological principles of vocational education (2) Didactics in vocational education (2,5) Theory and methods of educational work (1,5) Methodics of vocational education (basics of Training Technologies) (2,5) Communication processes in educational activities (1,5) Creative learning technologies (2) Rhetoric (1,5) Introduction to profession (1,5) Theoretical and legal foundations of education (1,5) Business Economics (3) Financial Accounting (8) Accounting in budgetary institutions (4)	Psychology (5) Age and Educational Psychology (2) Safety (Occupational Safety) (1,5) Basics of Safety (1,5) Methodological principles of vocational education (2) Didactics in vocational education (2) Theory and methods of educational work (3) Methodics of vocational education (Didactic design, Training Technologies) (5) Fundamentals of pedagogical creativity (3) Communication processes in educational activities (3) Creative learning technologies (3) Business Economics (6) Finance (4) Management (4) Marketing (4) International Economics (4) Regional Economics (5,5) Labor Management (3) Industrial training (3) Pedagogy (4)

	Accounting in budgetary institutions (5) Economic analysis (5) Management (5) Marketing (5) Planning and organization of production (5) Economics and innovation development (4,5) Project analysis (3) Metrology, Standardization and Quality Management (3,5) Justification of business decisions and risk assessment (4,5)		Management (4) Marketing (4) Methods of accounting and control of business activities (3) Organization of accounting and planning innovation (4,5) Project analysis (3) International Economics (4) Regional Economics (4) Accounting (3,5) Managerial Accounting (4) Computer Accounting Practice (4) Risk Management (4,5) Business analysis (4)	Modern economic theory (4) Statistics (4) Monetary and credit policy (4) Accounting (4) Labor Economics and Labor Relations (4)
Disciplines on the choice of HEI	Foreign Language (5) Valeology (1,5) Economic theory (3) Science of law (1,5) Sociology (1,5)	Science of law (5) Politology (3) Fundamentals of self educa-tion (3) Pedagogy (5) Sociology (5) Educational Management (5) Management (5) Accounting (5) The history of domestic educationки (5) Comparative pedagogy (5) Fundamentals of educational research (3) Regional Economics (4)	Basics of civil law and labor law (1,5) Sociology (2,5) Politology (2) Logics (1,5) Ethics (2) Religious (2) Theory of Economics (3) Cultural Studies (2) Economic Psychology (2) Labor Economics and Labor Relations (3,5) Practical Psychology (2) Economis Analysis (3) Pricing (2) Statistics (4)	Basics of the scientific research (2) Management and marketing in education (2) Economics of education (2) Education in HEI (1) Peculiarities of training of economics (2) Transformational economy and economic policy (2) Global Economics (2) Strategy of Company (3) Organization of production (4) Economics and organization innovation

		Labor Economics and Labor Relations (4) Monetary and credit policy (3) Information technology in education (3) Management in education (3) Foreign Language (professional) (5) Project analysis (3) Capacity building and development of enterprises (6) Justification business decisions and risk assessment (6)	History of Accounting (2) International Standards of Accounting (3) Design and modulateof information support of accounting (3) Accounting for Banks (3) Accounting in Foreign countries (2) Statements in companies (4) Interdisciplinary workshop by profession (6) Accounting in taxation (3)	development (3) Project analysis (3) Justification business decisions and risk assessment (2) Capacity building and company development (3)
Disciplines on the choice of student	Methods of socio-economic forecasting (5) Industrial training (12) State regulation of business entities (3) Economic modeling of socio-economic processes (4) Logistics (2) Fundamentals of energy and resource saving (2) Fundamentals of Correctional Pedagogy (1) Labor Economics (2) Taxes and tax accounting (3) Finance (monetary and credit policy) (2,5)	Information Resources Management and Data Protection (5) Organizational behavior (5) Public Relations (5) Conflicts in training (5) Foreign Language (Professional) (20) Banking (5) Social pedagogy (5) Correctional pedagogy (5) Development of entrepreneurial mindset (5) Leadership and partnership development (5) Gender Psychology (5)	Accounting and Forensic examination (2) Technological Systems in Industries (2) Fundamentals of business (3) Economic and mathematical models to analyze and audit (3) Accounting for small businesses (3) Control and revision (3) Accounting in industries (3) Foreign Language (4) Insurance (2)	Institutional Economics (2) Socio-economic security (2) National Economics (3) Planning and control of the enterprise (2) Economic Analysis (3,5) State regulation in economy (2) Finance of companies (3) Insurance (2) Investment (2) Audit (3)

	Business planning of business entities (4) Information technologies in economy (4,5) Statistics (3,5) Insurance (3) Technical means in training(2)	Testing in Didactics (5) Basics of Andragogy (5) Insurance (5) Methods of teaching of general economic disciplines (5) Methods of teaching of finance and accounting disciplines (5)		
Internship	Internship in companies (6) Internship in Schools (5)	Internship in companies (6) Internship in Schools (6)	Internship in companies (6) Internship in Schools (4,5)	Educational Internship (2) Internship in companies (3) Internship in Schools (5)
Final certification	State exam (1,5)	Bachelor thesis (4)	State exam (1,5)	State certification (3)

It can be seen a coincidence of individual components of standardized training and differences. Quantity of disciplines, duration of training, the distribution of compulsories and selectives differ.

Conclusion

1. Preparation of future VET teachers on the specialization "Professional Education (economics)" is currently carried out in 8 HEI in Ukraine. At the same time the quantity of students on this specialization is minor and does not correspond to real needs.
2. The curriculums are usually binary and include both educational and economic specialization.
3. Despite the existence of training standards on this specialization, its implementation in practice is very variable. All HEIs similarily divide all disciplines into 3 - humanitarian and socio-economic disciplines, mathematical and natural-science disciplines and professional (professionally oriented) and practical training. The majority of credits (ECTS) are done in professional (professionally oriented) and practical training. Humanitarian disciplines have the smallest portion. Similarities can be seen in the list of basic disciplines. The varieties are seen inside the professional (professionally oriented) and practical training.
4. There is a very large number of different disciplines, which are often similar and small (1-2 credits).
5. The volume of economic training in the contents of disciplines of professional and practical training often exceeds pedagogical disciplines.
6. The volume of individual work often exceeds classroom work.
7. The proportion of practical training is approximately a half compared to all forms of classroom work.
8. The share of internship (both in schools and in companies) is small and comprises 5% on average.
9. For the creation of a scientific basis of changes in the curriculum we conduct-

ed a survey among teachers of vocational schools (the questionnaire was created by scientific staff of the Project of Institute of Vocational Education and Training of the National Academy of Educational Sciences of Ukraine and is presented below).

VET TEACHERS' TRAINING IN VADYM HETMAN KYIV NATIONAL ECONOMIC UNIVERSITY

VET teachers' training in Vadym Hetman Kyiv National Economic University is carried out in two directions:

1. Psychological-pedagogical training for teachers of economics for secondary schools.
2. VET training for teachers in Economics for educational institutions of vocational education, technical schools and colleges.

The binary nature of training, when both pedagogical and economic fields are provided, is common for these two directions. The difference is the priority of economic or educational specialty, the name of qualification. As for the specialty "Professional education (Economics)" teaching qualification is at the first place.

Psychological-pedagogical training for students (PPT) as an additional educational with the designation "Teacher of Economics" is implemented in two stages:

- Basic course "Psychology and Pedagogy" as a mandatory component of basic professional training for first year students (humanitarian disciplines).
- On the second stage, psycho-pedagogical training is implemented for students in the second or third year by providing selected disciplines of psychological-pedagogical cycle of advanced level, which provides the second specialization "Teacher of Economics" (only for full time students).

The content and volume of psychological and pedagogical disciplines cycle meets the basic requirements of educational standard for preparation in HEIs and includes following integrated courses:

Social and humanitarian component of PPT

- "Psychology and pedagogy" (4 ECTS)
  (Psycho-pedagogical component of PPT);
- "Psychology of Communication and Training Management" (4 ECTS) (Professional component of PPT);

- "Methods of Teaching Economics" 4 (ECTS)
  (Practical component of PPT);
- Teaching Practice (6 ECTS).

The content of the majority of disciplines is integrated, which allows combining different components of teacher's professional training.

Issues

Despite the existing positive experience, the provision of psychological-pedagogical specialization as an additional discipline cannot ensure proper quality of training due to limited abilities of such training (teaching only the basic professional disciplines in a shortened amount of time), its selective nature (when such a training is based on students' preferences and isn't always associated with availability of appropriate skills for teaching activities).

Training of professional education teachers in the field of Economics for educational institutions, technical schools and colleges

In 2013 Vadym Hetman Kyiv National Economic University was given the opportunity to implement a new educational service of bachelor's level training by the specialization in "Professional Education (Economics)"in the field of study "Pedagogical Education". The Pedagogy and Psychology department was elected as graduating department.

Nowadays, bachelors' specialization "Professional Education (Economics)" in the field of study "Education" is carried out on the Personnel Management, Sociology and Psychology Faculty.

The total amount of training is 240 ECTS.

The curriculum includes:

- Humanitarian Training Courses (21 ECTS),
- Fundamental and General Eonomic Training (34 ECTS),
- Professional and Practical Training (106 ECTS);

- Practical Training (19 ECTS), that includes:
  - Basics of Profession (training course) (3 ECTS),
  - Teaching Practice (6 ECTS);
  - Practical Training (6 ECTS);
  - Preparation and Defence of Bachelor's Thesis (4 ECTS)
- Selected disciplines (60 ECTS)

Table 1.

Content of Bachelor's degree disciplines "Professional education (Economics)" at Vadym Hetman Kyiv National Economic University

Disciplines	Credits
1. Humanitarian disciplines	**21**
Ukrainian Language	3
History of Ukrainian Society	4
Foreign Language	10
Philosophy	4
Physical Training	0
2. Disciplines of fundamental and general economic training	**34**
History of Economics and Economic Studies	3
Politology	4
Advanced Mathematics	4
Probability and Statistics	4
Macroeconomics	4
Microeconomics	4
Essentials of Economics	4
ICT	4
3. Disciplines of Professional and Practical Training	**106**
Psychology	4
Pedagogy	4
Age and Pedagogical Psychology	3
Psychology of Professional Activities	3
Methodology and Didactics of Vocational Education	4
Theory and Methods of Pedagogy	3
Methods of Vocational Training	5
Fundamentals of Pedagogical Creativity	3
Processes in educational activities	4
Rethoric in Pedagogy	3
Educational Management	4
Innovative Pedagogical Technologies	3
Business Decisions Justification and Risk Assessment	3
International Economics	4
Economics of Enterprise	5
Occupational Safety	3

Human Resources	4
Economy of Labour and Social Labour Relations	4
Economics and Organization of Innovation Activity	4
Personnel Management	4
Motivational Management	4
Management	4
Marketing	4
Accounting	3
Organization of Production	3
Project Analysis	3
Potential and Development of the Enterprise	4
Business Strategy	3
Finance	4
4. Practical Training	**19**
Specialty Introductory Course (training course)	3
Practical Training	6
Work Experience Internship	6
Preparation and protection of Bachelor's Work	4
5. Selected disciplines defence	**60**

Training includes disciplines on economics cycle (63 ECTS), psychological-pedagogical cycle (43 ECTS) and practical training (19 ECTS) has been located 6 credits per teaching practice and work experience internship. The preparation and defence of the Bachelor's Thesis comprises 4 ECTS.

Vocational training is the final stage of pedagogical training and aims to implement theoretical knowledge and practical skills into the professional teaching activities.

