



METHODOLOGICAL FEATURES OF QUALITY ASSESSMENT OF THE TRAINING OF SPECIALISTS IN CONSTRUCTION COLLEGES

Tetiana Pashchenko¹, Natalia Vanina², Anna Ostapenko³

¹ Candidate of Pedagogical Sciences, Senior Research Fellow of laboratory of scientific and methodical support of training specialists in colleges and technical schools, Institute of Vocational Education of the National Academy of Educational Sciences of Ukraine, <http://orcid.org/0000-0002-7629-7870>, e-mail: tantarena@ukr.net

² Candidate of Pedagogical Sciences, Associate Professor, researcher of the laboratory of scientific and methodical support of training specialists in colleges and technical schools, Institute of Vocational Education of the National Academy of Educational Sciences of Ukraine, <https://orcid.org/0000-0001-8310-5139>, e-mail: nvanina.science@gmail.com

³ Doctor of Philosophy in the field of education, junior researcher of the laboratory of scientific and methodical support of training specialists in colleges and technical schools, Institute of Vocational Education of the National Academy of Educational Sciences of Ukraine, <https://orcid.org/0000-0002-2669-7227>, e-mail: annostapenko1989@gmail.com

Abstract

The actuality of education of students in educational institutions of the construction profile is focused on the creation of specific vital objects (buildings, communications, sports complexes, bridges and other buildings); the educational process is sensitive to the emergence of new priorities in education, changes in educational paradigms and the adoption from mass-reproductive forms and methods of teaching to individual and creative ones; pedagogues of construction education institutions need to substantiate modern adequate forms and methods of monitoring the formation of students' current competencies, which proves the expediency and importance of researching the methodological features of assessing the quality of specialist training in building colleges.

The goal: disclosure of methodical features of assessment of the quality of training of applicants of professional preliminary higher education in colleges of the building specialization.

The methods: theoretical (study of philosophical, psychological-pedagogical, methodical literature and normative documentation regarding the researched problem; comparative analysis, synthesis, classification, generalization regarding the problem and subject of research), empirical (observation, conversation, study and generalization of the experience of pedagogical activity).

The results: a theoretical study of the problem of assessing the quality of training of future specialists in scientific sources was carried out, the peculiarities of its implementation in colleges of the building specialization were analyzed.

Conclusions: it was found that the ultimate goal of evaluating the quality of training of future specialists in colleges of the construction pro building specialization file is an objective view of the result of training (the formation of the competencies of future specialists); the peculiarities of the assessment of the quality of the training of specialists in the colleges of the building specialization are substantiated (predominance of forms and methods of graphic assessment); it was shown that effective assessment contributes to the improvement of the educational process.

Introduction. Build is a unique type of activity that accompanies humanity at all stages of evolution. Even during the years of crisis phenomena caused by political or economic factors, build continues to develop actively, being the driving force of economic growth. In this connection, there was an objective need for highly qualified technical specialists. The Occupation builder has always been and will be one of the most sought-after by society, therefore the problems of effective professional training of students studying build specialties become particularly significant in the conditions of the post-war reconstruction of the infrastructure destroyed by the war.

Sources. The problems of assessing the quality of specialist training in higher education institutions are in the center of attention of pedagogical science, as evidenced by numerous conceptual and worldview studies of domestic and foreign scientists. Evaluation as a specific component of the educator's professional activity was investigated: I. Bulak, A. Vashchenko, N. Volkova, Yu. Zhuk, V. Lozova, I. Pidlasy, V. Polonsky, V. Sergienko, I. Shmygol, and others. The problem of evaluating educational achievements of students was the focus of attention of S. Babinets, T. Berezhynska, I. Bulak, N. Vanina (2021), O. Jezhula (2007), S. Kalaur, T. Kanivets, S. Kretovych, R. Kubanova, L. Kutepova, O. Lokshina, P. Luzana (2021), L. Lutchenko (2012), I. Mosya (2021), N. Pasichnyk (2012), T. Pashchenko (2021), O. Sokolyuk, O. Titova (2021) and others. Practically all researchers of the problems of assessment and quality assurance of professional training of specialists focused on the results of training, substantiated the essence of pedagogical evaluation as «the process of establishing the level of educational achievements of students in mastering the content of an educational discipline (topic, module, etc.) according to standardized requirements» (Luzan et al., 2021).

