

УДК 378.147:76:7.012

Yida LI

West Ukrainian National University

ORCID ID 0009-0007-3430-890X

DOI 10.24139/2312-5993/2024.04/478-486

METHODS AND MEANS OF FORMING THE PROFESSIONAL COMPETENCE OF FUTURE GRAPHIC DESIGN SPECIALISTS

The article highlights the problem of forming the professional competence of future graphic design specialists, which is changing with the rapid development of the digital age. It has been established that professional competence includes traditional skills (drawing, design skills), effective digital tools, collaborative design and thought processes. It is proved that the formation of professional competence in higher education institutions is a controlled process that stimulates learning motivation and compliance with the educational standard. It is noted that the active use of teaching methods and tools by teachers forms the professional competence of future graphic design specialists, enhances the training of creative, innovative and digital thinking, and provides for the integration of digital technologies into professional disciplines with the full use of networked information and communication technologies.

The effective innovative teaching methods include: short video method, differentiated method, project method, case method, group teaching method, theoretical methods (mental maps), which develop students' personal qualities and abilities and contribute to further learning, teamwork and future career development. The means of support of academic disciplines, including Internet channels, networked educational Internet platforms, are characterised. It is concluded that the formation of professional competence in graphic design specialists is influenced by the development of the digital age and the skilful use of adjusted curricula, innovative teaching methods and its means of support within this influence.

Key words: *training of graphic design specialists, professional competence, higher education, methods and means of forming professional competence.*

Introduction. With the changing times and the rapid development of the modern design industry, graphic design has moved from the traditional print medium to a variety of digital interactive design for the web, mobile applications and virtual reality, and this transition has placed higher demands on the professional competencies of future graphic designers. These competencies include not only traditional skills such as drawing and design skills, but also the use of digital tools, the ability to design collaboratively and thinking that allows you to adapt to new ways of working (Silvanus, Folasayo, 2024; Al Hashimi, Mahdi, 2019; Ramli, Saedon, 2024).

In the process of adapting to the needs of the times, the acquisition of professional competencies by future graphic design specialists has become an inevitable trend. Therefore, it is important to introduce effective methods and means of their formation in higher education

institutions for future graphic design specialists to ensure effective preparation of students for future professional activities.

Analysis of the Latest Research. In their works, scientists have comprehensively studied the professional training of future graphic design specialists. Thus, scientists M. Ornekoğlu-Selçuk and others focused on the principles of organising the design of the future, emphasising the need to introduce modern graphic design curricula into the educational process that would allow students to collaborate and share experiences (Örnekoğlu-Selçuk, Van Langenhove, 2024, pp. 12-14); A. Maksymchuk, O. Shvets, T. Steiner et al. considered it appropriate to integrate digital tools into traditional artistic techniques (Maksymchuk, Shvets, Steiner, Petrova, Kravchenko, Abramova, 2024); M. Sumantri et al. made an attempt to improve students' graphic design skills by introducing project-based learning into professional training (Sumantri, Gandana, Supriyatna, Yasha, Sethiavan, 2022). These scholars tried to change the significance of the future professionalism of the graphic designer, who will be professionally proficient in both digital tools and traditional techniques after successful studying at a university.

At the same time, scientists V. Arefiev, A. Budnyk, K. Kyselova, O. Podvolotska, O. Shandrenko and I. Shvets emphasised the existing gap between the skills that students receive at school and the skills required by the design industry and called for the reorganisation of curricula to bridge this gap (Budnyk, Arefiev, 2023, pp. 52-56); S. Sudhindra and T. Blessing proposed a design competency assessment system that can help educational institutions check whether educational outcomes meet professional expectations (Sudhindra, Blessing, 2021). The research by Kolosnichenko et al. emphasises the need for educational reforms that would balance relevance with the rapid changes in the design profession (Kolosnichenko, Nikolaieva, 2022). However, scientists have not fully disclosed the methods and means of forming professional competence in future graphic design specialists in higher education institutions.

The purpose of the article – дослідити вплив методів та засобів навчання на формування професійної компетентності у майбутніх фахівців графічного дизайну.

Summary of the main material. Today, the activities of designers are aimed at satisfying both the aesthetic needs of people and modelling a comfortable and aesthetic environment for people. At the same time, a designer, on the one hand, using her or his accumulated experience,

contributes to the creation of modern culture, and on the other hand, serves as an important tool for developing the creative potential of an individual, as she or he combines modern achievements of art, science and technology in his or her work. The development of design implies that a specialist relies on the growing aesthetic requirements of people to the quality and appearance of things and the environment. At the same time, design as a field of knowledge cannot lag behind the development of science and technology, the development and implementation of new materials and ways to aesthetise the environment of human existence.