During the practical training, students should develop a set of competencies in order to understand the different levels of educational activities in Ukraine; the functioning of various types of educational institutions, in which the economic disciplines are provided; as well as the implementation of pedagogical process.

Most often, the practical training takes place within the secondary schools based on the university referral without signing agreements. Today, the Vadym Hetman Kyiv National Economic University has signed agreements on practical training with the Kyiv Economic College KNEU and Kiev College of Information Systems and Technologies (Contract # 1/7 and 2/7 from 10.09.2015).

The Work Experience Internship is the final stage of the students' economic training, which aims at acquiring practical experience. Further, students should

deepen their knowledge, gained during theoretical course development of skills of independent practical work in the field of economic activity, and should become familiar with the specific work of a specialist - economist.

Issues in future VET teachers' training in the field of Economics, which require improvement:

1. The volume of disciplines of economic cycle exceeds the pedagogical one.
2. Insufficient volume of practical training.
3. The training of future VET teachers is very theoretical and requires improvement. Harmonization of the pedagogical and special professional components increases volume of practical component, flexibility and variability.
4. The low level of students' motivation for teaching.
5. Lack of institutions for students' practical training, mainly secondary schools.

In order to improve training on the specialization "Vocational education (Economics)" at Vadym Hetman Kyiv National Economic University we suggest the following changes:

1. Establish contacts and sign contracts on pedagogical practice with such institutions as:
   - High Commercial College of Kyiv National University of Trade and Economics;
   - State institution "Kyiv Centre of Vocational Education";
   - State institution "Kyiv Regional Higher Professional School of Construction";
   - Economics and Law School of Kiev University of Tourism, Economics and Law;
   - Kyiv Professional Construction Lyceum;
   - Educational and Scientific Centre of Vocational Education of the National Academy of Pedagogical Sciences of Ukraine and others.
2. To provide practical training for students in colleges and vocational schools.

3. To increase the volume of practical training by the implementation of educational practice (4 ECTS).
4. To develop a new curriculum and programs aiming at reorienting training from theoretical to practical-oriented by:
    - Increasing the volume of practical training;
    - Increasing number of training courses;
    - Implementation of workshops;
    - Increasing number of pedagogical disciplines.
5. To conduct a survey among employers to study:
    - • Level of college graduates (specialists) competence;
    - • Areas for improving their preparation;
    - • Need in most important and soft skills required for graduates of colleges.

VET TEACHERS' TRAINING IN IVAN FRANKO NATIONAL UNIVERSITY OF LVIV (IFNUL)

Future teachers' training at National University of Lviv is aimed at training the teacher cadres who are capable of working at the educational institutions of various types, particularly at vocational schools and colleges. In fact, there is no special, separate system of VET teacher preparation at Lviv University. Nearly twenty-two faculties provide teacher education at the University for Two Levels – Bachelor's and Master's degrees.

At the "Bachelor" level future teachers' training at Lviv University includes the training of:

- scientific staff and teachers for different discyplines
- a pre-school teacher
- an elementary school teacher
- a teacher in the field of Special Education
- a teacher in the field of Social Pedagogy.

At the level of Master's degree, the graduates can get the qualification of a researcher in the field of science, and a master of pre-school and elementary education. The recently established Faculty of Teacher Education is responsible for training the teaching staff of pre-school and elementary education, special and inclusive education, and social workers, as well at Lviv National University. The pedagogical component of teacher training at various faculties of the University is provided by the Department of General and Social Pedagogy, which is a part of the Faculty of Teacher Education.

The *compulsory* courses for training the future teachers of Bachelor's degree at the university faculties are:

- Psychology (3 ECTS);
- Methodology and methods of teaching (3 ECTS);
- Pedagogy (3 ECTS) that includes Basics of Pedagogy, theory of pedagogy, didactics as the theory of education and training.

The *elective* discyplines for teacher education chosen by a faculty include:

- Fundamentals of Psychology and Pedagogy;
- Theory of Pedagogy;
- Educational Management;
- Modern Educational Environment;
- Pedagogical competence and skills;
- Pedagogical Conflictology.

The *compulsory* discyplines for teacher training at Master's degree are:

- Psychology of Higher School;
- Methodology and methods of teaching in HEIs;
- Psychology and Pedagogy of Higher School or Pedagogy of Higher School (by the choice of faculty).

The elective courses at Master's level for the faculty choice are:

- Methodology of educational research;
- Modern University Education;
- Competence of a HEI Teacher;
- Innovative Pedagogical technologies.

Teachers' training within the different faculties of Lviv University for the Bachelor's degree involves practical training (4 credits) that takes place after theoretical disciplines, usually after their professional practical training. The main institutions of practical training are secondary schools, lyceums, grammar schools. The duration of the practical training is a month or less. Teaching assistance practice of Master students takes place at higher educational institutions of various levels after the research practice. The duration of this practice is 4 weeks, 6 weeks or 8 weeks and depends on the Faculty study plan. The practice of Master students is supervised by the teaching staff of students' main Faculty and the Department of General and Social Pedagogy.

The description of peculiarities and content of teachers' training at Lviv University comes up with the problems with VET teachers' training to be addressed:

- the discrepancy between educational theoretical disciplines and practical training, insufficient level of the practical-oriented content of pedagogical disciplines and applied learning;
- insufficient connection between teachers of general and vocational disciplines, and as a result the absence of efficient VET teachers' training system;
- weak interdisciplinary linkages between theoretical and practically-oriented courses;
- absence of such qualification as "Vocational education"
- lack of students' motivation to work as teachers at vocational schools and colleges;
- insufficient amount of teachers' education courses and poor quality of teaching in the context of vocational education and applied training;
- limited availability of schools which offer teaching practice (only few departments can send their students to have teaching practice at vocational schools or colleges).

In order to develop vocational teacher training at Lviv University we plan to:

- introduce new courses related to vocational teacher education at some University departments;
- establish contacts with vocational education institutions;
- organize students' teaching practice in vocational schools and colleges;
- develop and provide new study plan of VET teachers' training for the students as future professionals of the specialization "Correction and inclusive education".

There are more than 45 different vocational schools in Lviv (vocational high schools, colleges, professional lyceums, and technical schools), which accept students with basic (9 years) or full (11 years) school diploma. To establish vocational

teacher education in IFLNU we identified Lviv VET institutions which correspond with specializations of relevant University departments and are working on basis of agreements with University administration of these departments to establish appropriate linkages with the required vocational schools.

The main target group in the development of vocational education teacher training program at Lviv University are the students of the Department of correctional and inclusive Education who will be trained as employment tutors for students with disabilities. Tutors' main objectives are to prepare pupils / students with special needs for profession, provide them with all necessary assistance at workplacement; educate employers and employees on specific methods and techniques of interactions with students with special needs.

To reach this aim we are going to include a new specialization "Vocational education" in the system of training the specialists in the program "Special and inclusive education" at the Faculty of Pedagogic Education.

The purpose of this project is to improve and unite practice-oriented educational efforts of higher education institutions, vocational schools and enterprises.

Research and experimental work would include the following stages:

- study of the international experience in the field of employment of tutors for people with disabilities;
- development of new study plans based on the professional orientation of future specialists which includes studying the needs of local labor market, characteristic features of local businesses and practical training in the workplacement;
- study of the European and Ukrainian experience of the automotive and print business as potential bases for students' internships;
- to establish the new specialization "Vocational (special) education" at the Faculty of Pedagogic Education, Ivan Franko National University of Lviv.

We developed a tentative four-year study program for future vocational teachers in the field of special education ("Bachelor degree"), which includes 120 ECTS of

general training and 22 credits of the specialization. The program of vocational teacher in the field of special education will include (22 ECTS):

Theoretical courses:

- Theoretical and Methodological Foundations of Vocational Education (3 ECTS);
- Didactics of Vocational Education (2 ECTS)
- Theory of Special Education (2 ECTS)
- Psychology of Vocational Education (2 ECTS)
- Communication and Teaching (2 ECTS)

Practical training:

- Company (business) internship (3 ECTS)
- Teaching internship (3 ECTS)
- Implementation of dual education (3 ECTS).

VET TEACHERS' TRAINING IN VASYL STEFANYK PRECARPATHIAN NATIONAL UNIVERSITY

The current state of the economy and scheduled ways of reforming leave no doubt that only a highly qualified employee could stay on his workplace in market conditions, which perfectly use his profession, and armed with the necessary special knowledge, which allow altering specialization within this profession.

Nowadays we may declare that society faces the social-politic reformation, in which rivalry of qualified workforce appears.

In formed situation, when institutes of social protection don't reach the tempo of transformation, which happens, and a lot of society members are unprotected by market availability, professional education may be the biggest guarantor for able-bodied part of the people. In this way the main protection function for people is provided. Being a subsystem of social-economic formation, system of education is determined by the level of the development of productive forces. At the same time, being the element of superstructure, it is determined by the basis, namely by the manufacturing relations. So in this case, two general rules that influence the development of education act:

1) rule of accordance system of education to the level of development of productive powers;
2) rule of accordance system of education to manufacturing relations.

The problem of the workforce quality in Ukraine is transformed into a problem of the quality of the the preparation of students in theprofessional higher education system. It should be noted, that it is not only about formation of some theoretical knowledge, practical abilities and professional skills, but about the development of professionally important and common qualities and properties of personality. The development of these skills and abilities will assist the rapid adaptation in manufacturing, will allow the exploration of new techniques and technologies in the process of employment and will allow the workers to change their specialization and if necessary their profession dynamically.

The quality issues concerning the preparation of graduates in the system of vocational pedagogical education can be associated with two main challenges: The first challenge is to increase their level of knowledge, abilities and skills. Here we need to say, that modern pedagogical science recognizes the main goal in any educational institution – formation of new ways of activity, which synthesized based on received knowledge, abilities and skills. In the institution of higher education formation of new ways of professional activity is the main goal of teaching.

The second challenge is the development of professionally and socially important qualities and abilities of the graduates of the higher education institution.

Teaching the morality to the professionals will be a more difficult problem of the practical pedagogy. Specialist's morality should be an integral part of such concept as professionalism. Professional educational institutions of new type, namely higher professional schools, vocational lyceums and colleges should help to solve this problem. So, the elaboration of the educational content taught in these institutions becomes the main challenge of modern professional pedagogy. But the State national program "Education" ("Ukraine XXI Century") requires it.

Professional education includes:

- vocational and technical education;
- higher education;
- postgraduate education;
- graduate school;
- doctorate.

According to chapter 30 of the Law of Ukraine "On education" The College of the Public Higher Education Institution "Vasyl Stefanyk Precarpatian National University", such as all institutions of higher education in Ukraine prepare graduates on bachelor and master levels.

All system of professional education in Ukraine consists of two main subsystems, namely the system of vocational and technical education and system of higher education. Higher education is designed to provide fundamental scientific and professional and practical teaching on a certain educational level.

Higher Education Institutions provide preparation of the specialists to such educational levels as:

- junior specialist – provides technical colleges (and higher vocational schools);
- bachelor – colleges and all high educational institutes of higher level of accreditation;
- specialist and master - high educational institutes of III and IV level of accreditation.

