Project Education in Design. Innovations or Traditions?

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Abstract. The importance of the given article results from active new teaching technologies integrating into the educational system in Russia. The necessity for Russia’s education to shift to up-to-date forms is recognized by everybody in the scientific community. Prospects of project scenarios of acquiring knowledge are evident to everybody. Sooner or later, all persons involved, from professors to students, will have to solve these problems, but in practice, the problems are not so complicated as they seemed at the start of the reforms. Newest technologies in modern education and a historical experience of training specialist in architecture and art will make it possible to solve problems of creating scientific teams based on new cooperation principles. The objective of the given article is to focus the interest of colleagues of all areas of knowledge on the theory and practice of project education in leading scientific schools involved in training specialists in architecture, design, and culture. These areas of education possess a rich experience thanks to many generations of architects, designers, and artists working in decorative art, this experience produces amazing results. A new educational space that is being formed nowadays, puts forward a demand for multifunctional specialists, any experience being appreciated here. A method of solving the problem of shifting to project educational technologies in Russia was stated, among others, in the architectural and design education methodology. Being a work-through principle, project technologies concern all the subjects and meet the demands to form of a complete scope of competences of specialists in these aspects. This article propositions can result in a basis for new project education methods elaboration and fundamentally new educational medium formation. In the first place, these methods are directed to the problem to motivate creative search and form imaginative and project thinking. Nature as a source of inspiration, a factor of shape design and style, and actual problems of preserving it, can become a new content of many projects. A new attitude to the educational space as an integral body will support creating an ideal medium for interaction and development of all participants of the educational process on a permanent basis in future. That is a medium, really beautiful and comfortable for scientific and professional development and perfection.

1. Introduction

At present, project technologies in Russia’s contemporary educational space have become an overall trend. The implementation of this new methodology of training specialists is actively underway at all levels; the process is noticeably changing customary forms of education. It is particularly project technologies that let embrace and enable maximal number of competences that are necessary for a future specialist. In many aspects the problems, connected with the adoption of new forms of education, are a continuation of those positive and, no doubt, effective technologies, which are practiced in the world educational community, and produce impressive results. Nevertheless,
transitional period problems are explicit and they need to be interpreted and analyzed until project forms of education become general and obligatory. Working over projects related to specific kinds of activities – economical, industrial, digital, educational, cultural – makes participants of the process investigate specific branches of science and technology, essential for solving project problems. Possibilities of further development of ideas and found solutions are not considered. In the process of working over projects, too little time is allocated for acquiring general and specialized skills, and at this point, a problem of “doers” arises. If it is planned to involve specialists, technologists, and workers possessing an up-to-day qualification then the implementation of this part of the project can require huge efforts and time to arrange this job and to make it effective. Data accessing presents another problem that is far from negligible. Information is growing more available but its quality sometimes perplexes; besides, the process of searching necessary and reliable data can take active Internet users all their free time. Innovation processes often encounter a mere lack of technical facilities, which is the main problem for many educational institutions. All above mentioned “contras” are widely discussed in the educational community for a long time; all “pros” and “contras” are formulated and, perhaps, in the nearest future, solutions will be found. The author of the present article supposes that the most paradoxical problem of the project education is the mastering of project technologies. Many a specialists in project technology education come into classrooms and undertake a task of drilling scientific workers, students, postgraduate students, teachers, and professors in newest methods to master different subjects in no time. Meanwhile, the creators and practical users of these “innovatory” methods – architects, designers, and decorative artists – look at one another with a mute question in their eyes: “Is it really something new, or what have we been doing for all that time?” A rich and successful experience of project education in design and architecture has not been requested.

The importance of adoption of new education principles in Russia is indisputable. These problems are formulated and used in the online education by leading institutions of Russia’s science – the Skolkovo University, the Higher School of Economics, the Far East University, etc. The urgency of reforms in education in Russia is understood by all participants of this most complicated and complex process. Alongside, one should keep in mind that it is impossible to formalize each educational process, especially in the humanities.

2. Materials and methods

At present, project technologies are in the focus of all those involved in the educational reforms in Russia. They have become so commonly used that even junior grade schoolchildren are offered topics for individual projects. Prospects of new methods are promising: task-oriented learning, independent thinking, ability to learn by oneself, self-realization, ability to work in a team, usage of digital technologies, striving to practical value and economical efficiency. The problem of turning to practice-oriented education is objectively urgent; the gap between what is needed in real spheres of practical activities and the knowledge, acquired in educational institutions of all levels, is more than evident. Leading companies’ demand for taking part not only in defining professional competences but also in both working out the curriculum and educational process itself. Taking it into account, it is necessary to systematically re-equip the larger part of the Russian higher schools, integrate latest achievements of digital technologies, and create a digital space of higher schools. Project educational technologies and methods need to be developed and advanced in the first place. It is particular in design and architecture that a richest experience has been accumulated; there are formulated and successfully applied project technologies that are often “invented” from anew today.