These processes are usually interconnected and mutually determine each other. In the design profession, professional art education plays an important role in shaping the image of a future specialist and in the acquisition of professional competence by future designers.

This mostly applies to graphic design specialists, as they specialise mainly in modern printing, corporate identity development and implementation, advertising, packaging, web design, etc. Today, the level of products produced by designers does not always meet the growing demands of customers and consumers. Under such conditions, the designer's moral culture and growing social responsibility for the quality of promotion of goods and services, for the results of direct or indirect influence on the consciousness and behaviour of a significant number of consumers, come to the fore. In this context, the success of a graphic designer in professional activities directly depends on the students' mastery of knowledge, skills and abilities, as well as on personal motivation for self-development, self-education and self-improvement.

It is important that today the professional activity of a graphic designer involves the accumulation of knowledge from various fields - from geography, history, biology, ecology, etc. to economics. Such a set of professional knowledge of a designer is connected with the fact that the object of his/her activity is a wide range of various objects of the social environment. Accordingly, the formation of a designer's knowledge implies his/her serious awareness of economics, ergonomics, the basics of architecture and construction, geography and ecology, etc., since knowledge of all these scientific fields allows a future graphic design specialist to make competent decisions, find the most rational and aesthetic solutions to creatively designed tasks. A future designer is able to structure the visual environment surrounding a person and create a psychologically comfortable environment for them through the use of artistic means and images.

The work of each student while studying at a university has a certain logic and consists of stages, i.e. first, the 'ascent' to mastery, and then to design acme.

At the first stage of training, teachers direct students to create simple graphic series based on typical illustrations and uniform font blocks that effectively reflect the basic compositional laws and principles. However, in the process of studying at a university, the tasks become more complex, so the resulting works are performed taking into account the setting and solving of new, more complex design tasks. This, in turn, allows future designers to develop the experience of research and design work in different areas, to develop their skills in creating complex constructive, graphic and font forms, and to develop a deeper semantic interpretation of visual communication based on students' fluency in technical means and multimedia technologies.

Accordingly, future designers acquire the skills of a creative approach to the artistic process and demonstrate a sustainable experience of creating original design objects. That is, at the first stage of acquiring professionalism in higher education institutions, it is necessary to organise the correct acquisition of basic knowledge and professionally relevant information by students, as well as to promote their mastery of professional design methods and techniques. At this stage, the creative abilities of future designers are revealed and their compositional expression is formed. Equally important here is the development of the ability to use three-dimensional modelling tools, as they help to combine the student's thinking, logic and imagination.

The second stage of training is associated with the accumulation of the necessary amount of professional knowledge; the development of intellectual skills and professional skills in working with form-making technologies through the 'immersion in the world of design' scheme; the development of skills in creating complex projects, designing creative projects and own exhibition expositions; and writing reviews and annotations.

At the next stages of learning, teachers help to improve the skills of systematising, deepening and generalising the knowledge gained. At these stages of creative work, technologies for training professional and communication skills are used, which, accordingly, contributes to the formation of tolerant communication relationships.

The development of professional and communicative competences of future designers is realised through understanding the aesthetic and communicative problems of professional activity, the ability to set artistic and figurative, constructive and technological, communicative and informational tasks and solve them with visual and artistic means.

The moral image of a designer, the breadth of his/her general culture is manifested in the products of his/her creativity, which includes the general and professional culture of designers already today within the walls of the university, where it is formed by teachers in a union of youth and maturity, energy and experience.

The way to the top of the profession is through hard work, constant self-improvement, professional skills and creative experience. The annual adjustment of curricula is one of the important ways to improve the quality of professional training of future graphic design specialists. At the stage of curriculum revision, it is necessary to focus on ensuring the orderly training of specialists within the study of academic disciplines. This process is aimed at adjusting the disciplines in the designated speciality and involves the introduction of issues related to the topics of professionally oriented disciplines:

- improving the effectiveness of training graphic design specialists, namely by filling in tasks to enhance creative thinking;
- stimulating students' learning motivation and enthusiasm for active participation in the educational process;
- strict adherence to the educational standard and relevant industry trends.

In the process of adjusting the curricula for graphic design disciplines, teachers are obliged to rely on the latest achievements of the industry, enrich the teaching content with the necessary innovative theoretical and methodological material to improve the effectiveness of training graphic design students and promote their orderly professional development.