Certain aspects of the use in the evaluation of innovative technologies were highlighted in the scientific works of leading domestic and foreign scientists, in particular: H. Agrusti, L. Artemchuk, B. Bell, P. Black, I. Bulakha, V. Vember, D. Wilmut, L. Dybkova. Also important for our research were the works on graphic training of students P. Buyanov, V. Vitchenko, A. Gedzik, I. Goliyad, O. Jezhula, M. Kozyar, T. Olefirenko, G.

Raykovskaya, V. Sydorenko, N. Tytova, M. Yusupova, and others.

However, we believe that the problem of assessing the quality of specialist training in build colleges has not been sufficiently researched. In particular, the substantiation of the peculiarities of the evaluation of the quality of the training of future construction specialists in the institutions of vocational pre-higher education, the mechanisms of the use of forms and methods of graphic evaluation of the quality of the training of the future specialist in the building structure by teaching staff have not been sufficiently investigated, insufficient attention has been paid to the implementation of innovative technologies for the evaluation of the quality of the training of specialists in build colleges. There are no studies in which the method of assessing the quality of training of future builder specialists is scientifically substantiated.

The goal of article consists in the disclosure of methodological features of the assessment of the quality of training of applicants of professional preliminary higher education in colleges of the building profile.

Methods: theoretical (study of philosophical, psychological-pedagogical, methodological literature and normative documentation regarding the researched problem; comparative analysis, synthesis, classification, generalization regarding the problem and the subject of research), empirical (observation, conversation, study and generalization of the experience of pedagogical activity).

Results and discussion. Researches of questions of evaluation of the quality of training of specialists made it possible to find out that its ultimate goal is the result of training, that is, the formation of competencies of future specialists. In turn, the evaluation of the development of students' competencies allows improving the learning process, creating opportunities for improving the learning process. The methodology for evaluating the quality of specialist training in build colleges includes a set of forms (oral survey, independent work, control work, dictation, graphic assessment, test, colloquium, assessment, exam, essay, business game, multimedia presentation, web quest, portfolio); types (external, mutual, self-assessment) and methods (oral, written, graphic, programmed, combined, practical, coaching, assessment method in "inverted learning", mind map method, case method, etc.) of

evaluating the quality of specialist training that are implemented in contact and virtual educational environments. The implementation of the technology for assessing the quality of specialist training in colleges of the building profile involves ensuring the assessment of the formation of all student competencies due to the fact that certain types of assessment perform different functions (developmental, motivational, emotional-reflective, warning, corrective, educational, assessment-diagnostic, informational, planning, educational, differentiating, generalizing, establishing feedback, prognostic, socializing).

The analysis of the experience of training future build workers makes it possible to assert that the peculiarities of the quality assessment of the training of specialists in the colleges of the building profile are the predominance of forms and methods of graphic assessment. Thus, we will consider more detailed methods and forms of graphic evaluation of students' success, future builders.

The analysis of the activities of specialists in the build industry indicates the need for the structure and content of the graphic training of future builders in colleges to shift the emphasis from teaching graphic activities to the formation of graphic concepts. This is explained by the fact that during production activities, the builder does not have to develop drawings, but there is a need to correctly read ready-made drawings of certain structures and build them without mistakes according to these drawings. The success of such activity directly depends on the level of formation of graphic concepts in particular and the level of development of thinking and imagination in general. The process of formation of graphic concepts requires and occurs during the execution of graphic constructions - as a component of the educational and cognitive activity of a student of graphic training.

The basis for mastering educational disciplines that form the foundation of technical training («Engineering geodesy», «Theoretical mechanics», «Resistance of materials», «Building structures», «Reinforced concrete and stone structures», «Metal structures», «Wood and plastic constructions», «Architecture of buildings and structures» (including implementation of a course project), «Technology of construction production» (including implementation of a course project), «Organization of construction», «Basics and foundations» (including implementation of the course project)) is a graphic training received in classes in the discipline «Drawing geometry and engineering graphics», which contributes to the development of future builders' spatial thinking,

without which their design and inventive activities are impossible. In addition, disciplines that require graphic training instill in students such important qualities as accuracy, patience, give skills to work with reference literature and regulatory and technical documentation.

The graphic method of assessing the success of construction profile college students includes the following types of tasks: *mini-graphic tasks, calculation-graphic tasks, individual graphic tasks, multifunctional tasks, professionally-oriented graphic tasks, complex situational tasks, course and diploma projects.*

In computational and graphic tasks, attention is focused on the computational part of image construction. In mini-graphic tasks - on sketch images of the necessary products and structures in order to develop students' graphic competences, their spatial image.

