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RESEARCH OF METHODOLOGICAL APPROACHES IN IMPROVING THE SUCCESS OF STUDYING GRAPHIC DISCIPLINES BY STUDENTS OF JUNIOR COURSES

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Abstract. The most important task of modern education in higher education institutions (HEIs) is to create conditions conducive to the training of a qualified specialist ready for professional activity. The list of such requirements is growing every year. Graphic skills are an important component of the creative professionalism of an architect, designer or artist. The specific tasks of teaching a student of a creative specialty necessitate mastering hand graphics, which contributes to the development of thinking, creative and practical skills, understanding the specifics of graphic work, etc. All the variety of graphic techniques is the basis of methodological approaches on which the technology of building any images is based, which emphasizes the relevance of research in this area. Graphic education practically consists of training a student in related disciplines, such as descriptive geometry, image geometry, font art, architectural graphics, composition, drawing and painting, etc. Graphic disciplines in general are one of the most effective ways to form and improve creative skills and the quality of education in higher education, including the need to comprehensively develop and improve one's individual level of graphic culture, which will allow for a significant expansion of the scope of practical activities in the future. The article deals with the issue of systematization of methodological approaches to improve academic performance in the study of graphic disciplines by first- and second-year students. It is emphasized that in modern conditions, an important stage in the preparation of applicants for studying in creative specialties is pre-university graphic training, since some tasks have a logical continuation in the educational process of students. It is emphasized that the solution to the problem of forming the creative abilities of future architects, designers, and artists depends on individual motivation and interest in professional graphic education. The work used theoretical and empirical research methods: study of teaching experience, analysis of literature and scientific research, comparative analysis of curricula in related disciplines, observation of the process of working on students' educational assignments, method of expert assessments.

Keywords: graphic methodical techniques, graphic disciplines, academic performance, junior year students.

Introduction. The professionalism of a future architect, designer or artist is determined by their theoretical and practical skills, which they develop during their studies with a conscious desire to increase their creative potential, which includes, among other things, the ability to represent and analyze any object and extrapolate it in reality. At the present stage, the presence of graphic culture is necessary for a person, because there is a large amount of sign, symbolic, schematic and other types of graphic information in any field. As you know, drawing is the international language of architects, designers and artists. Working with flat images of spatial objects requires students to develop spatial thinking already in the first year of study. In this study, detailed attention is paid to

the review and analysis of existing methodological approaches to teaching important traditional graphic disciplines and trends in their improvement.

Statement of the objective. The solid consolidation in the practical work and consciousness of students will be more active and productive if we persistently carry out pedagogical orientation of students and their motivation for deep mastering of methodological principles of work on drawings, which is the purpose of this study.

Analysis of the recent research and publications. The state of knowledge of the problem is characterized by the development of different methods of teaching graphic disciplines [1, 103-113], [2, 38-42], [3], [6, 149-153], [8, 122-126], [9, 60-68]. The following works are devoted to outlining the basics of content, scope and methodological approaches in these disciplines for students of creative specialties [4, 101], [5, 152-160], [7, 354-360], [10, 12-22], [11, 201], [12].

Main material and results. The specific tasks of teaching the students of creative specialties determine, first of all, the need to master hand drawing. Graphic education practically consists of training students in related disciplines, such as descriptive geometry, image geometry, font art, architectural graphics, composition, drawing and painting, etc. Graphic disciplines in general are one of the most effective ways to form and improve the creative skills of an applicant, which will significantly expand the scope of his or her practical activities in the future. Our study is related to the generalization of the results of the experience of teaching graphic disciplines at the Architectural and Art Institute of the Odesa State Academy of Civil Engineering and Architecture. The paper uses theoretical and empirical research methods: study of pedagogical experience, analysis of literature and scientific research, comparative analysis of curricula in related disciplines, diagnostics of graphic works of students majoring in 191 «Architecture and Urban Planning», 022 «Graphic Design», 023 «Fine Arts», as well as graphic tasks of pre-university students, observation of the process of students' work on educational tasks, the method of expert assessments, etc.

It should be emphasized that pre-university graphic training is an important stage in preparing applicants for studying in creative specialties, as some tasks have a logical continuation in the students' educational process. In our opinion, one of the most urgent tasks in the system of pre-university graphic education is to improve the ability to use drawing tools, develop spatial thinking, increase motivation to be interested in the future profession and to be independent in learning, etc. Students of pre-university training are mainly pupils of the 10th and 11th grades of secondary schools and lyceums. Today, the subjects of Painting (Drawing) and Drawing are not taught in schools, so in order to more successfully master the basics of graphic competencies, students need to have direct contact with teachers and perform graphic exercises and test tasks according to the relevant curricula of these subjects. As a rule, attendance at practical classes held according to the schedule of preparatory courses is quite high.