Modern lessons feature the following elements:

- didactic: optimal choice of elements in didactic system;
- psychological: consideration of age, intellectual features of students, motives of entering to Higher Education Institution;
- organizational: timely beginning and ending of the lesson, rational using of time (effective organization of lesson: teacher and students' preparation to the lesson), means of teaching;
- moral and ethical: goodwill, consideration of humanization principles and democratization; realization educational goal of lesson;
- sanitary: color of classroom walls, which don't annoy the vision (green, yellow etc.) and design of classroom by "readable" illustrations;
- economic: generalization and systematization of material should occur according the point of economy view;
- technical: compliance of safety rules in labs;
- educational: content, principles, methods of teaching need to promote education of students.

The organization of the teaching activity depends on the following conditions: content of discipline, theme and goal of the lesson, principles and methods of teaching, kind and estimated structure of the lesson, form of students' organization during lesson (frontal, individual, group), means of teaching, level of teachers' pedagogical skills, level of students' knowledge.

Nowadays, the system of higher education develops in the context of market transformation, that's why it's possible and necessary to use economic categories and terms such as "market", "goods", "demand", "offer", "competition", "competitiveness", "marketing".

Among different needs of market economy, the most relevant ones are intellectual, cultural, physical and moral development and self-fulfillment of personality, generally enterprises, organizations and society require professional workforce with the skills of using science and technology, cultural potential.

The level of satisfaction of the demand by separate Higher Education Institutions depends on the quality of material and technical, scientific, informative and methodically base and teaching potential. Quality released product – alumnus, specialist in future - one of the most important criteria of the Higher Education Institutions activity.

The number of Higher Education Institutions as producers of educational services and methodical, scientific and technical products is substantial. In this communication Higher Education Institutions have to compete for potential applicants (students). Universities and other educational institutions and the education system as a whole should develop a generalized model of the "modern competitive professional". This model can be used as the target of educational institutions activity and would perform the function of a factor. The concept of "competitiveness" professional has a sufficient degree of constructive and could be the basis for the design of all educational activities.

In this case the basic properties should be taken:

- clarity of goals and values;
- diligence;
- creative attitude;
- the ability to take risks;
- independence;
- the ability to be a leader;

- the capacity for continuous self-development;
- the ability to continuous professional development;
- the desire for a high quality end product;
- resistance to stressful situations.

An educational concept in training and forming specialists should include three groups of skills: technical, conceptual and communicative skills. Communication is directly related to communication with various people. The conceptual skills are the art of predicting events, of planning activities of large groups of peopleand the ability to accept responsible decisions based on the systems analysis. In order to determine the level of professional skills ability to make decisions, to plan, to talk, organize people to monitor the activities of subordinates are evaluated.

An integral part of the process of training in higher education is the practial element. Its purpose is to teach students on how to master modern methods, forms of organization and tools in their future careers, to form their professional skills to make independent decisions on specific work in the real market and production conditions. Teachers‘education needs to systematically update their knowledge and creativity to apply them in practice.

In the Precarpathian National University named after V. Stefanyk the curriculum’s educational, manufacturing and pre-diploma (assistant) practice is foreseen. However, not all units (Foreign Languages Department, Philological Faculty of Natural Sciences, Philosophy - specialty "Psychology" and others) implement training (teaching) and manufacturing practice that most effectively demonstrate skills, characteristics, qualities, and knowledge of students.

The purpose of the educational practice is to master system skills with specific subjects. Practical training is conducted in the industrial conditions or organizations such as summer health institutions or summer camps.

An important task of pre-diploma practice is to collect factual material for the thesis (project), as well as preparation for the state proficiency testing. During their practice student interns analyze reports of financial and business enterprises, study

objects and processes that are the subject of their thesis research and gather other important information.

Obtaining a master qualification may be carried out on the basis of relevant educational and professional training programs (normative term of education program is determined individually taking into account the difference between academic education and professional program of the specialist and master, but can not exceed one year). An educational and vocational master training program includes fundamental, humanitarian, psychological, educational, scientific and specialized practical training.

Problems in training masters of the specialization "Pedagogy of higher school":

1. To increase the amount of individual work, students should spend about 75% of the time on the master specialized training**.**
2. High level of individualization of learning.
3. High level of scientific research work commitment, (a lot of students do not know how to prepare this work correctly, because most of them do not teach such discipline as "Principles of Teaching Research", so students are not oriented in the stages of doing scientific work).
4. Due to the fact that graduates from all specializations may enter the master program "Pedagogy of high school", most of them have no knowledge and experience how to work with students in the educational process - while not all of them studied course "Pedagogy", "Pedagogical mastery" and not all of them passed teaching practice.

Practical meaning. In order to increase the effectiveness of teachers' training we offer to implement credits into curriculums at all structure department which foresee doing pedagogical and summer practice by the third and fourth courses students, to study pedagogically directed courses - "Pedagogy", "Teaching skills of teacher", "Pedagogycal Conflictology", "Modelling of educational and professional teaching of specialist" etc. and to cooperate with pedagogical staff of secondary

schools, colleges, vocational and technical colleges. To improve training of specialists it is necessary to oblige teachers with non-teaching education (engineering, technical areas, etc.) to complete master specialty "Pedagogy of high school" and obtain proper theoretical and practical skills and competences.

ANALYTICAL REFERENCE ON RESULTS OF VET TEACHING STAFF SURVEY

by IVET of NAES of Ukraine

Vocational education in Ukraine has always needed practical orientation. While studying in vocational schools, future skilled workers should learn a profession and gain sufficient professional qualifications. However, for training teachers for the system of vocational education it is still prevailed to use theoretical approaches, which may cause difficulties in future teaching.

To find out the ideas of VET school teachers about future VET teachers' training in order to provide practice-oriented training in February and March 2017 the survey for teaching staff of Ukrainian VET schools was conducted by the Institute of VET NAES of Ukraine.

The survey was carried out in distance way via the web service Google Forms. This service allows to put online the digital version of the questionnaire to answer, to collect and process quickly the results and copy the answers for further processing in special statistical programs, including SPSS.

To organize the questionnaire, the letters were prepared and sent to training (scientific) – methodological centres (offices) of VET in all regions of Ukraine to organize vocational teachers survey of the area. The letter included the link to the questionnaire published on the Web service Google Forms.

The questionnaire included 28 questions, combined in 6 units:

1. SWOT-analysis of VET teachers' training in HEIs
2. Conditions for practice-oriented training in HEIs
3. The current state of practice-oriented training technologies use
4. The pursuit of professional self-development on practice-oriented teaching
5. Competence of teachers towards practice-oriented teaching
6. Social and educational characteristics of respondents

The structure of the questionnaire is given in Annex 1, and the form of a questionnaire in Annex 2. To ensure better objectivity, the survey was conducted anony-

mously. To clarify the rules of survey the participants were offered a guide. The questionnaire included both open and closed questions, and their combination (in closed questions respondents were asked to specifyalso, if desired, their answer).

The survey involved the participation of 869 teachers of vocational schools in all regions of the Ukraine. The majority of respondants (73%) was female, which generally reflecst gender structure of VET schools teaching staff. In terms of education the vast majority of respondents (82%) have a degree of higher education (specialist, master), and 64.9% have a degree in vocational education. The teachers of all ages were represented (up to 30 years - 18.2%, from 31 to 40 years - 29.5%, from 41 to 50 years - 24.1% more than 51 years - 28.3%), having different work experience (up to 5 years - 21.9%; 6-10 years - 18.6%; 11-20 years - 29.6%, more than 20 years - 29.9%) working in different types of vocational schools (professional high school, 43.2% vocational schools - 20.5%, higher professional schools - 25.9%; centres of vocational education - 9.3%). Working positions of interviewed were divided as follows: 37.7% - teachers of vocational education; 39.5% - masters of industrial training; 5.3% - the managerial staff (directors, deputy directors). 12.2% of respondents (106 people) provide teaching discipline of economic cycle.

THE RESULTS OF THE SURVEY

1.1. SWOT-analysis of VET teachers' training in HEIs

For the assessment of quality of VET teachers' training in HEIs the method of SWOT-analysis was used, according to which the object of study is described by four parameters:

- Strengths - advantages, strengths;
- Weaknesses - shortcomings restrictions;
- Opportunities – chances, opportunities;
- Threats – hazards, risks.

The first two categories concern the internal capacity of the object, and the other two external ones.

The parameters are listed in the Table 1.

Table 1

SWOT-analysis of VET teachers' training in HEIs

Advantages (strengths)	***Weaknesses (limitations)***
• better, broader and versatile training • considerable theoretical fundamental training • higher qualifications and experience of teaching staff • greater variety of forms and methods • combination of theory and practice • more opportunities for self-development, research activities • better theoretically based training • chance to practice in VET institutions • longer duration • higher quality and competitive education • greater prestige of diploma	• mismatch to modern requirements, outdated approaches • lack of practical training prevailing of theory • a lot of unnecessary information • a small volume of practice • lack of textbooks guides • poor communication with employers, VET schools • lack of students in vocational education and experience of the profession • lack of standards for future VET teachers' training • insufficient professionalization of training • lack of professional selection • unproductive training • lack of adequate information and technical base • incompetent teachers, outdated teaching methods • high cost of education • drop out students
The chances (opportunities)	***Hazard (risks)***
• variability, teacher freedom in the choice of educational content • increasing of hours on practical training, practical training in enterprises and teaching practice in VET institutions • use of modern practice-oriented pedagogical technologies with ICT support (workshops, trainings, webinars, online learning, distance learning)	• unwillingness of main part of the teaching staff to work in a competence-based approach • low prestige of the teaching profession • low motivation of students for learning and teaching activities • lack of job prospects for VET teaching staff • unwillingness of graduates for prac-

• improvement of the professional competence of teachers through self-education, training and internships abroad and in Ukraine, exchange of experience, international cooperation • upgrade of logistics and faculty • increased cooperation with enterprises • literature on professional field	tice-oriented teaching • difficulties in future work with students, professional burnout

Describing the benefits of that training teachers indicate its breadth, solidity, scientific base. Among the shortcomings excessive academic, separation from practice, lack of professionalization and communication with employers, outdated approaches and material base was indicated. As indicated improvement opportunities are the increase of the proportion of practical training, using modern practice-oriented learning technologies with ICT support, increasing cooperation with enterprises and upgrade of logistics. Teachers think that the risks are the unwillingness to modernize teachers' training lack of motivation of the students to the teaching profession and teaching.

1.2. Conditions for practice-oriented training in HEIs

The practice-oriented training of future VET teachers requires the use of appropriate organizational forms and methods. To understand the importance of certain forms and methods the teachers were asked to evaluate various teaching forms and methods using a 10-point scale. Teachers consider such forms as pedagogical practice, professional practice-practical training as the most significant forms to provide practice-oriented training (Figure 1).