Individual graphic tasks are tasks of a traditional nature that require careful elaboration of drawings, which are performed as part of independent extracurricular work and involve the teacher's consultation.

Multifunctional tasks are applied in nature, they are related to the future professional activity of construction bachelors and require the manifestation of integral engineering and graphic competence during their implementation.

For diagnostics of the initial level of knowledge (discipline «Engineering graph») are applied. Their implementation does not require a large expenditure of study time, but at the same time gives a comprehensive picture of the student's readiness to learn new educational material. Mini-graphic tasks suggest a sketch solution within a limited time and are the most informative for students' mastery of a certain topic of the discipline, motivating thoughtful, meaningful mastery of the subject.

It is worth noting that the interactivity of the educational process involves the activity of students, which consists in their active participation in the process of evaluating the quality of the performance of mini-graphic tasks. For this purpose, the teacher provides a mutual assessment procedure (work in pairs), which consists of students giving each other their previous scores on a five-point scale, before the exam.

Solutions of professionally oriented graphic problems are used for current, thematic (periodic) control of the necessary abilities and skills of graphic activity in the disciplines «Drawing», «Engineering graphics». The selection of professionally oriented graphic tasks should be carried out taking

into account a number of factors. Graphic tasks should: contribute to the formation of technical and graphic knowledge and skills; have a professionally oriented practical character; cover the most important educational topics; to answer equal graphic training of students (Dzhejula, 2007).

For an example (**example 1**), we will present the algorithm for solving a professionally oriented graphic problem, which involves the construction of a complex broken section of a part (*Fig. 1*):

1) analysis of the detail of the part in order to determine the optimal place for the intersection;

2) imaginary drawing of intersecting planes: main (profile) and auxiliary (*Fig. 1, a*);

3) to delete of a part of the detail located between the observer and the intersecting planes (*Fig. 1b*);

4) combining the detail's part cut by the auxiliary cutting plane with the part formed by the main cutting plane;

5) projection of the formed figure onto the profile plane of the projections; design of the result of solving the graphic problem (*Fig. 1, c*)

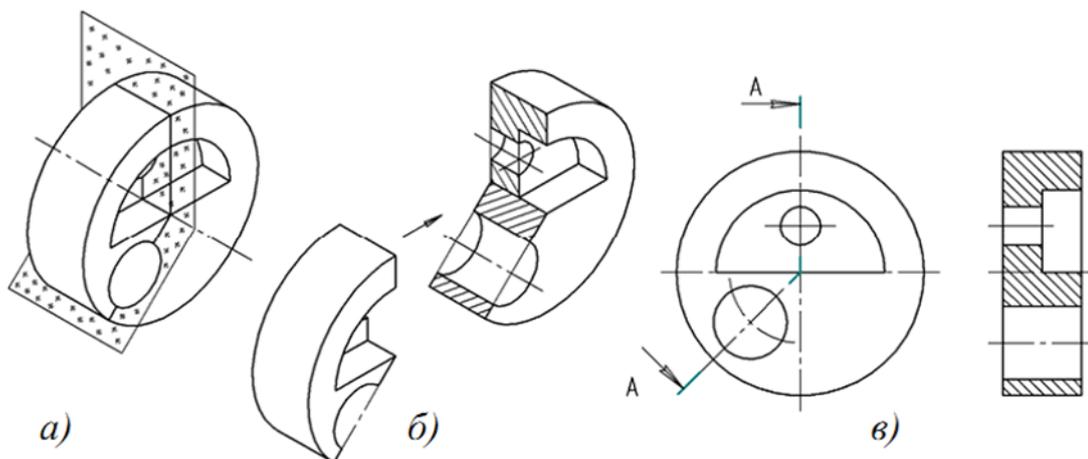


Fig. 1 Build of a complex broken section: a, b – visual demonstration of the stages of solving the problem; c – graphic presentation of the solution to the problem

For thematic control, it is advisable to propose a problem-oriented task aimed at drawing out the shape of the object according to the indicated cross-sectional figures (*Fig. 2*).

Example 2 (discipline «Engineering graphics»). Make a drawing of the part, the shape of which contains the specified sections (*Fig. 2*).