The authors have conducted a comparative analysis of the results of the current and final control of students' knowledge over the past year. The sample of students participating in the study is 63 students. Throughout the entire period of study, the authors performed a planned assessment of the level of knowledge and graphic skills acquired by calculation and graphic works in «Painting (Drawing)», (Table 1) and control works in «Drawing», (Table 2).

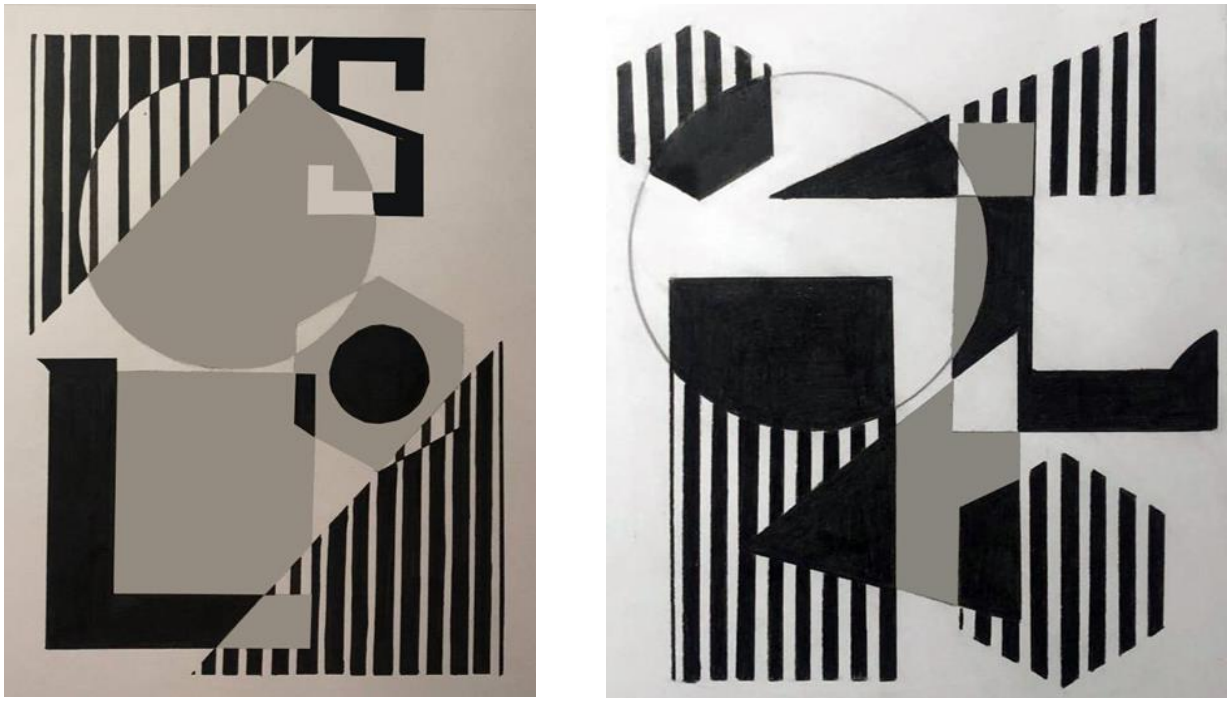
Drw. 1 shows examples of educational exercises for students who were trained in the field of «Graphic Design» on the topic «Letter Composition». Drw. 2 shows examples of educational exercises for students who were trained in the field of «Architecture».

Table 1. The results of the study of the success of students in the discipline «Painting (Drawing)»