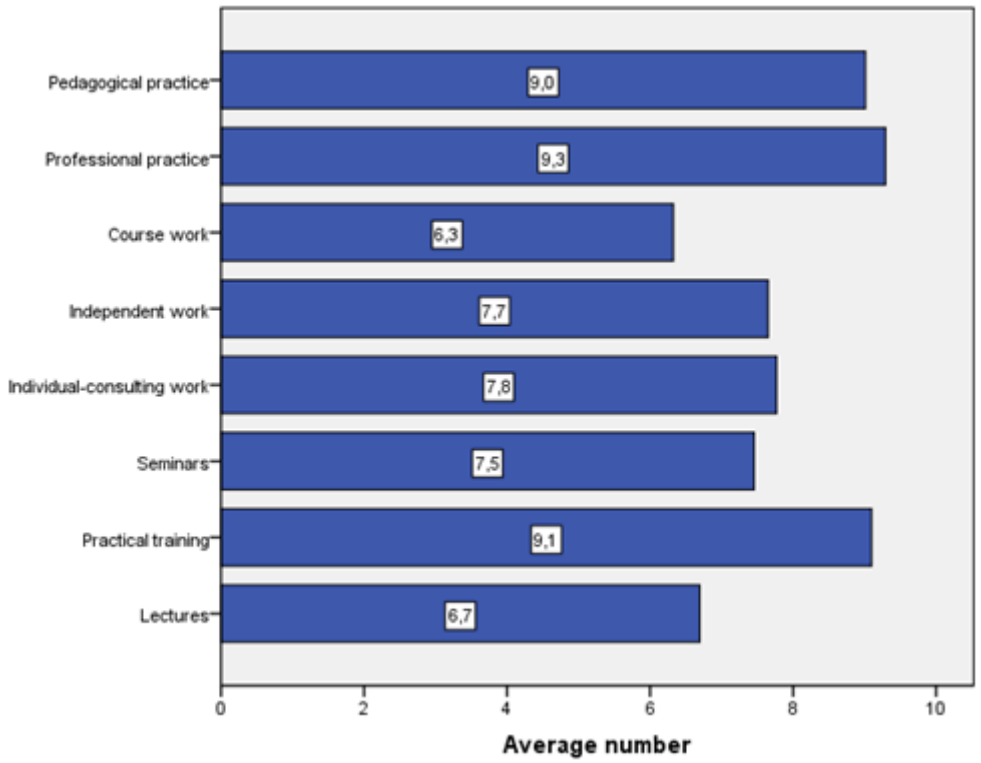


Figure 1. Organizational forms to provide practice-oriented training.

Training methods also have different value for practice-oriented training (Figure 2).

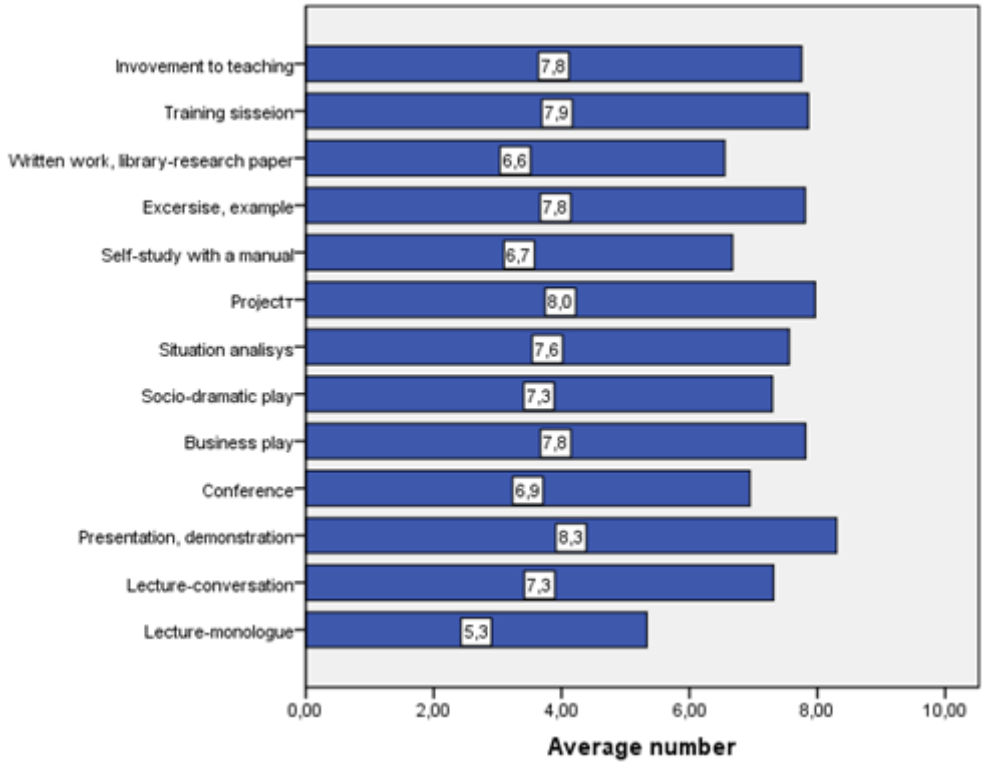


Figure 2. Value of different training methods for practice-oriented training of future VET teachers.

The following methods are highly valued: presentation, demonstration, training, project-based training, involvement to teaching, the lowest-traditional lecture-monologue, written works, self-study manuals and conference.

So, practice-oriented training for VET teachers needs to reduce the share of traditional forms and methods of work with students to gain theoretical knowledge and increasing the share of practical training in various ways using modern, practice-oriented teaching methods (training, project-based learning, business games, etc.).

To study the ideal ratio of different components of training process some questions aimed to reveal teachers' attitude to correlation of psycho-pedagogical and specialized and professional disciplines, classroom and independent work, lectures, seminars and workshops, correspondence of teaching hours to theoretical and practical training.

Estimating the proportion of psycho-pedagogical and specialized and professional disciplines more than half of the teachers (59.26%) noted the need to balance them (Fig. 3), while more than a third of the teachers (36.48%) noted the necessity of increasing the share of specialized and professional disciplines.

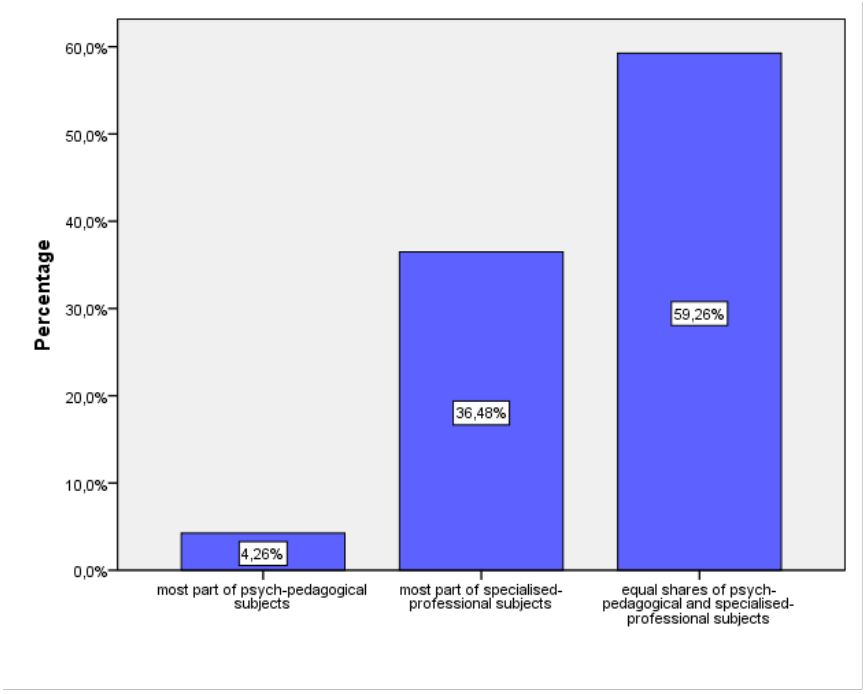


Figure 3. Perfect proportion of psycho-pedagogical and specialized-professional disciplines estimated by teachers.

Estimating the perfect ratio of class and independent work (Fig. 4), the majority of respondents (60.53%) also noted the need to balance them. The views of other respondents divided almost equally between those who prefer classroom work (21.17%), and those who expressed need for more independent work (16.23%).

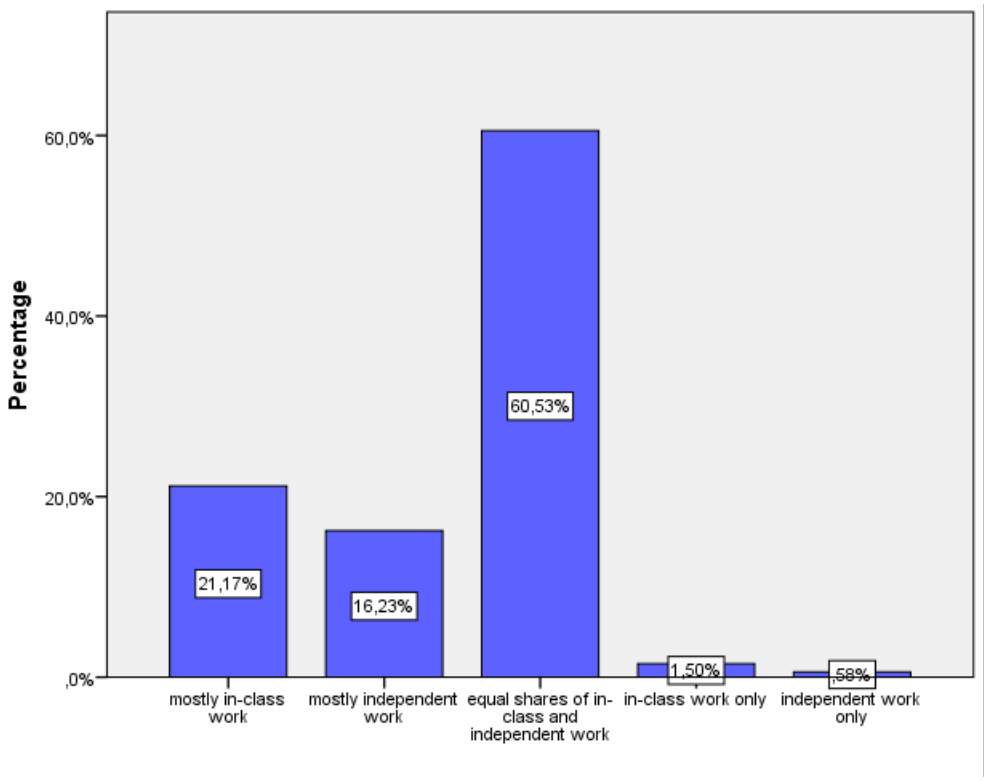


Figure 4. Estimated proportion of class and independent work.

Estimating the proportion of lectures, seminars and workshops (Fig. 5) 50.86% of respondents expressed the need for practical training predominance but there is a large number of those who believe that this ratio must be balanced (41.31%).

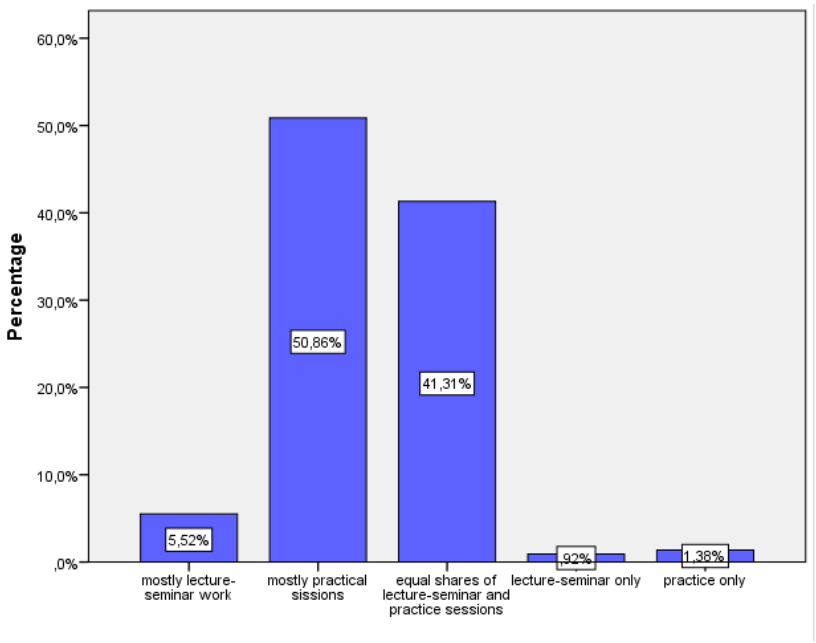


Figure 5. Estimated perfect proportion of lecture-seminar and practical trainings.

