Nataliia Paziura, Kyiv
ORCID: 0000-0003-1234-7610

THE INFLUENCE OF EDUCATIONAL ENVIRONMENT ON THE DEVELOPMENT OF FUTURE DESIGNERS' CREATIVITY

This scientific article is aimed at studying the problem of fostering creativity in future designers in the context of labour market requirements and taking into account the latest trends in design. The analysis of modern approaches to the educational process in the field of design at the institutional level and the compliance of educational services with the needs of the labor market was carried out. It was found that the creative educational environment of the educational institution best contributes to the development of creativity in future designers. The determining factors of the educational environment are revealed. It has been proven that educating students in a creative educational environment affects their creativity and further motivation for success. A conclusion was made about the need to create a creative and innovative educational environment in educational institutions.

Keywords: design education; future designers; educational environment; creativity; art; educational institutions.

Formulation of the problem. The study of the latest trends in design education indicates the need to adjust approaches to the educational process in the context of widening globalization trends, the development of digital technologies, and the growing role of the market economy. The specified processes require modernization of the content of education and up-to-date practice of providing formal and informal educational services. Respectively, it is especially important to encourage students to develop their abilities to think creatively in the conditions of the knowledge society. According to the economic concept of the knowledge society, the main focus of production in such a society is shifting to the field of knowledge. Therefore, production becomes a specific creative process of knowledge production, with an emphasis on both creativity and innovation. In such conditions, universities should respond to the knowledge society's need for a greater number of creative graduates, mainly by improving educational policies and strategies for learning and evaluating academic achievements, developing appropriate educational programs aimed at developing creativity (Laurillard, 2002, p. 180).

For design education, as well as any art education, social and economic changes in the society actualize the importance of teaching design students creativity and creative thinking skills, since the designer's professional activity involves manufacturing new and original products. Such qualities as the ability to think creatively, the readiness for rapid learning and self-realization in various areas of design activity, the ability to focus on new trends, process a large flow of diverse information, analyze and synthesize it for further use in work can be formed only in special educational conditions.

Analysis of recent research and publications. The results of the study of scientific researches indicate the increasing interest of scientists in the problem of education of students' creativity. Scientists prove the expediency of considering creative independence and creativity as a leading factor in improving the quality of professional training of designers (Rosensson, 2003, p. 96). Researchers believe that fostering creative independence among designers requires the need for them to obtain the most up-to-date knowledge, which needs modernization of the ways of obtaining it and the possibility of applying it in the conditions of modern production. The importance of cultivating a personal vision of the proposed problem, the ability to improvise and focus on self-expression is emphasized.

The issue of conditions that contribute to the teaching of creativity among students in higher educational institutions was considered by H. Georgiou, A. Turney, E. Matruglio, P. Jones, P. Gardiner, C. Edwards-Groves (Georgiou et al, 2020; Ekvall & Ryhammar, 1999). S. Hunter, K. Bedell, M. Mumford, E. Esch, L. Wei, F. Chiang, pay attention to the relationship between the organizational climate and the creativity of employees in various organization (Hunter, Bedell & Mumford, 2007; Esch, Wei & Chiang, 2018). Particular interest for our research are works of P. Xiaofu, Q. Qiwen, A. Harris, L. De Bruin, (Xiaofu & Qiwen, 2007; Harris, & De Bruin, 2018), which are devoted to the study of factors affecting the education of creativity in students. Conditions of establishing a creative educational environment in educational institutions and the role of the teacher in this process were investigated by K. Soh, M. Morais, I. Azevedo, M. Erez, R. Nouri (Soh, 2017; Morais & Azevedo, 2011; Erez & Nouri, 2010).

The iam of the article is to study the influence of the creative educational environment of educational institutions on the teaching of future designers creativity, and to identify the defining characteristics of such an environment.

In accordance with the set goal and objectives of this research, the following **research methods** were used: the methods of *system-structural analysis* and *theoretical generalization* made it possible to formulate the principles of a creative educational environment, to draw conclusions and determine the prospects for the implementation of research results in the creation of an appropriate educational environment in the field of design education; the *content-comparative method* was used to identify the reliability of information based on a comparison of scientific articles and works on the researched problem.

Presenting main material. The need to develop art and creativity of design students is confirmed by the requirements of employers, from the point of view of which, a designer must have creative potential, a flexible approach to work, be prepared and capable of self-realization when solving working tasks.

Scientists define creativity as "imaginative processes with results that are original and valuable." Originality means not only creating something new, but also combining old elements in a new composition or applying old ideas to new contexts, in order to solve the problems of a certain area and add new knowledge to professional and artistic practices. Moreover, creative people "are more inclined to think about the topic indefinitely, they "borrow with pleasure" important concepts from fields of research different from their own (Harris & De Bruin, 2018, p. 220).