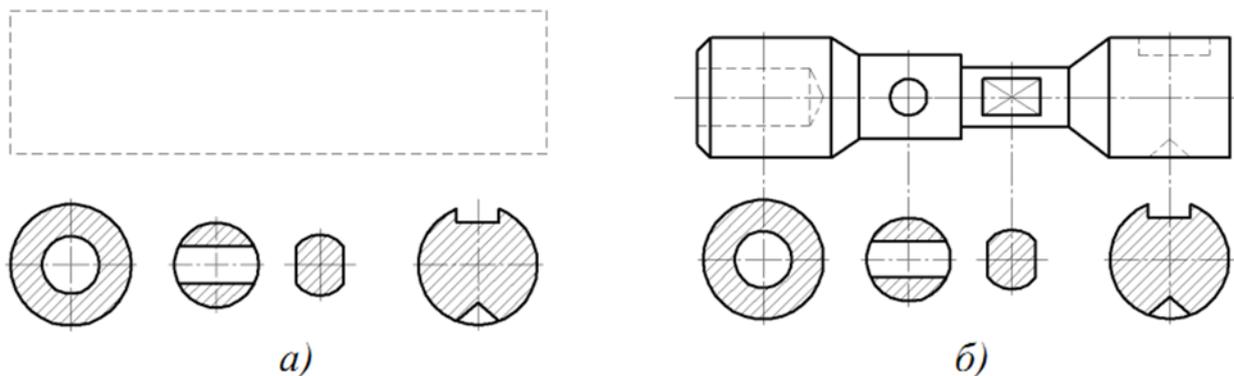


Fig. 2. Problem-solving condition (a) and possible solution (b)

Calculation and graphic tasks are performed by students while studying a number of disciplines «Fundamentals of geodesy», «Theoretical mechan-

ics» «Resistance of materials», «Building structures», «Reinforced concrete and stone structures», «Metal structures», «Wood structures and plastics».

Computational and graphic tasks test the student's ability to use mathematical operations when designing image dimensions, the ability to perform calculations, knowledge of the algorithm of actions when designing an image of standard parts, the ability to use regulatory documents to find the necessary information, and others. Just as the mini graphics, they do not require a lot of academic time. An example of such a task is shown in Figure 3.

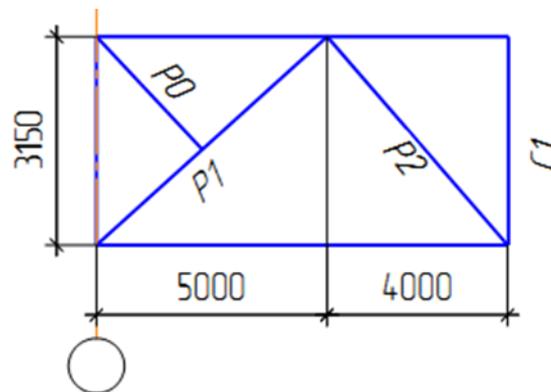


Fig. 3. An example of a calculation and graphic task

Students perform computational and graphic work independently and under the supervision of a lecturer in practical classes. Tasks are performed step by step, in consultation with the lecturer. After the lecturer has checked the reporting materials from the calculation and graphic works and corrected the indicated deficiencies, the calculation and graphic works must be issued in compliance with the requirements given in the methodical instructions. Completed works are defended by the student and graded by the lecturer. During the defense of calculation and graphic works, the student must positively answer the questions, the main ones of which are given at the end of the corresponding section of the methodological instructions.

Individual graphic tasks are traditional and involve detailed processing of the image on sheets of drawing paper of a given format. The result of their execution is full-fledged drawings of details and structures. These drawings make it possible to diagnose the quality of the formation of graphic competence comprehensively. An album of graphic works made by students during the semester is a kind of portfolio.

A labor intensity of individual graphic tasks is on average from 2 to 6 hours, depending on the complexity of the task and the individual level of preparation of the student. Individual graphic tasks are type of formative, since their implementation requires a combination of various types of activities, such as independent work with regulatory documentation, calculations, constructions, etc.

Example 3 (the discipline «Fundamentals of calculations of building structures»). Calculate the length of braces P0, P1 and P2 of the metal farm shown in the diagram.

The task has a clearly expressed professional-oriented character, as it allows you to calculate the required length of profiles' metal according to the truss scheme. It should be noted that the task has two methods of solution (analytical and graphical).

