STUDENT EXPERIENCE OF ONLINE INTERNATIONAL DESIGN STUDIO PARTICIPATION

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ABSTRACT

We argue that students participating in competitive project activities may facilitate development of their skills such as creative thinking, the formation of "vision" and stress resilience. In this paper, we will reflect on students' experiences who participated in the 10 weeklong creative Global Studio project, which was delivered online across five countries. The article describes features of the creative studio project, the tasks and goals that the participating students set for themselves, as well as their motivations. An important place in the structure of our exploration is the identification of the aspects in this creative studio project which students perceived to benefit their learning as well as the difficulties they experienced with the implementation of their projects.

The article reports the results of a student survey and discusses the attitudes of students with different levels of preparation for creative studio projects.

The article highlights the importance of professional projects and project work as an integral part of the educational process of students of creative specialties and notes that competitive projects carried out jointly with students from different countries of the world give a positive experience of combining the educational process.

We conclude that in the modern world, virtually devoid of borders due to the development of technology, competitive project activity is a new educational trajectory that brings out the student's creativity and teaches them to adapt quickly to the changing stressful working conditions.

Keywords: Professional design education, competitive design, online projects, art projects

1 INTRODUCTION

According to Bobryashova and Mosienko [1], Romanovsky [2], Park and Lee [3], today's world, virtually devoid of borders due to proliferation of the communication technologies, provides education with emerging possibilities to form a new way of engaging and thinking in architecture and art education. Chiurea, Philip [4] and An [5], argued that graduates need to develop professional competencies which will allow them to meet the constantly changing expectations at the workplace [6]. The expected skills and requirements are rather high for the graduates in creative industries, including architecture and design. Besides specific technical professional skills, the graduates are expected to have: openness and receptivity to new things, ability to observe, experience in teamwork, and creative thinking [e.g., 7, 8, 9]. What's more, all the constituents of design capabilities are epistemologically and methodologically strongly connected [10].

The development of the above competencies is largely associated with the participation of students in professional creative activities such as problem and project-based learning [11, 12]. Participation of representatives from different countries, different design schools, and directions provides additional learning possibilities [13]. This form of teaching architectural design, which involves solving a specific practical design problem in a team of like-to minded people (students and teachers), contributes to clarify many professional issues and is the optimal form of self-realisation for the students [14].

In this article, we summarise the experience of the third-year students, enrolled in the Design of the Architectural Environment programme at the Peoples' Friendship University of Russia (RUDN University), who voluntarily participated in the 2020 Global Studio project.

2 PROJECT ARRANGEMENTS

The Global Studio has been an annual collaborative programme since 2006. During the 2020 Global Studio, students from these 6 countries: Italy (Suor Orsola Benincasa University, Napoli), China (SUT,

Zebo), Spain (Tecnun, San Sebastian), Brazil (UFRGS, Porto Alegre), Russia (RUDN, Moscow) and Turkey (METU, Ankara), took part in the international cooperative design project.

The distinctiveness of design projects undertaken in the Global Studio lies in the fact that student teams from different international universities are paired to work cooperatively [15]. Altogether 73 students, who were allocated to 22 teams, participated in the 2020 project. Four of the teams were based at the Peoples' Friendship University of Russia (RUDN University). Two of these teams were paired with students from the Universidad de Navarra located north of Spain, the third was paired with the student team from the Universidade Federal do Rio Grande do Sul (UFRGS) which is located in south of Brazil and the fourth team was paired with students from Middle East Technical University (METU) which is located in the capital of Turkey, Ankara.