Estimating the amount of time to study the disciplines and practices 54.89% respondents consider to have equal amounts of time, while 39.01% of teachers tend to share more need in practice (Fig. 6).

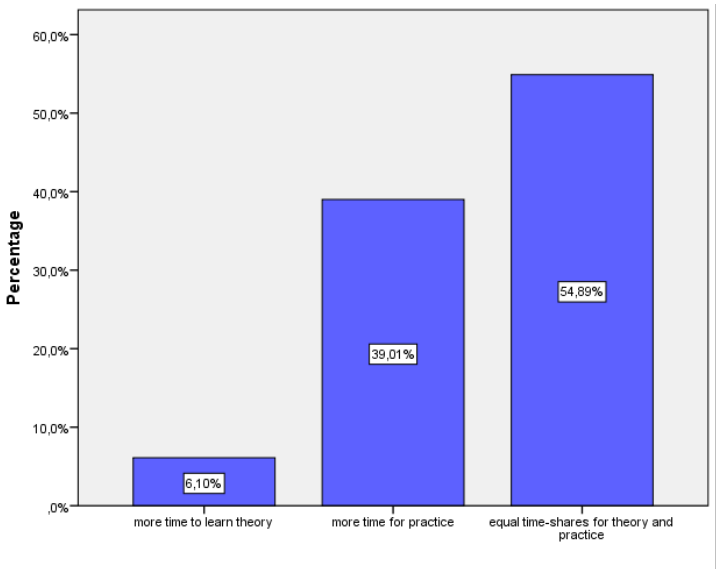


Figure 6. Estimated ideal proportion of needed time to learn disciplines and practical trainings.

Thus, the majority of teachers are inclined to build a balanced educational process with distinct share of practical training.

The teachers were also asked to submit their recommendation to increase the practical orientation of training. Summarizing the responses, we can formulate the following suggestions to modernize training teachers of vocational training in HEIs:

- increasing the practical share of professional disciplines, including workshops (for example, meetings of methodical commissions at open classes, extracurricular activities, etc.);
- to cooperate with VET schools, training and traineeship at enterprises;
- to ensure better quality of practices-based learning, including in-service, at the workplace in order to train workers' skills;
- to use innovative educational technologies (quests, workshops, projects, business and educational games, etc.), ICT (specialized online courses, webinars, e-learning);
- to create appropriate legal, social and economic, logistic and financial conditions for practical training;
- to prepare methodological provision for practical training;
- to engage practitioners to training provision.

Therefore, universities need to bring VET teachers' training within the scope of further practical activity – teaching in VET sector.

1.3. Use the practice-oriented learning technologies by teachers

Teachers were also asked to evaluate the use of practice-oriented training technologies in their teaching activity, including: project, case and simulation technologies, game creation and work in small groups (Fig. 7).

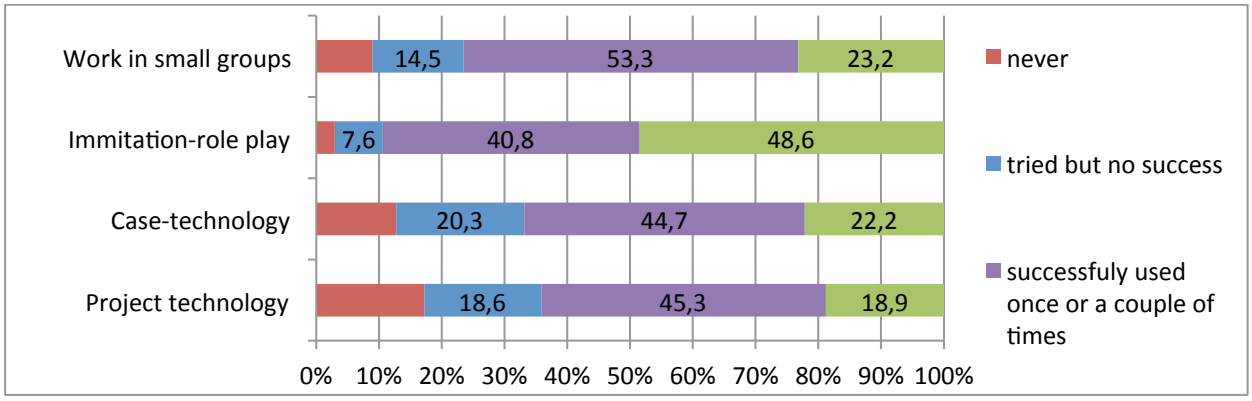


Figure 7. Use of practice-oriented training technologies by teachers.

It turned out that, teachers commonly use simulation technologies (48.6% of respondents) while other ones are used less frequently. The least used technology is project-based learning (1/3 of teachers does not use this technology or used, but not very successfully).

Teachers of economic disciplines use practice-oriented technology more often than teachers of other subjects (Fig. 8).

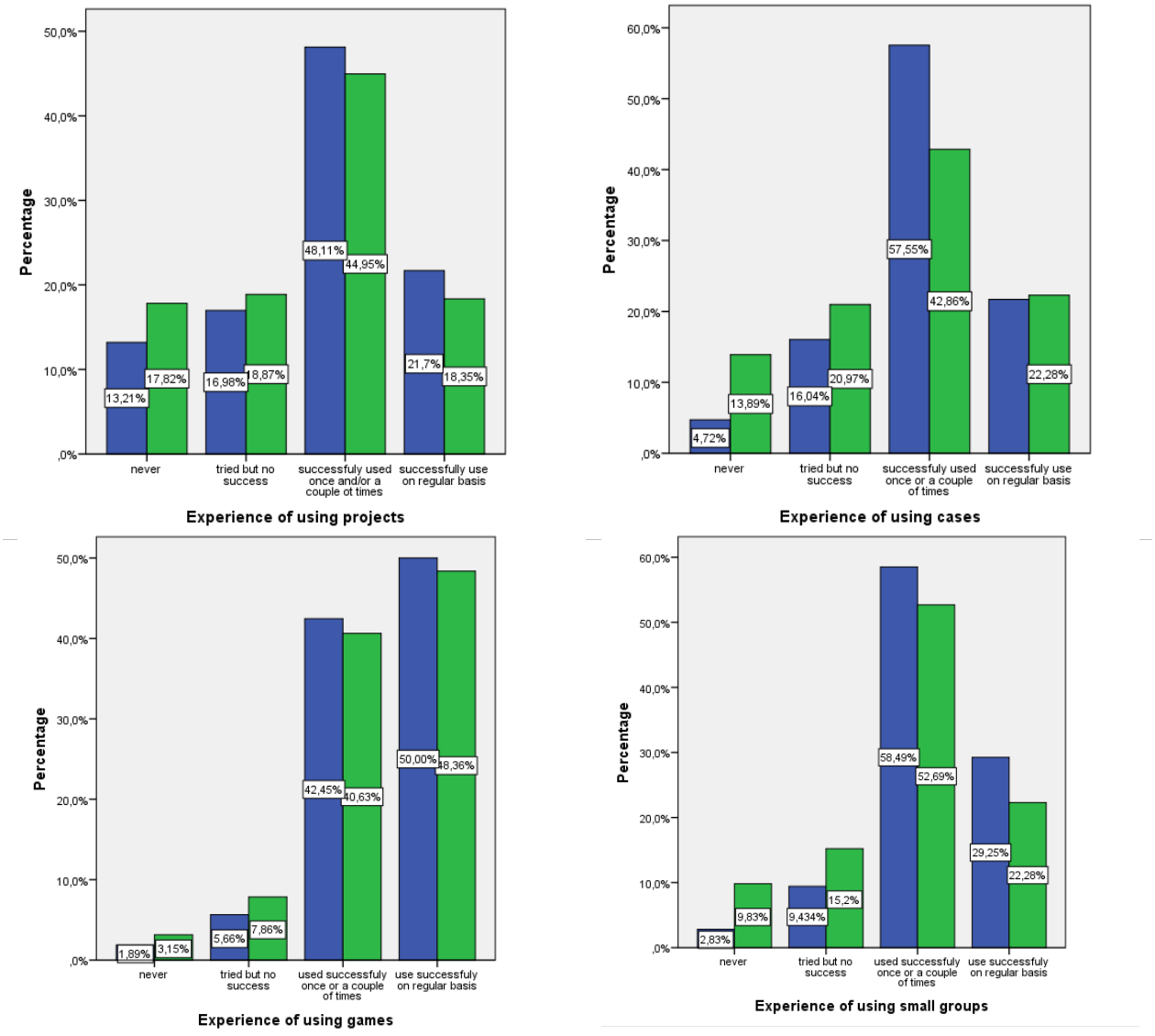


Figure 8. The comparison of practice-oriented training technologies use. (■ - teachers of economics, ■ - other teachers)

Overall, only about a third of VET teachers-respondents does not use or has a negative experience with the use of practice-oriented technologies. Of course, it shows the effectiveness of having these technologies implemented in VET schools and leads to the need of having these technologies by future VETP teachers.

1.4. Professional self-development on practice-oriented teaching issues

The majority of respondents use practice-oriented teaching technologies and 89.9% of respondents want to increase their competence on practice-oriented teaching. Teachers consider that the most attractive form of professional self-development training is self-education, mutual presence at classes, training courses and internships (Fig. 9). Traditional lectures and seminars on training courses, blended and distance learning are recognized as less efficient ones.

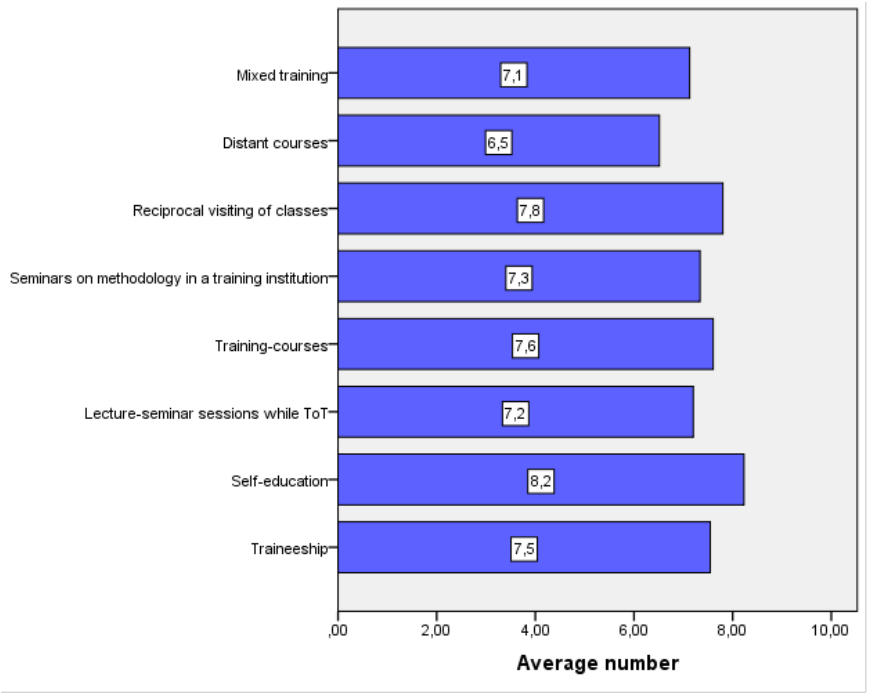


Figure 9. Average estimation of appropriate forms for further training teachers (10-points scale).