Multifunctional tasks are used to assess the quality of specialist training in colleges of building profile. Such tasks are used for the current control of the «Architectural and construction design» section and contribute to the formation of professionally significant competencies, such as the ability to read design documentation, readiness to plan and perform work on the development of the graphic part of project documentation, readiness to plan and perform work on the development of the graphic part of project documentation, and others. **Example 4** of the task is shown in fig. 4

Performing multifunctional tasks, students learn to think critically, find errors in ready-made drawings, build the necessary image based on a visual model or photo, which is valuable from the point of view of employers. The evaluation criteria for such a task are listed in Table 1.

It can be seen from Table 1 that the maximum number of points for a completed multifunctional task is 5.

For a multifaceted assessment of the quality of professional training, it is advisable to use complex situational tasks. They combine a heterogeneous test, computational and graphic tasks and multifunctional tasks that are connected by one professional situation. Completeness and correct carry out of a complex task determine the degree of resolution of this situation and indicate the level of graphic competence of a student of the build college.

Cross out the main facade of the building, shown in the figure.
 Initial data for drawing development:
 Riv. land = - 1,200;
 Riv.ch.p. = 0.000;
 Floor height = 2,700.
 Sizes of balcony windows and doors choose according to DSTU B V.2.6 -15:2011 Window and door blocks.



Fig. 4. An example of a multifunctional task from the section «Architectural and construction design»

Table 1

Criteria of assessment of multifunctional tasks

Indicators	Recommended score
The facade is incompletely drawn, with errors, the requirements of the State Technical and Technical Service are not met. There are no sizes.	1
The facade is drawn with errors, the requirements of DSTU are not met. There are no dimensions or gross errors in calculations.	2
The facade is drawn with errors, the requirements of DSTU are partially met. Most of the dimensions are not set, there are errors in the calculations of the relative marks.	3
The facade is drawn correctly or with small errors, partially meeting the requirements of the State Technical Service of Ukraine. Almost all dimensions are set, calculated with small errors	4
The facade is drawn correctly in compliance with DSTU. The dimensions are calculated and placed correctly.	5

The main advantage of such tasks is a comprehensive multi-level assessment of the quality of the formation of graphic competence, as well as accuracy in identifying gaps in its structure. Disadvantages of these tasks include the high labor intensity of their development and considerable time (compared to tests) for carry out and checking.

Competency-oriented tasks, being a type of educational tasks, occupy a special place in the structure of all components of the process of professional training - substantive, technological, control and evaluation. The educational task acts as a method, as a means of learning. In addition, the solution of the educational task allows to form and develop the

internal motivation of students' educational activities. At the same time, the task is nothing more than a unit of learned educational content. Finally, the solution of educational tasks is a simple and reliable way of simultaneously checking the quality of both the gnostic and the active components of student training. Such tasks are built on the basis of consideration of production situations, aimed at assimilation of knowledge by topics (sections) of the educational discipline (professional module), the ability to apply them. They are offered to students in the form of oral or test task, practical or laboratory.

Depending on the types of future professional

activity, tasks of this type can be oriented towards solving technological, organizational-management and other issues, and the order of their execution can be reproductive or problem-searching in type.

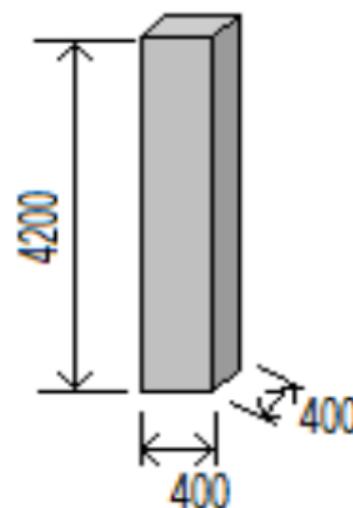
A competence-oriented task organizes the student's activity, not his reproduction of information or individual actions. As an example of a competence-oriented task, you can consider the task for those who studies in the field of engineering and builder.

Example 5. 1. Using the «Compendium of standards for consumption of materials in build», calculate the need for materials (dry and taking

into account moisture) for concreting 10 monolithic reinforced concrete columns with a cross section of 400x400 mm, a height of 4.2 m from heavy concrete of class B15. The data in fig. 5. Write the obtained results in the empty cells of table 2.

2. Pass the technological sequence of performing the main operations during concreting of monolithic columns. The total number of operations should not exceed 14. List the operations in the technological sequence in Table 3.

3. Write down in Table 4 the requirements for the quality of heavy concrete for concrete columns.



Calculate the need for materials (dry and taking into account moisture) for concreting the monolithic reinforced concrete column shown in the figure.