Thus, the methods and means of forming the professional competence of future graphic design specialists used by teachers are aimed at strengthening the training of creative, innovative and digital thinking in students and involve the integration of digital technologies into professional disciplines and the comprehensive use of networked information and communication technologies in the classroom. At the same time, teachers help students acquire professional knowledge of

graphic design by using online channels in the process of studying the material, which allows students to evaluate and understand design works and thereby develop their own creative thinking step by step.

When developing professional competences, teachers in the classroom can successfully combine various necessary teaching methods with the method of short videos to study creative design concepts in order to strengthen students' professional understanding of the material studied. However, practical classes will be successful if there is a personalised and differentiated approach to student development, where differentiated teaching methods are applied in accordance with the knowledge and innovative thinking abilities of students. The differentiated method allows to develop and improve students' professionalism, namely their imagination and creativity.

The project-based learning method is successful in shaping the professional competence of future graphic design professionals. Its goal is to encourage students to participate in real projects and apply them during their undergraduate internships. Since graphic design is a practical subject, teachers have to improve students' design skills throughout their studies by involving them in practical work and project activities. Project-oriented learning, in which teachers offer students to work on real design projects, allows them to apply the knowledge and skills they have acquired to solve practical problems in real-life situations in the future. This method of teaching can not only develop students' practical skills, teamwork and problem-solving abilities, but also stimulate their creativity and innovative thinking. By improving the practical connections of teaching and providing more practical cases, students develop their abilities to solve professional problems and apply what they have learnt in real-life situations.

In project-based learning, students take the initiative, become active participants in the planning, execution and evaluation of a project, thereby increasing their ability to learn independently and self-manage. In addition, project-based learning helps students connect with the realities of graphic design. By improving the practical connections of teaching and providing more practical cases, students are able to apply what they learn in real-life situations and develop their abilities to solve professional problems in the future. Thus, project-based learning is a dynamic and effective teaching method that comprehensively develops students' personal qualities and abilities and lays a solid foundation for their further education and career development.

At the same time, the expansion of the content of academic disciplines is made possible by the use of digital technologies by the teacher to search for educational resources on the Internet. This, in turn, helps the teacher to share learning resources on the basis of Internet channels, to create a network learning platform so that students can download relevant learning resources. In addition, teachers can offer students the opportunity to get acquainted with the practice of teaching their own professional courses, employment trends, and other relevant information on online platforms to broaden the students' horizons and abilities in graphic design.

In addition to traditional teaching methods, the introduction of innovative methods in the educational process of students is aimed at developing their design skills through practical work and project practice; practice-oriented teaching-integrated connections, where students can apply what they have learned in real-life situations to solve problems.

In order to adapt students to the new learning objectives, teachers are comprehensively applying more innovative teaching methods, such as the case method and group teaching. In solving cases, classic design works and works that have won awards in important design competitions at home and abroad are mainly taken as objects of analysis, and the basic knowledge of the course is used as the basis of analysis to help students master the methods of analysing works, evaluating them and researching them. Students have the opportunity to reflect on the strengths and weaknesses, styles and types of cases, using their existing knowledge to improve their ability to analyse work and promote design thinking. In group learning, students usually complete a design project in the form of group work, and there are usually 5~6 students in the group. The division of labour among group members includes several important sections, such as labour market research, new product planning, packaging design, etc. Project implementation allows you to effectively apply professional knowledge and teamwork skills.

In the educational process, theoretical methods (mental maps) of teaching are used to form professional competences in future graphic design specialists. This method is used to establish a logical connection between topics, where students can logically, three-dimensionally and structurally organise disparate knowledge from the course using a mind map.

Conclusions. With the constant development of the digital age, graphic design education and its tools are constantly evolving and

innovating. This process is greatly influenced by the adjustment of the curriculum system and innovative methods of teaching graphic design, such as project-based learning, diversified learning, and multidimensional assessment methods, which can meet student demand and improve their learning effect.

A promising area of our research will be to reveal the peculiarities of training graphic design specialists using virtual reality technologies in the educational process of higher education institutions.