The most common requirement of recruitment agencies for candidates for these jobs is creative thinking, a creative approach to projects or assigned tasks. Employers understand that designers must be responsible for the project, and this requires creative independence. It is the designer who must be able to create an aesthetically functional, economical and at the same time original product. Thus, the demands of employers and consumers determine the need for changes in professional training, and this requires the search for such an educational system or educational environment that promotes the creative independence of future designers (Rogers, 2011, p. 58).

An important feature of design is the integration of organizational-managerial, information-technological and artistic-

design activities aimed at creating an aesthetic, original, convenient and at the same time practical environment for human life. The designers' artistic independence and creativity prompt him to use the necessary methods and techniques of design, allow improvisation in the course of solving project tasks.

Ukrainian scientists note the following shortcomings of Ukrainian design education:

1) a small number of specialties and their excessive versatility;

2) lack of equipment for specialized training;

3) lack of connection between domestic design education and the realities of life;

4) inconsistency with modern professions of domestic and international labour markets;

5) distortion of the gender component of design education;

6) use of outdated methods and techniques in the learning process (Дяченко, 2020, p. 177). As you can see, the list of shortcomings does not mention the issue of creating the necessary conditions for fostering creativity and creative independence of future designers.

As we live in the era of the knowledge society, creativity is seen as crucial to a company's competitiveness, its effective performance, and creative organizations will be distinguished from others by their success (Hunter, Bedell & Mumford, 2007, p. 70). Creativity is a necessary feature for the survival of the organization. Several authors (Erez & Nouri, 2010, p. 353) believe that organizational creativity should be analyzed at different levels, such as internal (individual), inter-subject (group), collective (organizational). Thus, the individual characteristics of employees are one of the factors that shape organizational creativity and include cognitive skills/styles, personality, inner motivation, and knowledge.

In addition organizational creativity also needs additional study. The concept of organizational creativity considers creativity as a phenomenon that affects the individual and his state, along with environmental factors. This concept is also considered in several social sciences such as sociology, psychology, etc (Esch, Wei & Chiang, 2018, p. 1685).

L. Cummings noted several defining features of creative organization (Cummings, 1965, p. 222). These include the absence of an excessively imposing attitude to human resources, a flexible structure, open communication channels, efforts to institutionalize the

organizational system of rewards, etc. Scientists have conducted research at various levels of educational institutions, including primary and higher education, and have also proven the correlation between the educational environment and organizational creativity. For example, P. Xiaofu and K. Qiwen came to the conclusion that educating students in a creative educational environment in primary schools in China influenced their creativity and subsequent motivation for success, which leads to the conclusion of the need to introduce an open, tolerant and innovative educational environment in all educational institutions (Xiaofu & Qiwen, 2007, p. 66). Similarly, J. Ekvall and L. Ryhammar include communication technologies and the educational environment as important factors for the istablishment of a creative educational institution, which they called the predominant influence on the education of creativity in universities (Ekvall & Ryhammar, 1999, p. 305).

In our research, the creative educational environment of educational institutions is considered as an environment in which there is democracy and dedication to the institution, dedication of teachers to their work, constant interaction of the management of the institution and subordinates, all kinds of support from teachers to the students' attempts to achieve success and improvement of their academic outcomes.

Scientists say that if young people are involved in the activities they like, the foundations for the development of their creativity will appear. That is why teachers should create special conditions for fostering these qualities in their students, and the entire pedagogical process should be aimed at stimulating the imagination of students. Teachers agree with this, the vast majority of whom support the idea that creativity should be developed in the classroom and in the audience. In their opinion, for this purpose, such teachers emphasize the development of independent learning skills, treat students seriously, promote their self-esteem, reward courage, etc. (Soh, 2017, p. 60).

Teaching creativity requires the introduction of special educational policies, approaches and practices to support creativity in educational institutions (Harris & De Bruin, 2018, p. 220). Research should be conducted together with the study of the influence of the educational environment on the students' creativity and the factors that improve or hinder the fostering of creativity in institutions,

because teachers and the administration of an educational institution should be creative and establish an environment that can develop the creativity of students (Morais & Azevedo, 2011, p. 333).

So, taking into account that organizational creativity is the result of personal traits of individuals in the organization and the interaction between certain organizational units, we can conclude that there is a direct relationship between the educational environment and creativity. Previous studies have found a direct relationship between work results and employees' creativity, their attitudes, motivation and psychological well-being (Erez & Nouri, 2010, p. 368). An educational environment conducive to creativity affects the effectiveness of the employees in a company and the development of students' creative independence (Ekvall & Ryhammar, 1999, p. 305).

The educational environment affects both individual creativity and group creativity. Aspects of the educational environment that influenced individual creativity were teachers' dedication to their work and institution, democratic principles of conflict resolution. Institutions with motivated members who fulfil their duties conscientiously, are willing to support others, discuss their ideas, respect other people's opinions, support each other, and do not create conflicts are more creative. Thus, the educational environment includes such aspects as the positively directed emotional participation of members of the institution in organizational activities and the achievement of its goals, freedom of behavior in proposing new ideas, emotional safety in organizational relations, the availability of time for the development of new ideas, tolerance for new ideas, etc. (Morais & Azevedo, 2011, p. 335).