Output data for calculations:

- concrete strength, MPa – $R_b(28) = 25$;
- cement activity, MPa – $R_c = 40$;
- cement density, kg/m³ – $\rho_{cm} = 1000$; $\rho_c = 3100$;
- density of sand, kg/m³ – $\rho_{pm} = 1600$; $\rho_n = 2800$;
- sand humidity, % – $\omega_n = 4$;
- aggregate type – granite crushed stone;
- aggregate density, kg/m³ – $\rho_{msh} = 1400$; $\rho_{sh} = 2800$;
- aggregate size, mm - 40;
- aggregate moisture, % - $\omega_{sh} = 3$;
- reinforcement consumption, kg/m³ – 56.

Fig.5. Example of competent-oriented task on discipline «Building material science»

Table 2.

The need for materials (dry and moisture-free) for concrete 10 monolithic reinforced concrete columns

The name of the materials	Consumption per 1 m ³ of concrete mixture	The need for dry materials for 1 column	Need for dry materials on 10 columns	Need in materials with moisture-taking into account
Cement				
Sand				
Rubble				
Water				
Armature				
.....				

Table 3.

Sequence of technological operations during concrete of monolithic column

№ Operation	Name of the operation
1	
2	

Table 4.

Requirements to the quality of heavy concrete for concrete columns

№ p/p	The name of the quality parameter	Description of the quality parameter
1		
2		
3		
4		
5		

With the introduction of new generation standards, the importance of independent work increases significantly. The need for it in education is due to the fact that the development of the subject of professional activity is impossible outside of the activity in which its goal is independently set, actions and operations are planned and implemented, the obtained result is correlated with the goal, methods of activity are adjusted, etc. The subject position of the student in education becomes the main condition for the formation of practical experience and, on its basis, the mastery of competences. This, in turn, requires the appropriate reorganization of the educational process in terms of the educational component, improvement of educational and methodological documentation, introduction of new information and educational technologies, updating of technical and software support for independent work, new technologies of self-assessment and current control of knowledge, skills and abilities.

To assess the quality of training of specialists in colleges of building profile in technical disciplines such forms of self-evaluation are often used:

- implementation of drawings, schemes;
- implementation of calculation and graphic works;
- solving situational production (professional) problems;
- preparation for business games;

- design and modeling of various types and components of professional activity;
- experimental design work;
- research and experimental work.

In the process of planning independent work, it is advisable to indicate not the types, but the approximate topic of independent work. At the same time, the topic should be presented in the form of tasks.

Students should be offered difficult reading material as homework. It is expedient, «having proposed a new educational content as a source material, to give the task of processing, transforming it into a certain kind of product with the help of certain independent works and operations, relying on some knowledge and cognitive skills. At the same time, acquiring knowledge becomes a necessary condition (means) for solving a specific educational and professional task (problem)» (Lutchenko, & Pasichnyk, 2012).

In modern practice, the following types of independent tasks are common in professional higher education institutions, within which various research methods are used, including surveys, the use of mathematical methods of data processing, laboratory observation, experiment, presentation of the obtained results in the form of a structured text, drawing up conclusions, etc.

Such forms of knowledge assessment as solving situational tasks and working with educational cases

are quite common. Actually, the educational case is a description of a specific situation from a certain field of professional activity, written in an interesting (popular-journalistic) style. It contains a subject with a certain intrigue, containing a hidden or overt conflict (interests, positions, actions of various business entities and/or their consequences). Tables and diagrams illustrating the subject, etc., are often included in the case description. Sometimes the description of the situation of the educational case is accompanied by multi-page programs from which information is selected to solve the problem. Having familiarized themselves with the content of the educational case, students formulate the problem, diagnose the causes of its occurrence and substantiate the methods of solving contradictions (Pashchenko, 2014).

Business games, case-technologies, and the project method are among the assessment tools within which it is possible to simulate real professional situations. The main advantages of these tools are: a wide range of evaluated competencies; the possibility of organizing individual tasks; evaluation of both the result and the process.

Experience of practical activity, general and professional competences can also be formed in the process of solving practical (including project) tasks.

One of the traditional types of project tasks are term papers (projects) - independent educational work performed during the academic semester (course) under the guidance of a teacher and aimed at solving an individual task or conducting research on one of the issues studied in a professional module (academic discipline).