LITERATURE

- Örnekoğlu-Selçuk, M., Emmanouil, M., Hasirci, D., Grizioti, M., & Van Langenhove, L. (2024). A systematic literature review on co-design education and preparing future designers for their role in co-design. *CoDesign*, 20(2), 351–366. DOI: <https://doi.org/10.1080/15710882.2023.2242840>
- Al Hashimi, S., Al Muwali, A., Zaki, Y., & Mahdi, N. (2019). The Effectiveness of Social Media and Multimedia-Based Pedagogy in Enhancing Creativity among Art, Design, and Digital Media Students. *International Journal of Emerging Technologies in Learning (iJET)*, 14(21), 176–190. URL: <https://www.learntechlib.org/p/217207/>
- Budnyk, A., Shandrenko, O., Kyselova, K., Shvets, I., Podvolotska, O., & Arefiev, V. (2023). Aspects of the formation of future designers' professional competencies. *AD ALTA: Journal of Interdisciplinary Research*, 23, 52-59. URL: https://www.magnanimitas.cz/ADALTA/110222/papers/A_09.pdf?utm_source=chatgpt.com
- Kolosnichenko, M., Kolisnyk, O., Gula, Y., Dubrivna, A., & Nikolayeva, T. (2022). Graphic design as an indicator of social transformations. *Revista de la Universidad del Zulia*, 13(38), 893-915. DOI: <http://doi.org/10.46925/rdluz.38.47>
- Maksymchuk, A., Shvets, O., Shtainer, T., Petrova, I., Kravchenko, N., & Abramova, O. (2024). Developing art and graphic skills among future designers: an integrative principle and a methodical model. *Revista Românească pentru Educație Multidimensională*, 16(2), 105–117. DOI: <https://doi.org/10.18662/rrem/16.2/848>
- Ramli, H., Ibrahim, N., Prasetyaningrum, P. T., & Saedon, M. A. M. (2024). Graphic Design and Education: A Systematic Review on The Evolution, Diverse Aspects, Innovations in Teaching Methods, and Interconnected Changes in Design. *Journal of ICT in Education*, 11(2), 42–54. DOI: <https://doi.org/10.37134/jictie.vol11.2.4.2024>
- Ametordzi, S. & Olalere, F. (2024). The effect of digital technology on graphic design ideation output. *IDA: International Design and Art Journal*, 6(1), 144–156. URL: <https://www.idajournal.com/index.php/ida/article/v>
- Sudhindra, S. T., & Blessing, L. T. (2021). A framework for design competency assessment. *Proceedings of the Design Society*, 1, 91–100. DOI: <https://doi.org/10.1017/pds.2021.10>
- Sumantri, M. S., Gandana, G., Supriatna, A. R., Iasha, V., & Setiawan, B. (2022). Maker-centered project-based learning: The effort to improve skills of graphic design and student's learning liveliness. *Journal of Educational and Social Research*, 12(3), 191–200. DOI: <https://doi.org/10.36941/jesr-2022-0078>

АНОТАЦІЯ

Лі Їда. *Методи та засоби формування професійної компетентності майбутніх фахівців графічного дизайну.*

У статті актуалізовано проблему формування професійної компетентності майбутніх фахівців графічного дизайну, що змінюється за стрімкого розвитку цифрової епохи. Встановлено, що професійна компетентність включає традиційні навички (малювання, дизайнерську майстерність), ефективні цифрові інструменти, спільне проектування та миследіяльність. Доведено, що формування у закладах вищої освіти професійної компетентності є керованим процесом, який стимулює навчальну мотивацію та дотримання освітнього стандарту. Зазначено, що активне використання викладачами методів та засобів навчання формує професійну компетентність майбутніх фахівців графічного дизайну, підсилює підготовку творчо-інноваційного та цифрового мислення, передбачає інтегрування цифрових технологій у фахові дисципліни за всебічного використання мережевих інформаційно-комунікаційних технологій.

До дієвих інноваційних методів навчання нами віднесено: метод короткого відео, диференційований метод, проектний метод, кейс-метод, метод групового викладання, теоретичні методи (ментальні карти), які розвивають особистісні якості та здібності студентів й сприяють подальшому навчанню, вмінню працювати в команді і майбутньому кар'єрному розвитку. Схарактеризовано засобове забезпечення навчальних дисциплін, що включає Інтернет-канали, мережеві навчальні Інтернет-платформи. Зроблено висновок: на формування професійної компетентності у фахівців графічного дизайну чинять вплив розвиток цифрової епохи та уміле використання у межах цього впливу скорегованих навчальних планів, новаційних методів навчання та його засобового забезпечення.

Ключові слова: *підготовка фахівців графічного дизайну, професійна компетентність, вища освіта, методи та засоби формування професійної компетентності.*