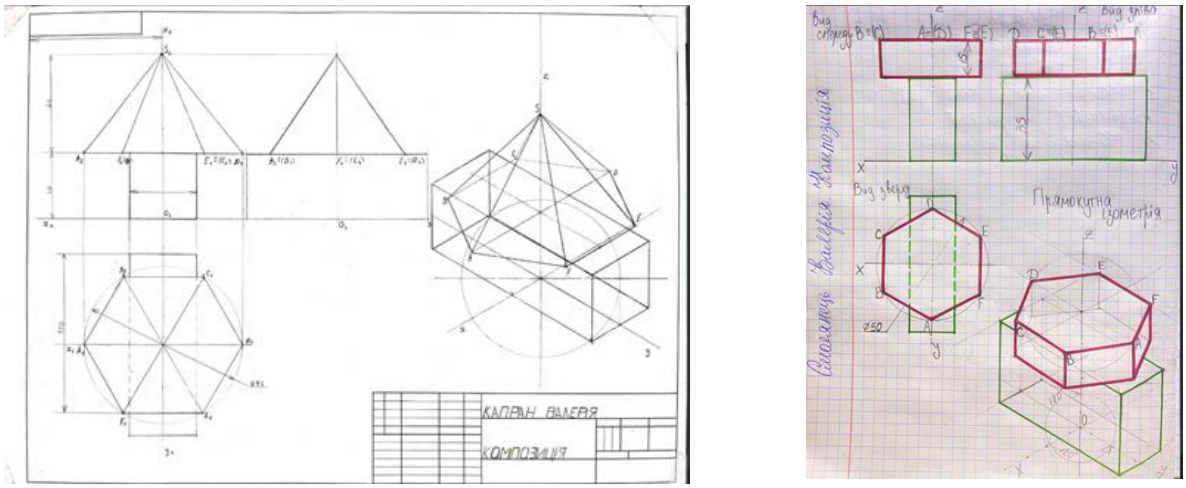
No. of groups	**Number of students**	CW №1	CW №2	CW №3	**Final grade**
1	23	7.0	8.0	9.5	9.5
2	21	6.5	8.0	8.5	9.0
3	18	6.0	7.0	8.0	8.5

Table 2. The results of the study of the success of students in the discipline «Drawing»

No. of groups	Number of students	CW №1	CW №2	CW №3	Final grade
1	23	6.5	8.5	9.5	10.0
2	21	6.0	8.0	9.0	9.5
3	18	6.0	8.0	9.0	9.0
Notes: 1. Pupils in group 3 studied for four months 2.The generalized average score of the controlling current work (CW) was calculated on a twelve-point scale.					



Drw. 1. Examples of educational exercises on the topic «Composition of letters»



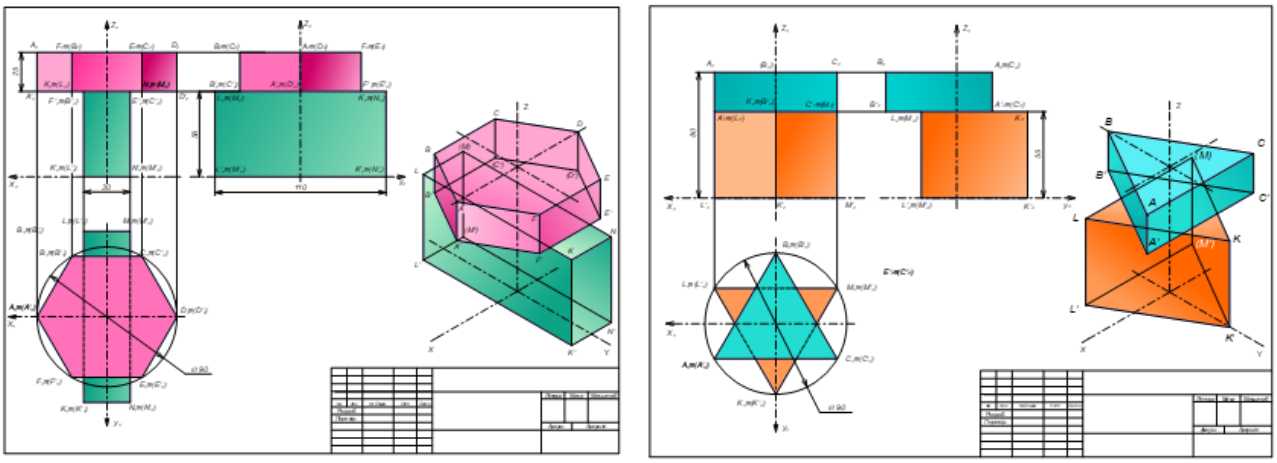
Drw. 2. Examples of educational exercises from «Drawing»

At each practical session, the teachers constantly paid attention to the quality of graphic works, because this will contribute to high-quality results of creative exams and admission to budget education. As our experience shows, almost 90% of budget places are occupied by students who have completed preparatory courses.

The results shown in Tables 1 and 2 above can be emphasized that it is difficult for students to clearly understand their assignments, and even the sub-scores show a high level of preparation,