In the training of specialists for the construction industry, it is important to teach the future specialist to acquire knowledge individually, to navigate well in the flow of constantly changing information, to be able to think creatively and critically. A leading role in this for students of construction specialties is given to course design. Course design is carried out in the form of a course project or course work. Each student has different abilities, diligence, desire to achieve maximum results or be satisfied with some minimum. At the same time, they objectively weigh their capabilities in performing certain tasks. In this case, it is desirable to give students the opportunity to independently choose the type of course project, that is, with a simplified task, a task of medium difficulty or a more difficult task. In order for a student to receive a high grade, he can complete a course project (work) of an independent creative nature or per-

form a task that demonstrates in-depth and generalized knowledge. In this case, a different level of complexity can be achieved not only through individual, more complex tasks, but also by considering specific additional issues that require more in-depth knowledge and generalizations.

Course design is considered as one of the active forms and methods of learning that allow developing the creative thinking of young construction specialists when they solve specific problem situations. It is appropriate to note the special role of educational design in the development of the student's ability to perform professional functions in connection with the integral nature of tasks.

The importance of course design is determined primarily by the fact that it completes the development of the construction discipline, makes it possible to systematize the acquired knowledge during lecture, practical and laboratory classes. It is in course design that the main tasks related to the field of further professional activity of tomorrow's builders are solved.

In the process of completing the course project, the student applies all the acquired knowledge from certain and related disciplines. As a result, this gives the teacher the opportunity to carry out integral control of the acquired knowledge, to notice and eliminate problems in mastering the discipline. During the implementation of the course project (work), students widely use interdisciplinary knowledge obtained during practice; learn to design various objects; master various methods of calculations; draw various schemes, drawings; use normative and reference literature, periodicals to develop skills in working with books and electronic resources, etc. (Luzan et al., 2021).

Training plan of specialty 192 «Civil engineering» for certain construction disciplines, in addition to lecture, practical and laboratory classes, includes course projects that are considered as a type of educational work and are performed within the hours allocated in the curriculum for its study. A characteristic feature of course design is that the main amount of time is allocated to the student's independent work.

Many years of practice shows that course design, along with lectures, plays a significant role in the formation of a specialist and is the most important type of training lessons with students. In the process of course design, the following is carried out simultaneously: checking the level of theoretical knowledge, which is accompanied not only by their repetition, deepening and systematization, but also by developing the skills to use

them when solving certain engineering tasks; formation and consolidation of students' engineering skills in decision-making and their practical implementation in the form of relevant design and construction documents.

In almost all institutions of higher education, where educational programs of the build profile are implemented, the topics of course projects are issued to students in the format of a general name, that is, they are not tied to any specific, real object. A student understands that he needs to develop a conditional task and it is unlikely was implemented in practice, and may not even be discussed by the scientific community. This circumstance reduces students' interest in the work being performed. And on the other hand, the assignment for the course design prescribes specific parameters of the object being designed, which does not allow the student to approach the design process creatively, to apply other parameters outside the assignment based on economic analysis or accepted criteria for the optimality of the object, etc. With this approach, the student does not have the opportunity to self-realize his creative and research abilities.

In order to solve this problem, it is necessary that the subject of course design is based primarily on the needs of the build market of the region, on the tasks of innovative production, on various scientific and research developments that are closely related to the discipline being mastered. Depending on the scope of the course project and the time allocated in the curricula for its implementation, it is desirable to specify in the assignment tasks that require a thorough study from the student.

The approximate topic of coursework for students to choose is formed based on the planned educational results of the professional module, and should also have a «task» formulation. The structure, design, training and defense regulations are determined by the Regulation on course work (course design) agreed with employers, which is part of the educational and methodological complex that ensures the implementation of the appropriate educational and professional program of the educational institution. To organize the defense of term papers, it is necessary to develop evaluation criteria that include indicators formed on the basis of planned educational results (Luzan et al., 2021).

Control over the implementation of the course project is carried out according to the schedule of control points that correspond to the main stages of the design (technical task, technical proposal, etc.),

at each stage the use of a certain evaluation tool is provided. At the stage of the technical task, it is proposed to write an essay (the basis for entering an explanatory note to the project), a technical proposal - to perform a presentation (justification of analog models, etc.), in the future, the presentation can become part of the overall presentation of the project, the evaluation of the execution of sketch and technical projects takes place in form of open review of works. At the stages of the technical proposal, sketch and technical projects, evaluation is carried out in the form of mutual evaluation, during which students fill out specially designed forms, a round table may be held, etc. The implementation of the working documentation of the project is evaluated by the teacher in a personal conversation, mutual evaluation is also possible by organizing the work of a «design bureau» among students. The form of project protection can also be varied, it can take place according to the «classic scheme», in the form of a business game, in the form of "protection at work" (a form of assessment when project protection takes place within the walls of a construction company), etc.