It can be assumed that these responses reflect negative experience of previous training not efficient enough to create competencies practice-oriented teaching. At the same time, adults' wish and desire in self-education and sharing their experience is obvious. Also, existing institutions of postgraduate education and teachers should take into account the need in active formation of practical skills and experience exchange with colleagues.

1.5. Practice-oriented teaching competence

For a more detailed analysis of teachers' requirements to their training, they were asked to rate the competence of practice-oriented teaching. Meanwhile, it was necessary to assess the importance of specific competences and then determine the level of already achieved competencies (10-point scale).

The average teachers' evaluation of certain competencies importance is represented in Fig. 10.

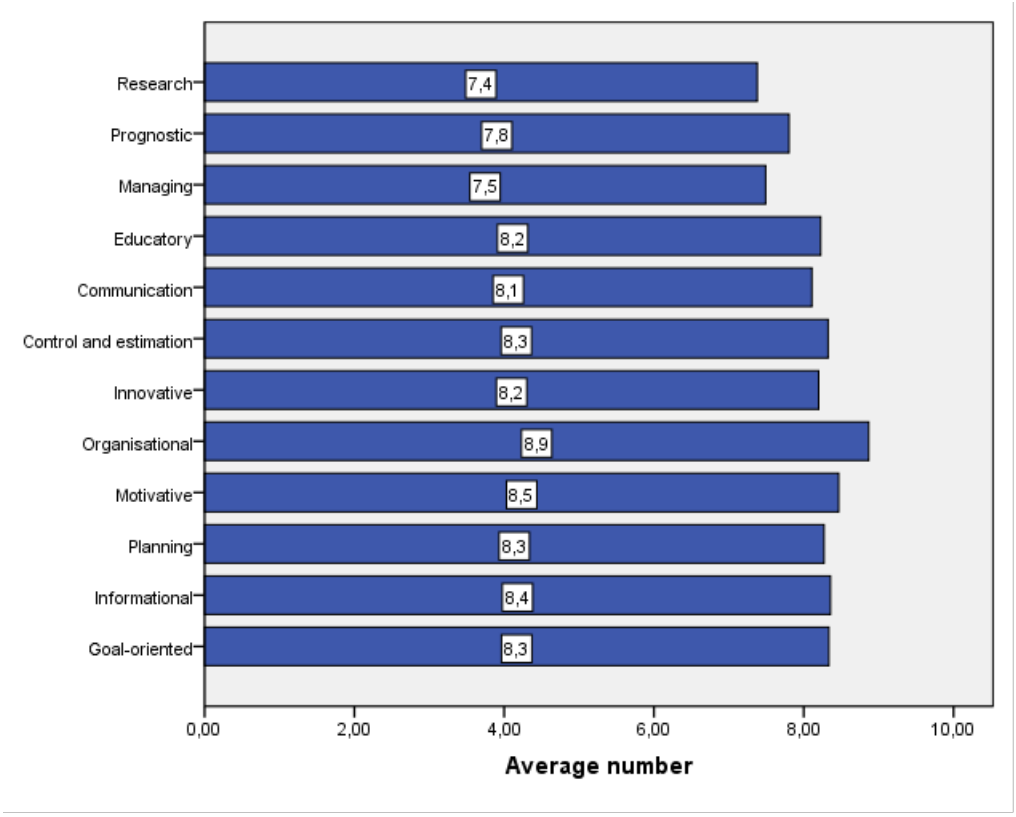


Figure 10. Aaverage teachers' evaluation of certain competences importance.

All teachers' competences are highly rated. The most important competence for practice-oriented assesed by teachers is the organizational one. Motivational and stimulating competences help to enhance learning activities of students. Compared to other research the competences (researching) and management (administrative) competence are assessed below. Obviously, the data indicates that training institutions should be focused on teachers' ability to work directly with the learners to

shape their organizational and motivational competence. Traditional training in HEIs is focused on research competences formation so that the information does not comply with practice-oriented teaching in VET institutions.

The average self-competence of teachers regarding practice-oriented teaching is given in Fig. 11.

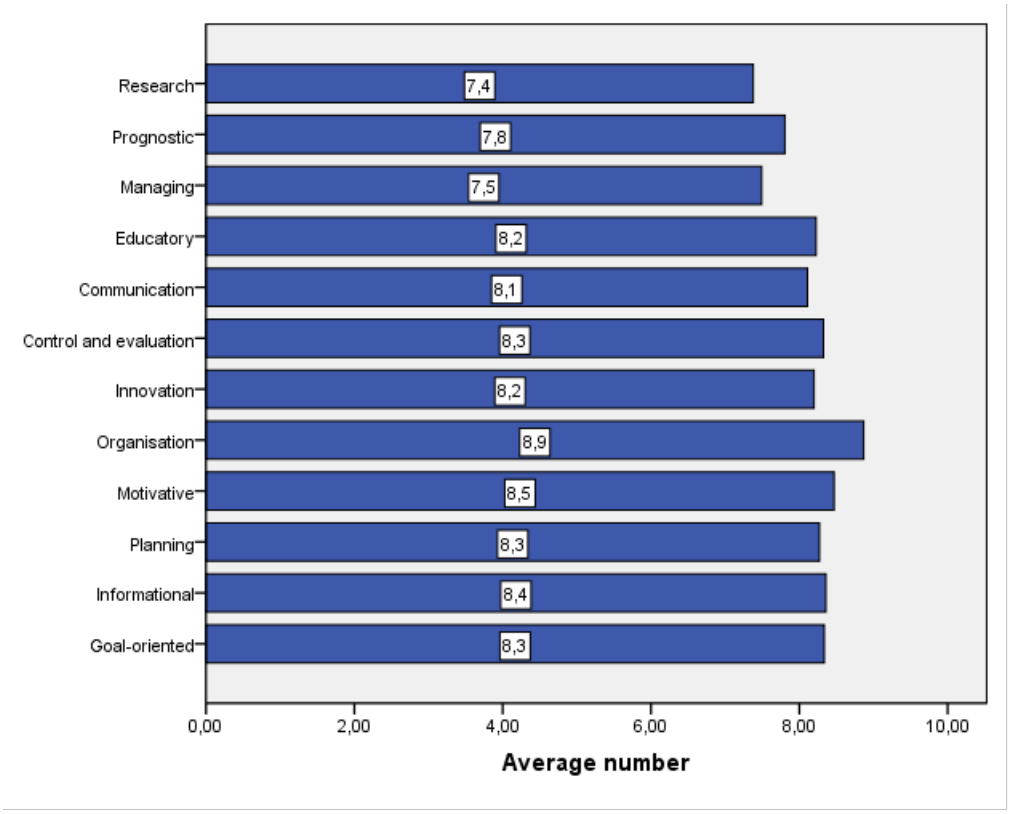


Figure 11. The average self-estimation of achieved competences.

Teachers-practitioners also highly value the structure of professional, organizational and motivational competences but not the research, management and predictive ones.

Comparing average teachers' ratings on specific competences importance and availability their difference was calculated (Table. 2) and the result shows the degree of difference, "+" – the lower grade, compared with importance, "–" – having the competence is more important than its importance.

Table 2

Compare of competences' estimates and self-estimations on practice-oriented teaching

Competences kinds	Average estimation of importance	Average estimation of having	Difference
Aim	8,338	8,335	0,003
Motivation	8,678	8,467	0,211
Plan	8,419	8,270	0,149
Information	8,369	8,357	0,012
Organisation	8,868	8,868	0
Control-estimated	8,474	8,326	0,148
Innovative	8,475	8,198	0,277
Communication	8,274	8,109	0,165
Mentoring	8,435	8,227	0,208
Managing	7,746	7,490	0,256
Prediction	8,194	7,803	0,391
Research	7,312	7,379	–0,067

In general, teachers slightly estimate availability of certain competences in comparison with their importance. The most significant differences are observed regarding forecasting, innovation, management, motivational and educational competences where teachers' self-evaluation is marked as an important one. More attention should be given to these competences in future teachers' training. However, teachers believe they have better developed research expertise than it is necessary as while they study in HEIs this competence is usually highly developed.

Therefore, the comparison and self-evaluations of teachers on practical-oriented teaching has shown the need for educational process reorientation forming mainly information and research competencies in forming teachers' abilities to work directly with trainees (organize their activities, motivate), and innovative, forecasting, communication and educational competencies development.

CONCLUSIONS

Overall, the survey of teachers showed imperfections of the existing system of VET teachers' training in HEIs. Despite the fact that this training in assessments of teachers is characterized by breadth, fundamental nature, scientific, prestige; it is

too theoretic, out of practice, not professionally directed and there are also outdated approaches and equipment. To improve VET teachers' training the share of practical training, using modern practice-oriented learning technologies with ICT support, increasing cooperation with enterprises, institutions of professional education and updating of logistics should be increased. It is also important to increase the competence of VET teachers' staff and provide better motivation of students to the teaching profession and activity.

The organization of teachers' training is desirable to reduce the share of traditional forms and methods of work aimed at the elaboration of theory, and increase the share of practice in various ways using modern, practice-oriented teaching methods (trainings, projects, case studies, business games, etc.). The learning process should be balanced with an expressive share of practical training. It is recommended to increase the practical training share of professional disciplines, to implement teachers' training in VET schools, to collaborate with universities that train VET teachers via vocational, educational and production (training) stations at enterprises to provide better quality of organization practices, including production, in the workplace in order to provide skills for future teachers to use practice-oriented educational technologies (quests, workshops, projects, business and educational games, etc.), ICT (specialised online courses, webinars, e-learning); to create appropriate legal, socio-economic, logistical and financial conditions of practical training; to prepare the methodical providing practical training via engaging practitioners to the training process.

The actual process of teaching in VET schools is characterized by practice-oriented learning technologies, indicating their efficiency in professional education and determines the need of their mastering by future teachers training. At the same time VET school teachers also tend to increase their competence on practice-oriented teaching, preferring forms of self-education, mutual presence at classes, training courses and internships.

To implement practice-oriented teaching the study should be guided on forming future teachers' abilities to work directly with trainees (organize and motivate) and

innovative, forecasting, communication and educational competencies development.

THE MODEL OF VET TEACHERS' PRACTICE-ORIENTED TRAINING

by IVET of NAES of Ukraine

The designed model of VET teachers' practice-oriented training reflects the interaction of purpose, content, forms, methods and techniques, teaching conditions and the results.

There are four blocks (conceptual target, content, technology and diagnostic-resultative) and each has smeaningful content and solves the needed part of the learning process.

Thus, the conceptually-target unit embodies the social order, general purpose, scientific approaches and principles. The social order of modern society is the need in qualified teaching staff for vocational education and training field. Accordingly, the aim is to train a competent teacher for vocational education and training. The conceptual basis of the model has methodological approaches: synergetic, axiological, competence, subject-active, integrative, context.

The synergetic approach to the practice-oriented training of VET teachers is reflected in the openness of education, spontaneity, flexibility, innovation training, recognition of individual needs and students' capabilities, non-legislative learning management.

The axiological approach involves the formation of VET teachers' professional values. They include the value of social and professional competence, self-development and self-actualization in education and professional improvement.