University	Country	Teams/ Students	Degree(s)	Study Level	Participation mode
Peoples' Friendship University of Russia (RUDN)	Russia	4/14	Design of the Architectural Environment	UG 3rd	Extracurricular activity
Middle East Technical University (METU)	Turkey	9/18	Industrial Design	UG 3rd	Elective course
Suor Orsola Benincasa University (SOBU)	Italy	2/5	Cognitive Ergonomics	Masters	Optional course
Shandong University of Technology (SUT)	China	1/2	Industrial Design	Masters	Extracurricular activity
Tecnun, University of Navarra	Spain	7/21	Industrial Design	UG 4th	Extracurricular activity
Universidade Federal do Rio Grande do Sul (UFRGS)	Brazil	4/12	Visual Design	UG 3rd	Extracurricular activity

Table 1. Participating Universities



Figure 1. Project stages

Each of the student teams simultaneously acted as "clients" (c) who initiated the design task for their paired team, as well as, in the role of "executors-designers" (d) who create design solutions on the instructions of their paired (client) team from another university.

At the initial stage of work (c1, see the Figure 1), the "client" team's first task was to analyse target users to identify their needs. For the team in their roles as the clients, it was necessary for them to find

out what problems exist in the daily life of the selected target audience and what might provide positive solutions. In the 2020 project, the target users were students' grandparents.

The second task for the clients was to collect and process information. At this stage of work, it was important for the client teams to interpret the obtained data and determine the needs of the target audience. The third task was to conduct primary modelling of objects and situations that bring a "joy" to the target audience, by eliminating or mitigating annoying factors. They articulated this in the project briefs which they gave to their paired teams.

The next stage (c2) was the formation of a technical task for the design teams using the clients' project briefs, a description of the functionality and range of application of the designed object. If necessary, indication of the ergonomic or design features of the designed object. The description of the appearance was secondary. The tasks of the clients at this stage include the preparation of materials that would acquaint the "designers" with the peculiarities of the culture and mentality of the customers. In addition, "clients" must approve the proposed design concept (c3), recreate the object in the layout (material and manufacturing technology are not regulated, the choice of execution technique remains with the "client" team) (c5), prepare a script for an advertising campaign for the target audience and conduct it (c6).

Throughout the joint work, the "clients" provided feedback and thus adjusted the work of the "designers." At the final stage, clients' task was to evaluate the work of the "designers" according to certain criteria, such as professionalism, teamwork, the creative potential of the team, the compliance of the designed object with the technical specifications, and the success of the interaction.

The team of "designers," having received the terms of reference in the form of a project brief, must carefully study the material provided by their "clients" (d1-d2). The material explains to the "designers" the cultural and social differences between their country and the country of the "clients" and may include interviews with the target audience, videos, additional information on traditional arts, folk board games, etc. The main task was to find out the needs of the target audience in the context of cultural and social realities; get acquainted with the terms of reference and, if necessary, clarify issues related to the technological part of the project, design, aesthetic appearance or functionality. The work of the designers at this stage (d3) involved the preparation of several fundamentally different primary and general concepts of the object that aimed to meet the terms of reference and solve the assigned tasks; appearance at this stage was deemed secondary. As the experience of participation in the project has shown, often a lack of awareness of the culture of the target audience of consumers complicated the design process. We have observed that generally this resulted in designers taking a wrong direction, and, accordingly, disappointed their clients.

"Client" team selected one or two primary proposed design concepts (c3). Each member of the creative design team offered their idea for solving this object, working out the features of its functioning and aesthetic appearance, complementing the primary concepts (d4). As soon as the customers approved one final concept, joint work on the project was already underway, in which the whole team took part. At this stage (d5), the "designers" had to carefully work out the appearance and ergonomics of the object, the principles of its technical structure, and the process of functioning, to designate its dimensions and prepare drawings, art sketches, and visualisations. The presentation was meant to give a complete picture of the proposed object. The designers supplied the clients, additional instructions for assembling the object using analogy with the instructions for mass-produced items.

In general, the process of joint creativity aimed at achieving the result, considering the peculiarities of a specific culture, gives an understanding of the relevance and practical significance of the Global Studio project. It has been noted that such work develops tolerance to ambiguous decisions and debatable ideas ("tolerance of ambiguity") [16], an important skill for the future design professionals [17].