It is presented multi-stage evaluation significantly increases the reliability of the decisions made during evaluation procedures, and allows monitoring the dynamics of students' educational and professional achievements over a certain period.

Modern evaluation systems in professional education require a change in the position of the lecturer, who before studying a professional module, an educational discipline, presents the students with an evaluation system for the results of his mastery. The position of the student also changes, who becomes an active participant in the evaluation process, which contributes to the awareness of the acquired experience of educational and professional activities and the integration of knowledge and skills in competence.

Conclusions. It was found that the ultimate goal of evaluating the quality of training of future specialists in colleges of the building structure is an objective idea of the result of training (the formation of the competencies of future specialists). The peculiarities of the assessment of

the quality of the training of specialists in colleges of the building structure are substantiated (predominance of forms and methods of graphic assessment). It is shown that effective assessment contributes to the improvement of the educational process.

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МЕТОДИЧНІ ОСОБЛИВОСТІ ОЦІНЮВАННЯ ЯКОСТІ ПІДГОТОВКИ ФАХІВЦІВ У КОЛЕДЖАХ БУДІВЕЛЬНОГО ПРОФІЛЮ

Тетяна Пащенко¹, Наталія Ваніна², Анна Остапенко³

Кандидат педагогічних наук, старший науковий співробітник лабораторії науково-методичного супроводу підготовки фахівців у коледжах і технікумах Інституту професійної освіти НАПН України, <http://orcid.org/0000-0002-7629-7870>, e-mail: tantarena@ukr.net

Кандидат економічних наук, доцент, науковий співробітник лабораторії науково-методичного супроводу підготовки фахівців у коледжах і технікумах Інституту професійної освіти НАПН України, <https://orcid.org/0000-0001-8310-5139>, e-mail: nvanina.science@gmail.com

Доктор філософії в галузі освіти, молодший науковий співробітник лабораторії науково-методичного супроводу підготовки фахівців у коледжах і технікумах Інституту професійної освіти НАПН України, <https://orcid.org/0000-0002-2669-7227>, e-mail: annostapenko1989@gmail.com

Реферат

Актуальність: навчання студентів у закладах освіти будівельного профілю орієнтоване на створення конкретних життєво важливих об'єктів (будівель, комунікацій, спортивних комплексів, мостів та інших споруд); освітній процес є чутливим до появи нових пріоритетів в освіті, зміни освітніх парадигм і переходу від масово-репродуктивних форм і методів викладання до індивідуально-творчих; педагоги закладів освіти будівельного профілю мають потребу в обґрунтуванні сучасних адекватних форм і методів контролю сформованості актуальних компетентностей студентів, що доводить доцільність і важливість дослідження методичних особливостей оцінювання якості підготовки фахівців у коледжах будівельного профілю.

Мета: розкриття методичних особливостей оцінювання якості підготовки здобувачів фахової передвищої освіти у коледжах будівельного профілю.

Методи: теоретичні (вивчення філософської, психолого-педагогічної, методичної літератури та нормативної документації щодо досліджуваної проблеми; порівняльний аналіз, синтез, класифікація, узагальнення щодо проблеми та предмета дослідження), емпіричні (спостереження, бесіда, вивчення та узагальнення досвіду педагогічної діяльності).

Результати: здійснено теоретичне дослідження проблеми оцінювання якості підготовки майбутніх фахівців у наукових джерелах, проаналізовано особливості його здійснення у коледжах будівельного профілю.

Висновки: з'ясовано, що кінцевою метою оцінювання якості підготовки майбутніх фахівців у коледжах будівельного профілю є об'єктивне уявлення про результат навчання (сформованість компетентностей майбутніх спеціалістів); обґрунтовано особливості оцінювання якості підготовки фахівців у коледжах будівельного профілю (переважання форм і методів графічного оцінювання); показано, що ефективне оцінювання сприяє вдосконаленню освітнього процесу.

Ключові слова: фахова передвища освіта, оцінювання, якість підготовки фахівців, графічний метод оцінювання

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