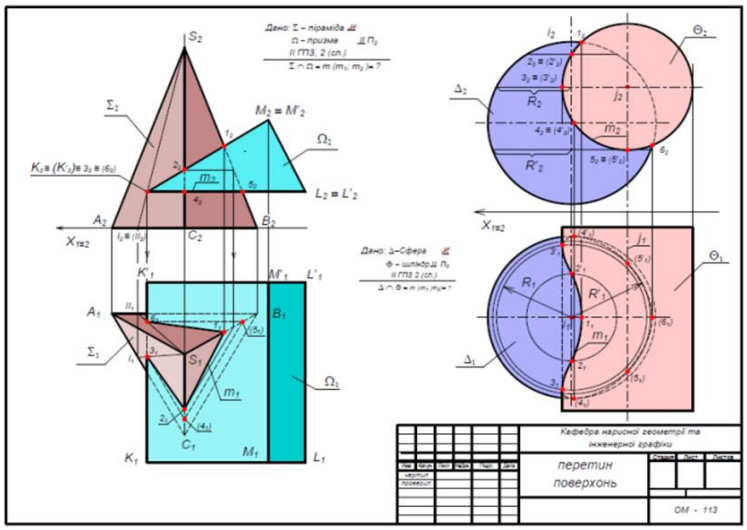
especially for motivated students. In the process of professional training of students, an integral component is scientific research work, which is organically inherent in the educational and creative activity of the students. The application of scientific research activity is determined by the problem of mastering the culture of scientific research, as well as scientific and practical skills. Let's emphasize, for example, that Descriptive geometry is a basic discipline in architecture, design and art. This is a unique tool for studying the characteristics and features of spatial objects and space travel in general. During training, students are given examples of solving individual problems with the help of visual images, algorithms for solving typical problems, etc.

Drw. 3 shows examples of visual images using the AutoCAD computer graphics program, made as part of an individual task for research work.



Drw. 3. Examples of building a visual image of a composition of two prisms using the computer graphics program AutoCAD

Drw. 4 shows an example of a classic sketch geometry task: to construct projections of the line of mutual intersection of surfaces.



Drw. 4. Mutual intersection of two polyhedral surfaces and two surfaces of rotation

Conclusions. The education system in higher education is a multifaceted process consisting of a number of interrelated elements. Among them, an important place is occupied by the control of knowledge, skills, abilities and the organization of feedback as a means of managing the educational process. In conclusion, we emphasize that the graphic training of future specialists in the system of higher education is based on such components as motivational-targeted, technological,

effective, which contribute to the development of the individual in a creative direction, which in turn determines creativety potential. Basic knowledge acquired by students will be solid if the learning process is creative and arouses interest among students.The results of the research were tested in the educational process, which provides for the improvement and development of this topic in the future

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ДОСЛІДЖЕННЯ МЕТОДОЛОГІЧНИХ ПІДХОДІВ У ПІДВИЩЕННІ УСПІШНОСТІ ВИВЧЕННЯ ГРАФІЧНИХ ДИСЦИПЛІН СТУДЕНТАМИ МОЛОДШИХ КУРСІВ

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Одеська державна академія будівництва та архітектури

Анотація. Найголовнішим завданням сучасної освіти у закладах вищої освіти (ЗВО) є формування умов, які допомагають підготовці кваліфікованого фахівця, готового до професійної діяльності. З кожним роком список таких вимог зростає. Графічна майстерність – важлива складова творчого професіоналізму митця. Специфічні задачі навчання здобувача творчої спеціальності зумовлюють необхідність оволодіння ручною графікою, що сприяє розвитку мислення, творчих та практичних навичок, розумінню специфіки графічної праці тощо. Все розмаїття графічних технік є основою методологічних підходів, на яких базується технологія побудови будь-яких зображень, що підкреслює актуальність досліджень у цій галузі. Графічна освіта практично складається з підготовки студента з суміжних дисциплін, таких як нарисна геометрія, геометрія зображень, мистецтво шрифту, архітектурна графіка, композиція, рисунок і живопис тощо. Графічні дисципліни загалом є одним із найефективніших способів формування та вдосконалення творчих навичок та якості освіти у вищій школі, зокрема, з огляду на необхідність всебічного розвитку та підвищення індивідуального рівня графічної культури, що дозволить значно розширити сферу практичної діяльності в майбутньому. У статті розглядається питання систематизації методологічних підходів для підвищення успішності при вивченні графічних дисциплін студентами першого та другого курсів. Звернута увага на те, що в сучасних умовах важливим етапом підготовки абітурієнтів до навчання на творчих спеціальностях є довузівська графічна підготовка, тому що деякі завдання мають логічне продовження у навчальному процесі студентів. Наголошено на тому, що розв’язання проблеми формування творчих здібностей майбутніх архітекторів, дизайнерів, художників залежить від індивідуальної мотивації та зацікавленості в професійній графічній освіті. У роботі використовуються теоретичні та емпіричні методи дослідження: вивчення педагогічного досвіду, аналіз літератури та наукових досліджень, порівняльний аналіз навчальних програм із суміжних дисциплін, спостереження за процесом роботи студентів над виконанням навчальних завдань, метод експертних оцінок.

Ключові слова: методологічні підходи, графічні дисципліни, успішність, студенти молодших курсів.