“An overall interest in art and its techniques and methods of its motivation probably grows from the fact that a large part of the scientific community understands the value of this experience. Art can become a source of inspiration and the fastest way of realizing new ideas. A strong visual image, the realization of which requires invention and application of a complex of new knowledge and technologies, can become a factor of joining groups of scientists from different spheres. Who is going to be an ideological leader of such a group does not matter. Joint creative work matters here” [3].
It is impossible to ignore businessmen, employers, who criticize the education system for complete absence of relations with contemporary real economy requirements. However, many companies are often out of date, and managers have a poor idea, if at all, of fast changes in different branches of real economy. Besides, the question if businessmen are ready to formulate really large scale and important project tasks, leaving apart current up-to-the-minute demands, has no answer. Higher school science is always in an active search and able to meet challenges of the time. Its experience makes it possible to understand value of ideas and project propositions that can at first sight seem far from reality or even odd (one should bear in mind that the project are proposed by very young people, yesterday’s school students). In his book “Design for the Real World” Victor Joseph Papanek describes such a case. The smart paper dresses that were proposed by American young designers in 1960-s were bitterly criticized for the high price and being non-sensible. V.J. Papanek himself believed that they had no future. However, the idea of paper dresses became a trigger for a start of large and profitable industry producing throwaway clothes for medical and cosmetical use. There are many examples like this one in the design project history.

3. Discussions

The experience of leading figures of project education in architecture, design, and decorative arts is so wide and actual that within the given article it is possible to mention only few of its achievements. The Collected works having the common title “Problems of Design”, the first issue in 1992, and the following ones included “… articles on problems of theory, history, and contemporary project practice of design”. “VKHUTEMAS SPACE: Heritage. Traditions. Innovations.”, “Designer’s Education. History. Theory. Practice.”, “Design: Russian Version”, “Fundamentals of Design Theory”, and a great many textbooks and aids on projecting in different areas of design, which were prepared by leading scientific schools and outstanding specialists in the project education in Russia. These works are particularly task-oriented for training specialists in architecture and design, provided all basic principles, methods, and modes of solving project problems not only formulated but also verified by the practice and authority of these scientific schools.

The project education in Russia always develops together with the world tendencies. During recent decades, beginning from 2000-s, an active exchange of ideas takes place among leading foreign schools and educational centers; the exchange is useful for all the parties. To make it more explicit, architects and designers in Russia are well aware of everything what is going on in the design education abroad as well as our colleagues there always appreciate the level of our specialists.

No use to describe effective project methods scientifically grounded in theory and practice in detail. Firstly, they are thoroughly formulated, tested, and widely applied by educational architecture and design community. Secondly, all the sources are well known and available. It is important in this article to remind the colleagues from other areas of knowledge how effective and flexible project education methods are in training the above mentioned specialists.

The difficulty of the project education lies in a problem statement. Scale, importance, possibility of application of the results in practice, and economic efficiency demand wide and up-to-date level of knowledge from all the participants of the project forms of education. Leaders of creative teams, professors, coachers, and students are to express most urgent contemporary problems and to form the context of our common future.

Another problem is a lack of credit to young designers’ projects. On having received a project task, any student follows a habitual way: he or she investigates sources and analogues, then systematize the acquired data. All the project work technologies are used: work in team method, brainstorming, analogue method, etc. It shows that the project solution is never casual. This is impossible, but it is a rare case that the fact convinces the customer. The latter knows better, he or she has found a solution, and the designers must visualize it. No project technologies can help in such a case. The complex project education becomes phantom. Young designers prefer developing their own ideas and projects, or being engaged in art design; many of them are successful. It is quite enough to look through quickly
growing number of participants in prestigious exhibitions, contests, and forums where students from Russia every time achieve a success and recognition.

4. Results
The result is our long-term cooperation with the largest dual education DNBW University in Germany and the media design college, headed by Professor Markus Rathgeb. Student and professor exchange, traineeship, joint projects, participation in the defense of graduation projects – all these give a chance not only to consider carefully project education forms and methods of our European colleagues but also to get convinced of the unity of approaches to the student education practice.

The most significant difference consists in methods of estimating students’ projects, i.e. the organization of the defense procedure. Our colleagues abroad arrange this as an event of a large scale. The project exposition is set on largest grounds of the city, and almost all the region population takes part in discussions of the projects. The public character of such an action inspires the creative activity of future specialists, and at once, it demands maximal responsibility from the authors and directors of the projects.

Within the Ufa State Petroleum Technological University the students’ projects directed to solve practical problems always find support. The University possesses such a possibility, and students’ projects receive monetary and scientific help, provided real project tasks are worked out. The system of inner and outer grants gives a support to the forecasting projects, the efficiency of which is not so obvious. So, in this aspect the project education in the Ufa State Petroleum Technological University is already enabled in many knowledge areas.

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