3 REFLECTIONS

Language practice such as: oral direct communication, blogging, writing briefs, as well as "immersion" in the cultural layer of the customer's team to evoke the necessary emotions through the created object of industrial design in the field of professional activity plays an important role [18].

The participating students highly appreciated the experience gained during the project work. Among the respondents were students of the 3rd year of the "Design of the Architectural Environment" programme at RUDN. Evgenia Solovieva emphasised that "the project made it possible to look at the process of creating a product from different angles: from the side of customers and the side of designers. This helped to understand all the shortcomings in working with clients and make it more effective. This experience will be very useful in the future." Kassai Elizaveta, another 3rd-year student highlighted the ability to build relationships between the "clients" and the "designers" as a positive experience: "The project allowed us to assess our weaknesses and strengths. Thinking through the action plan step by

step, we could learn from our own mistakes." Separately, students appreciated the lectures that were held as part of the project work and were aimed at developing creative potential. Kassai E. stated in her review that: "At the lectures, we examined the variety of graphic design using the example of graphic novels of different genres and analysed the main mistakes. We have mastered such ways of presenting concepts as a mood board, mind map, etc. Listening to lectures in a foreign language was very interesting and useful, albeit unusual at first. I think this experience will be very useful in my further studies in the magistracy."

Another advantage of such cooperative work was the development of the qualities necessary for effective teamwork. Traditional forms of education often do not provide the desired effect in the development of cognitive activity, independence, and initiative. Vlada Klakova stated that: *"The design process allowed us to form into one production team, to understand who is strong in what and to take advantage of each other."*

The Global Studio has revealed that the approaches to design activities differ in different universities. For example, though students from RUDN usually take an active part in project activities, they are not used to writing briefs or making mind maps. Besides, the meanings of some words were understood differently by students from different universities. For example, when the RUDN team used the word "design" they meant a final product in colour, with patterns of ornament, etc. The students from the Universidad de Navarra, Spain limited the meaning of this word to the development of form and functions only.

The cultural differences between the teams were quite a challenge too. Sometimes we faced difficulties not associated with mentality, but because all people have different traits of character. However, in the brief each team tried to clarify the culture-bound issues and the issues of individual perception; attached interviews with the target group; mood boards and videos. If some additional information was needed, e.g., about traditional ornaments, the teams were happy to share it.

It is unfortunate that in some cases the proposed design solutions were based on cultural stereotypes. However, in most cases after the first meeting the confusing situations were clarified and solved, and the design of the product was modified. In general, the Global Studio proved that it was the dialogue between the students from different countries that helped to solve the problems the teams faced due to cultural or personal differences or differences in the curricula.

We would like to emphasise that the creative programme the Global Studio project does not limit the independence and initiative of the participants. Curators (tutors) of student teams from the participating universities do not make edits to the projected object during its development, but can help students with recommendations, submit an idea. Only the ordering (client) team is allowed to evaluate the project and adjust it. It fosters productive collaboration and brings teams closer together. The advantage is also one age category of teams, which allows participants to more freely discuss all emerging issues. The positive aspects of the creative competition allow the participants to enjoy the design process, which contributes to the development of intrinsic motivation during the creative production process [5].

3.1 Shortcomings

Along with the advantages described above, extracurricular project work has its difficulties. Each team, despite the officially agreed timeframes for completing the work, demonstrated a certain archetype of thinking, interest, speed, perseverance, and perseverance in solving problems. This has been partly influenced by mentality and culture, style and rhythm of life, which is mostly a human factor. It is also worth noting that Russian and foreign design schools are characterised by different approaches to education [2]. In addition, the language barrier aggravated the situation: sometimes the interaction between teams was difficult, as for example, it was difficult to accurately understand the task, which may suppress the motivation of students.