The competence approach determines the ability of VET teachers to solve educational problems professionally based on developed professional knowledge, skills, professional and personal qualities.

As one of the priority tasks of continuing education is to form the subjectivity of a teacher as a professional, it is important to use the subject-activity approach and via his/her standpoint pedagogical activity should be considered as the scope of the creative possibilities of a teacher's individuality. The mean of a future teacher's subjectivity formation is joint educational activity and practice-oriented training.

The integrative approach means that VET teachers' training uses different methods

and various forms of training, content enrichment courses and introduction of integrated courses.

The contextual approach involves the creation of pedagogical conditions for students' dynamic movement from academic to professional activity, transformation the first into the second one. This approach takes into account that the contents and conditions of professional activity are always probabilistic and problematic. Therefore, the basic unit of learning content context is the problematic situation that involves the inclusion of a productive thinking student.

An important condition for the establishment, development and operation of our developed model is to determine its source principles to consider selection of content, methods and technology forms of training activities. In our opinion, general principles of VET teachers' practice-oriented training are: scientific, continuity and succession, student-centeredness, openness and variability, the relationship of theory and practice, technology.

The scientific principle requires its reflection in students' knowledge and achievements of modern science and research methods. Students have to acquire reliable facts, events, processes, understand the essence of scientifically based laws, especially the development and establishment of certain scientific discoveries in historical perspective, join the prospects of new scientific research, engage to research activities, master the methods of scientific research.

The principle of continuity and succession determines the connection between training levels, support to the already studied material, further development of the students' existing knowledge and skills, establishing various relationships between old and new knowledge. The implementation of this principle is provided by methodically reasonable construction of curricula, sel-studied manuals, compliance sequences of movement from simple to more complex learning, teaching all system resources.

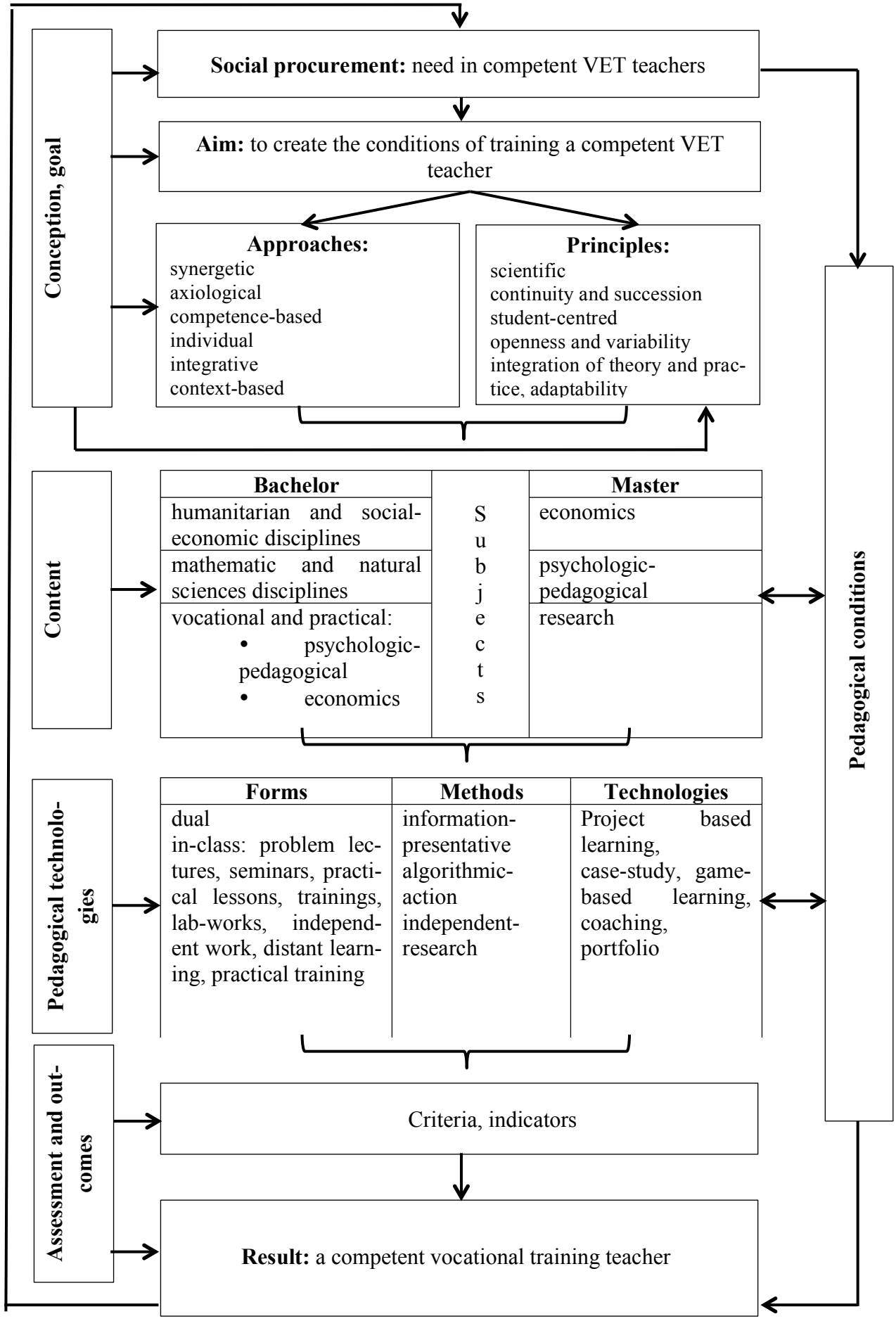


Figure. The model of future VET teachers' practice-oriented training.

The student-centred principle is characterized by training orientation, based on the competency model of a specialist for students to meet their urgent needs, maximize employement opportunities (first job) on the labour market and to improve suitability for employment.

The principle of openness and variation involves the presentation of learning content open to amendments of ambiguous facts which are possible to learn with critical reflection; using different methods, forms and means of educational process according to tasks. The application of this principle can overcome the monotony of training content that originally combined training programs in various disciplines, to provide more basic knowledge using a variety of learning technologies, choosing the appropriate volume and pace of learning activities.

The principle theory and practice connection is to prepare teachers to consciously productive professional activity in view of the fact that the practice is the impetus for cognitive activity while checking the validity criteria of knowledge.

The technological principle provides flexible learning management in a higher education institution. The technological essence is to make the learning process fully controlled using educational and information-communication technologies.

The content block of the model includes components of teachers training curriculum at bachelor and master levels. Taking into account the experience and tradition of VET teachers training in Ukraine, we rely on the common and Germany followed consecutive training model (the Consecutive Model).

Main characteristics of this model are the combination of psychological, educational and economic subjects on the "bachelor" level and advanced learning of psychological and educational and economic disciplines at the second level of "master". The master level is a necessary condition for professional development and the development of future teachers. The person with the qualification of "master" level must have advanced knowledge in the chosen specialty, innovative, research (creative), or scientific, educational or management skills, gain some experience using the obtained knowledge and be able to produce (create) new elements of knowledge for solving problems in the relevant profession.

Forms, methods, technologies and practice-oriented training of VET teachers are represented in the technological block of the model.

The obligatory condition to choose forms, methods, technologies and means of teaching practice-oriented training of teachers is their compliance to the goals. The practice-oriented training of teachers makes use of the dual elements of learning, providing academic activities in universities, workplace and professional education institutions. It is important to combine collective and individual forms of educational activities, while the role of students' independent work has to increase gradually where the effective use of distance learning is the promoting one. The model provides a clear proportion of teachers' practical training that requires increasing of practical training in professional disciplines, universities cooperation with VET schools, educational and production (training) stations at enterprises to ensure quality organization practices, in-service one in particular, to train VET teachers.

According to the principles of reasonable practice-oriented training of VET teachers the information and representational, algorithmically-effective and independent research methods should be applied in the educational process.

The information representational teaching methods aimed at transferring ready and relevant information and its appropriate reflection to trainees. Types and methods are divided into: verbal (lecture, story, explanation, reading aloud); visual-verbal (illustration, demonstration, presentation); writing (summarizing, abstracting, annotation, planning, structuring, analysis, synthesis, classification, comparison, generalization, specification, interpretation, results, conclusions, translation, presentation, composition, dictation, review, report, report, explanatory note paper, thesis).

The algorithmic-effective training methods aimed at understanding of provided information, mastering certain practical procedures and methods for solving standard problems and situations. Types and methods are divided into: dialogic (conversation, discussion, consultation, seminars, coaching, surveys); object-group (exercise, research, diagnosis, problem solving, working with computers, experiment, case method, questioning, testing); group (small group "brainstorming", games, conferences, projects, auctions, contests, quiz, situations analysis).

The self-search training methods are aimed at obtaining independent information, developing abilities to learn independently. They are divided into ways of working with implicit definite objects, but certain specific products (results) of work (survey, projects, modelling, studying) and ways of working with clearly-defined objects actions (texts, tests, questions, problems, laboratory exercises, practical exercises, training).

Among the technologies that provide performance of VET teachers' practice-oriented training, project, case-study, gaming, context, coaching, portfolio, information and communication. Thus, design technologies provide learning through activities, students' guidance – future teachers to create educational products.

Case-study technology develops the breadth and flexibility of thinking, helps to teach the rational use of the information, independently analyse facts, critically examine different points of view, discuss and defend own position, readiness to use various means and methods to find optimal issues.

Gaming technologies allow to simulate future educational activities and to provide online interaction of all participants where the transformation of theoretical knowledge in practical professional skills needs skills.

Contextual technologies are based on that prototype of students' learning activity is the scheme of a specialist's action that covers the following steps: analysis, problem definition, problem solving, decision prove the truth.

Coaching technologies are aimed at unleashing the students' potential to maximize its use, help in the formation of professional competence, determining appropriate goals, developing a plan of action to achieve them.

The portfolio technology realizes the idea of lifelong learning, enabling secure the continuity of the various process and communication learning stages among participants, helps to plan, monitor and adjust educational and career trajectory of a future teacher.

Information-communication technologies provide the improvement of educational process, can automate monitoring and evaluation of educational progress for

students to organize effective communication to exchange experiences, promote the development of students' creative abilities.

Diagnostic-result block of the model provides assessment, analysis and correction of those training results and includes criteria, indicators and levels of teachers' professional competence and planned results.

Among the criteria of a teacher's professional competence formation the instrumental, systemic, social, personal and technological ones are defined. The indicators of a teacher's professional competence formation for the instrumental criterion is the ability to plan educational activities, educational project technologies, the ability to collect, process and organize educational information. The systematic criteria include the following indicators: the ability to innovative educational activities, the idea of innovative educational technology, foreign and domestic experience of innovation activity. The formation indicators of a teacher's competence on social and personal criterion, the ability to create an effective system of communication while professional and educational activities and provide educational interaction possession of theoretical and methodological aspects of educational and social work in VET field. The formation indicators of a teacher's competence on the technological criterion is the ability to identify specific goals and objectives of educational work, the ability to motivate, stimulate and intensify training activities, the ability to organize the process of training activities, the ability to control and evaluate educational results.

Three levels of a VET teacher's competence are singled out: high, medium, low. The high level is characterised by teaching scientific orientation, communication theory and practice, the teacher's ability to manage learning process, content logical presentation, application of modern teaching and information technology. The medium level provides professional techniques of speech technology, professionally relevant knowledge and skills, the teacher's ability to plan, design training that enables him/her to endure the already learned ways of work to real learning process. The low level differs with the reproductive professional and psycho-pedagogical knowledge and skills, performing the professional and

educational activities according to a predetermined algorithm without creative intentions; insufficient activity.