Taking into account this information, we can assume that if a democratic atmosphere prevails in an educational institution, and teachers make efforts to support it, this has a positive effect on the individual creativity of all members of the educational process. Thus, the development of a democratic educational environment, respect for the individual characteristics and mutual understanding between all members of educational establishment, their dedication to work, their desire to improve the students' success, are factors that contribute to the development of creativity of students, affect the improvement of individual creativity of teachers.

In addition, the issue of fostering the creativity of students - future designers cannot be considered without an analysis of

educational and methodological support of the educational process, which would meet the requirements of the market and be consistent with a creative educational environment. Curriculum of design education should be built in such a way as to take into account all elements of modern approaches to the creation of an original product, expressing the freedom, creativity and imagination of the designer, since the level of professionalism of the designer depends on his level of creativity and ability to use innovative approaches in design when creating products.

Y. Rogers (Rogers, 2011, p. 60), researching the specific characteristics of designers' training, points to special methods of learning that the students themselves consider creative, and therefore, interesting and useful for them. This includes role plays, debates and presentations. Some fairly traditional forms of learning are also nominated as creative, including dialogic learning with discussions that focus on students' current understanding or beliefs. Individual assignments, encouragement, examples, and feedback are helpful in this regard.

Scientists H. Georgiou, A. Turney, E. Matruglio, P. Jones, P. Gardiner, C. Edwards-Groves (Georgiou, et al, 2022, p. 160) identify several teaching methods to promote creativity: heuristic strategies, i.e. problem-based learning; game learning, which involves solving complex problems; practical training; group work. K. Soh emphasizes the importance of a positive attitude of the teacher and favorable factors, such as trusting relationships between the teacher and students, which also contribute to the establishment of a creative learning environment. The use of special pedagogical techniques for the development of creative thinking during the study of professional disciplines lays the foundation for future creative work of students (Soh, 2017, p. 60). There are several such techniques for the development of creative thinking, such as the "six thinking hats" technique, which can be used to stimulate creativity among students. It has been proven that these forms, methods and techniques stimulate the creative abilities of students both during their studies and in their further work (Rogers, 2011, p. 61).

Besides, it is important to establish connections between design disciplines and other disciplines, which would contribute to the development of design thinking and the ability to conduct creative business.

Conclusions. The importance of fostering creativity and creative thinking skills in design students is determined by social and economic changes in society. Only the designer's creative independence and creativity allows improvisation in the course of solving project tasks during the design of new and original products. The conducted study showed that teaching students in a creative educational environment has a positive effect on the fostering of their creativity and further motivation for success, which leads to the conclusion of the need to introduce an open, tolerant and innovative educational environment in design education institutions.

An educational environment conducive to creativity has a positive effect on the effectiveness of all members of the educational process and the development of students' creative independence. Its defining features are democratic relations between all members of the educational process and the management of the educational institution, respect for their individual characteristics, mutual understanding between them, dedication to work, and the desire to improve the students' academic achievements. The analysis of forms and methods of training that would meet the requirements of the labor market for designers' training proved the need to use special methods to promote the creativity of future specialists (heuristic strategies, problem-based learning, game-based learning, group work to solve complex problems, etc.).

We see **the prospects for further research of the problem** raised by us in the study of the development of domestic design education through the optimal combination of the resource of academic disciplines with innovative means and technologies.

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Наталія Пазюра

ВПЛИВ ОСВІТНЬОГО СЕРЕДОВИЩА НАВЧАЛЬНОГО ЗАКЛАДУ НА РОЗВИТОК КРЕАТИВНОСТІ МАЙБУТНІХ ДИЗАЙНЕРІВ

Наукова стаття спрямована на дослідження проблеми розвитку креативності в майбутніх дизайнерів у контексті вимог ринку та з урахуванням останніх тенденцій мистецтва дизайну. Проаналізовано сучасні підходи до освітнього процесу в галузі дизайну, виявлено визначальні фактори креативного освітнього середовища навчального закладу. Акцентується на тому, що вчителі та адміністрація мають бути творчими та дбати про середовище, яке стимулює розвиток креативності учнів. Визначальними рисами креативного освітнього середовища є: демократичні стосунки між усіма учасниками навчального процесу та керівництвом закладу, повага до індивідуальності кожної особистості, взаєморозуміння між працівниками, відданість справі, прагнення підвищити успішність учнів. Проведений аналіз дидактичних форм і методів засвідчив необхідність застосування евристичних стратегій, проблемного навчання, ігрових, проективних, інтерактивних технологій тощо, а також сучасних педагогічних прийомів (до прикладу, прийом «шість капелюхів»), які стимулюють креативність майбутніх дизайнерів.

Ключові слова: дизайн-освіта; майбутні дизайнери; освітнє середовище; креативність; мистецтво; навчальні заклади.