3.2 Comparison

If we compare our experience of participating in the Global Studio with the assumptions made when initiating the Global Studio project [18], it can be noted that all the assumptions have been proved. Firstly, modern students are digital natives. It was pretty easy for us to work with the WordPress site we were blogging on. Secondly, from the very beginning we had a feeling of "equal status" in all the matters of collaboration with the students from another country, despite the fact that our educational programmes were not very much alike. During our joint work we got to know each other better but we went on to put forward equal demands to each other and strictly evaluate the result.

Thirdly, all students had equal access to all information as well as online project websites [18]. Although the students had different levels of English proficiency, the use of online translators helped to make all

the teacher-generated and student-generated information as accessible and easy to understand as possible.

3.3 Survey

As were noted above, all participants of the 2020 Global Studio from the RUDN University were senior students, which meant that they had both theoretical and practical training experience as well as initial professional work experience. Assuming that in many respects interest in creative competitions and motivation is connected precisely with the level of training of students, we surveyed first-year and fourth-year students. They were asked to answer several questions: would you like to participate in extracurricular creative programmes? Do you think that participation in such programmes helps in further self-realisation, or does it distract from the educational process? Do you think that participation in extracurricular creative programmes helps in further studies? Below are charts summarising the respondents' responses collected using Google Forms (see Figure 2).

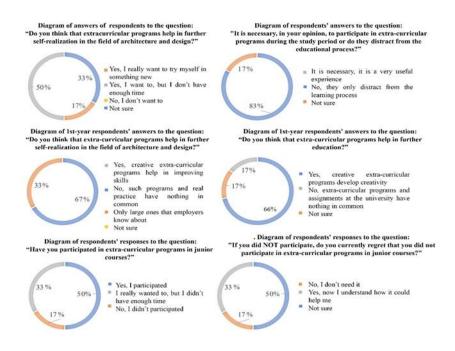


Figure 2. Results of the survey

As can be seen from the diagrams, first-year students, like senior students, understand the uniqueness of the experience that participation in extracurricular project work can give them, but it is often difficult to combine study and creative activity. The respondents noted that extracurricular project activities develop creativity and help in further self-realisation in the field of architecture and design.

We also included in the survey among senior students (year 4 to 5) the questions: did you participate in extracurricular creative programmes in your junior years? If you did not participate, do you regret it? The respondents' answers are summarised in the diagrams in the Figure 2.

According to the data obtained, half of the surveyed senior students did not participate in extracurricular creative projects. Most of them regret the missed opportunity to gain a unique experience that they could get during such an activity.

4 CONCLUSIONS

Summing up, professional design project activities are an important integral part of the educational process for students of creative specialties. Close interaction with people of the same age, but different cultural background, gives a vision of an alternative approach to work, alternative methods of solving problems, and teaches tolerance. A close acquaintance with a different mentality opens new possibilities for creativity. Along with the assessment of his work, the participant of the extracurricular programme could see the work of the others participating in correspondence discussions and expand his creative horizons. It is significant that while preparing for the implementation of the project assignment, the student will certainly study the available developments on the project's topic, which also contributes to the growth of his professional level. At the same time, during project work, psychological stability is formed, which is necessary for everyday work and is not formed in any way in the greenhouse conditions

of academic education. Psychological pressure, creative experiences, and precise timing are integral parts of extracurricular programmes. Overcoming difficulties during project activities fosters stress resistance in students, which many authors consider to be the most important skill that needs to be developed among designers-architects [2, 3, 14]. Students who have received such experience will not "float" at the first failures in real work, which allows them to gain a foothold in the team [5, 17]. Students of the Design of the Architectural Environment programme at the RUDN University were especially interested in international training programmes. Joint projects with educational institutions around the world provide a positive experience in combining the educational process and creative work of students and teachers. Participation in the international online Global Studio project was our first and very successful experience in developing cooperation between the Department of Architecture and leading educational institutions around the world. We hope this pioneering educational design initiative, which is unparalleled in Russia today, will continue in future on a yearly basis.

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