The efficiency of VET teachers' practice-oriented training is achieved by creating sustainable educational environment. According to the teachers' survey results, conducted by the project Erasmus + "Improving teacher education for applied learning", in particular, conducted SWOT-analysis, the following pedagogical conditions of VET teachers' practice-oriented training are defined:

- •increasing the students' motivation to educational activities;
- •the balanced shares of psycho-pedagogical and specialized and professional disciplines proportion;
- •enlarging the practical component of future teachers training;
- •use of modern practice-oriented learning technologies with ICT support;
- •upgrading the competence of teaching staff to get them ready to VET teachers training;
- •involving stakeholders to future teachers training and evaluating its quality.

Thus, the designed model of VET teachers' practice-oriented training is the research tool to study that type of training as a pedagogical category; reflects the bridges of pedagogical science and practice; exemplifies the basic position of the studied process; summarizes the results and determines the predictive vision of the research.

ANNEXES

Annex 1. The structure of the questionnaire

Criteria	Indicator	Number of question
SWOT-analysis of VET teachers' training in HEIs	– strengths of VET teachers' training in HEIs	1
	– weaknesses of VET teachers' training in HEIs	2
	– opportunities of VET teachers' training in HEIs	3
	– threats of VET teachers' training in HEIs	4
Conditions of practice-oriented training for VET teachers in HEIs	– assessment of forms of training	5
	– assessment of methods of training	6
	– correlation between psychological-pedagogical and specialized-professional disciplines	7
	– correlation between classroom and individual students' work	8
	– correlation between lecture-seminar and practice work	9
	– correlation between hours for studying of disciplines and internship	10
	– recommendations for increasing of practically oriented training for VET teachers	11
Using of pedagogical technologies	– using of PBL	17
	– using of case study	18
	– using of simulation-training games	19
	– using of small groups' work	20
Will to continuous professional development	– will to develop technological competency	21
	– assessment of suitable forms of professional development	22
Teachers' technological competency	– assessment of importance	23
	– self-evaluation of competency development	24
Social and educational characteristics	– age	25
	– gender	26
	– education	27
	– pedagogical education	12
	– teaching experience	13
	– type of institution	14
	– position	15
	– teaching of discipline of economic cycle	16
	– residence	28

Annex 2. QUESTIONNAIRE

Practice-oriented training of teachers of vocational schools

Dear colleagues!

You are invited to participate in a study conducted by the Institute of Vocational Education and Training of the NAES of Ukraine in the project Erasmus + "Improving teacher education for applied learning in the field of vocational education (ITE-VET)".

The survey is expected to seek the opinion of teachers of vocational education on compliance of future VET teachers' training in HEI to needs of practice-oriented educational activities.

Please be honest in the answers. To mention your name is not required.

The results of the survey will be published on the website of the Project (http://ivet-ua.science).

Thank you for participating in the survey!

The first set of questions aims at finding out your views on the preparation of VET teachers in HEI.

1. **What are strengths of VET teachers' training in HEI?**
   - ☐ _____
   - ☐ _____
   - ☐ _____
   - ☐ _____
   - ☐ _____
2. **What are weaknesses of VET teachers' training in HEI?**
   - ☐ _____
   - ☐ _____
   - ☐ _____
   - ☐ _____
   - ☐ _____
3. **What are opportunities of VET teachers' training in HEI?**
   - ☐ _____
   - ☐ _____
   - ☐ _____
   - ☐ _____
   - ☐ _____
4. **What are threats of VET teachers' training in HEI?**
   - ☐ _____
   - ☐ _____
   - ☐ _____
   - ☐ _____
   - ☐ _____
5. **Rate forms of training according to their importance to VET teachers' training in HEI (assess each form on a scale from 0 - is not important to 10 - the most important):**
   - ☐ lectures ___
   - ☐ workshops___
   - ☐ seminars___
   - ☐ individual work with teacher___
   - ☐ individual work of student___
   - ☐ Coursework ___
   - ☐ Professional internship___
   - ☐ School internship___

6. **Rate the methods of training according to their importance to VET teachers' training in HEI (assess each form on a scale from 0 - is not important to 10 - the most important):**
   - ☐ Lecture – teacher's monologue ___
   - ☐ Lecture with elements of interaction ___
   - ☐ presentation, demonstration ____
   - ☐ conference ___
   - ☐ game ___
   - ☐ plot-role-playing game, staging, theatricality ___
   - ☐ analysis, working with cases ___
   - ☐ implementation of the project in small groups ___
   - ☐ individual work with the textbook ___
   - ☐ exercises, assignments ___
   - ☐ creative writing papers, essays ___
   - ☐ training ___
   - ☐ attract students to teaching ___
7. **What is correlation between psychological-pedagogical and specialized-professional disciplines do you consider as the most appropriate to VET teachers' training in HEI?**
   - ☐ Larger share of psychological-pedagogical disciplines
   - ☐ Equal shares of psychological-pedagogical and specialized-professional disciplines
   - ☐ Larger share of specialized-professional disciplines
8. **What is correlation between classroom and individual students' work do you consider as the most appropriate to VET teachers' training in HEI?**
   - ☐ Only classroom work
   - ☐ Lager share of classroom work
   - ☐ Equal shares of classroom and individual work
   - ☐ Lager share of individual work
   - ☐ Only individual work
9. **What is correlation between lecture-seminar and practice work do you consider as the most appropriate to VET teachers' training in HEI?**
   - ☐ Only lecture-seminar work
   - ☐ Lager share of lecture-seminar work
   - ☐ Equal shares of lecture-seminar and practice work
   - ☐ Lager share of practice work
   - ☐ Only practice work
10. **What is correlation between hours for studying of disciplines and internship do you consider as the most appropriate to VET teachers' training in HEI?**
    - ☐ More hours for study of disciplines
    - ☐ Equal hours for study of disciplines and internship
    - ☐ More hours for internship
11. **What can you offer for increasing of practically oriented training for VET teachers?**
    - ☐ _____
    - ☐ _____
    - ☐ _____
    - ☐ _____
    - ☐ _____

The second block of questions ask you to evaluate your experience in teaching.

12. **Do you have a special pedagogical education?**
    - ☐ yes

- ☐ no

13. **Your teaching experience**
    - ☐ Up to 5 years
    - ☐ 6-10 years
    - ☐ 11-20 years
    - ☐ More than 20 years
14. **Type of educational institution where do you work:**
    - ☐ Vocational lyceum
    - ☐ Vocational school
    - ☐ Centre of vocational education
    - ☐ Higher vocational school
    - ☐ College
    - ☐ other _____
15. **Your position**
    - ☐ director
    - ☐ deputy director
    - ☐ teacher of general disciplines
    - ☐ Methodist
    - ☐ Teacher of theoretical and vocational disciplines
    - ☐ Practical VET teachers
    - ☐ other _____
16. **Do you teach discipline of economic cycle?**
    - ☐ yes
    - ☐ no
17. **Which statement reflects your experience in using of PBL in your teaching experience most?**
    - ☐ Never used it
    - ☐ Tried to use it but not very successful
    - ☐ Used it successfully one or more times
    - ☐ Using it on the regular basis
18. **Which statement reflects your experience in using of case study method in your teaching experience most?**
    - ☐ Never used it
    - ☐ Tried to use it but not very successful
    - ☐ Used it successfully one or more times
    - ☐ Using it on the regular basis
19. **Which statement reflects your experience in using of simulation-training games in your teaching experience most?**
    - ☐ Never used it
    - ☐ Tried to use it but not very successful
    - ☐ Used it successfully one or more times
    - ☐ Using it on the regular basis
20. **Which statement reflects your experience in using small groups' work in your teaching experience most?**
    - ☐ Never used it
    - ☐ Tried to use it but not very successful
    - ☐ Used it successfully one or more times
    - ☐ Using it on the regular basis

21. **Do you want to develop your professional competence in practice-oriented training?**
    - ☐ yes
    - ☐ no

- ☐ difficult to answer

22. Rate forms of teachers' professional development according to their suitability for you personally (assess each form on a scale from 0 - is not important to 10 - the most important):

- ☐ internship ___
- ☐ self-education___
- ☐ lecture-seminar classes with PC ___
- ☐ trainings ___
- ☐ in-service for teachers in VET schools ___
- ☐ peer learning___
- ☐ e-learning ___
- ☐ blended learning ___
- ☐ other _____

In the third block of questions we ask you to evaluate pedagogical competences which are important to the practice-oriented teaching.

23. **Rate competencies according to their importance to practice-oriented teaching in VET institutions (assess each form on a scale from 0 - is not important to 10 - the most important):**

Competencies	***Points***
The ability to identify specific goals and objectives of teaching	
The ability to collect, process and organize teaching information	
The ability to plan teaching activities, to design pedagogical technologies	
Ability to motivate, stimulate and intensify training activities	
The ability to organize the teaching process	
The capacity for innovative teaching activities, awareness about innovative educational technologies, foreign and domestic experience in teaching innovation	
The ability to control and assess of the results of teaching activities	
The ability to create an effective system of interconnections both in professional and teaching activities and provide cooperation	
Awareness about theoretical and methodological aspects of teaching and social work in the field of VET	
Ability to management	
The capacity for predictive vision of the teaching process by studying the needs of the labour market	

24. Assess competencies below according to level of their development at you (assess each form on a scale from 0 - is not important to 10 - the most important):

Competencies	***Points***
The ability to identify specific goals and objectives of teaching	
The ability to collect, process and organize teaching information	
The ability to plan teaching activities, to design pedagogical technologies	
Ability to motivate, stimulate and intensify training activities	
The ability to organize the teaching process	
The capacity for innovative teaching activities, awareness about innovative educational technologies, foreign and domestic experience in teaching inno-	

vation	
The ability to control and assess of the results of teaching activities	
The ability to create an effective system of interconnections both in professional and teaching activities and provide cooperation	
Awareness about theoretical and methodological aspects of teaching and social work in the field of VET	
Ability to management	
The capacity for predictive vision of the teaching process by studying the needs of the labour market	

Finally, please answer a few more biographical questions

25. Your age

- ☐ Up to 30 years
- ☐ from 31 till 40 years
- ☐ from 41 till 50 years
- ☐ more than 51 years

26. Your gender

- ☐ male
- ☐ female

27. Your education

- ☐ Junior specialist
- ☐ Bachelor
- ☐ Master

28. What region do you live in:

- ☐ Crimea Autonomous Republic
- ☐ Vinnitsa Region
- ☐ Volyn Region
- ☐ Dnipropetrovsk Region
- ☐ Donetsk Region
- ☐ Zhytomir Region
- ☐ Zakarpatska Region
- ☐ Zaporizhya Region
- ☐ Ivano-Frankivsk Region
- ☐ Kyiv Region
- ☐ Kirovograd Region
- ☐ Lugansk Region
- ☐ Lviv Region
- ☐ Mykolayiv Region
- ☐ Odessa Region
- ☐ Poltava Region
- ☐ Rivne Region
- ☐ Sumy Region
- ☐ Ternopil Region
- ☐ Kharkiv Region
- ☐ Kherson Region
- ☐ Khmelnytskiy Region
- ☐ Cherkasy Region
- ☐ Chernivtsi Region
- ☐ Chernigiv Region
- ☐ City of Kyiv
- ☐ City of Sevastopol

Thank you for assistance!