

Our Future: Children or Old Age? New Goals of Continuing Architectural Education

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Abstract: The research is aimed at the potential of the professional architectural education and solving one of the important problems of society—creating conditions for maintaining health and social rehabilitation of older people. The experience of universities, public organizations, museums in Europe and North America was analyzed. Six types of strategies of these organizations were identified. They were differing in the degree of development of social and professional communications. The most interested in developing supplementary architecture and art education for older people are Colleges of Arts and Art museums. In the first case, the communication's basis of the Colleges is there interest in the public appreciation of new art works. In the second case, the social missions of the Art museums. At the final stage, the sociological study of the attitude towards these programs among the participants of the Moscow Mayor's Project "Moscow Longevity" had been done. It showed that the most attractive for 3-d age people was the opportunity to visit the Moscow Architectural Institute—an architectural monument and communicate with professors.

Key words: 3-d age education, Moscow Longevity, supplementary architecture education.

1. Introduction

This article is targeted at searching for new lines in the development of the system of continuing education at the Moscow Architectural Institute (State Academy). To achieve this goal, the following tasks were identified:

• illuminating the diversity of approaches and types of architectural education in the world;

• prioritization of development strategies for different types of universities, schools of architecture and continuing education departments;

• evaluation of the possibility of developing continuing education for people of the third (3rd) age at MARCHI.

2. Method and Methodology

A study of the approaches to architectural education in higher education institutions in Europe, North America, Australia and Asia shows that there is a relationship between the type of organization, its development strategy and the areas of activity in general and continuing education. To identify the diversity of approaches and types of the organization of higher architectural education in the world, we refer to the popular ratings of national higher education systems and schools of architecture from THE TIMES, DOMUS, Design Intelligence magazines and the Harry Stephen Center for Architectural Sociology [1-4].

Despite the excesses in estimations, their dependence on public opinion and focus on the English-speaking world, the set of the best schools of architecture is relatively small.

2.1 Comparative Analysis of the Leading Architectural Schools and Other Organizations of Additional Architectural Education Strategies

Let us compare the development strategies of schools of architecture of the multidisciplinary universities of Cambridge (Great Britain), Harvard and UniPen (USA), Universities of Melbourne, Tokyo

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and other principal national universities. Their strategies are based on supporting individual leadership (type 1). The structures of continuing education and the content of the programs they offer are focused on the development of personal abilities of students, teachers and scientists of the university.

Leading technological universities, with schools of architecture and design: Polytechnic of Milan (Italy), Massachusetts Institute of Technology (USA), Delft University of Technology (Netherlands) and others consider it their goal to upgrade education in the society (2nd type of strategies). By efforts of technological universities Open and Distance Education systems that "open doors" to a university for everyone were set up. Advantages of open education are characterized by wide coverage, access to a broad variety of topics and the speed of obtaining new information, regardless of geography, availability of free time, race, gender and age [5].

Artistic fundamentals of architectural creativity are best manifested in the educational methods of the architectural faculties of art colleges such as Cooper Union (New York, USA), Glasgow and Edinburgh College of Art (Great Britain), École nationale supérieure des arts appliqués et des métiers d'art (Paris, France) and other. They preserve the interdisciplinary links between traditional and new plastic arts: painting, sculpture and architecture, as well as performing arts, decorative and applied arts, photography, digital arts. The strategies of art colleges (the 3rd type) are based on the principles of social and interdisciplinary interaction in art. Continuing education in art colleges, along with exhibitions, public discussions, project presentations, competitions, festivals, is a part of a range of measures designed to promote art, its discussion and critical analysis.

The fourth type of strategies and, accordingly, approaches to the development of continuing education, is typical of architectural academies, for example, London School of Architecture and the Moscow Architectural Institute (State Academy). Unlike other architectural schools, in which architecture interacts with technical, art and social faculties, the strategies of architectural academies focus on a monodisciplinary area and improving professional skills of members of the architectural community. Within the framework of the declared objective, we will look for opportunities to unfold intellectual potential through continuing architectural education outside the architectural community.

A similar type of strategy for the development of organizations of continuing architectural education should include programs for the development of national creative unions of architects (the 5th type). Like academies of architecture, unions of architects unite representatives of one professional community and are interested in developing their professional skills. However, architectural unions of almost all countries of the world are engaged in developing architectural education for children. The experience of the Japan Institute of Architects (JIA) shows that the next step in quality improvement of an architectural project is certification of architect bureaus because the final result depends on the work of the entire team. This strategy resulted in integration of the Union of Architects of Japan with the Unified Association of the Builders of Japan and cooperation with leading manufacturers of building materials, the Japan Bar Association, the Housing Policy Council and other public organizations.

Institutions of continuing education of architects exist in design and construction corporations and are developed in accordance with scientific and technological development plans, their strategies are built on (the 6th type). As examples we can quote Autodesk, the largest manufacturer of design and construction software; VITRA—an international holding company for the production of office furniture and accessories; Akari Lighting and Technology Corporation—a corporation for the production of lighting for interiors and streets and so on. Appearance of technological innovations that need to be tested and be introduced into practice serves as an impulse for the development of continuing education in engineering, technological and construction corporations. Target audiences of continuing education are determined on the basis of the need for specialists providing a full cycle of design, construction, operation, renovation and disposal of construction projects.

To make the study complete, it is necessary to identify another model of continuing architectural education, relying on the artistic and cultural fundamentals of architecture. These qualities contributed to the emergence of interest in architecture and its study by various social groups of society, children and adults. Architectural museums were founded; archives of outstanding architects were compiled, collections of architectural artifacts (photographs of architecture, models, and drawings) were built up. Collections of architecture, arts, and science museums are used as educational tools by world renowned schools of architecture such as Harvard (Fogg Museum, Busch-Reisinger Museum and Arthur M. Sackler Museum), Columbia University (US Museum of Modern Art and the Frank Lloyd Wright Foundation), Cambridge (museums of Cambridge and the surrounding area, including works of landscape design), Paris Schools of Architecture (Chaillot School and Cité de l'Architecture et du Patrimoine). Museums, carrying out their cultural mission, contribute to the interpenetration and unification in non-formal education of architects and other social groups. Through the use of public contests, exhibitions, workshops and public lectures, creative communities are formed that unite representatives of different ages and professions (the 7th type).

Cultural and educational programs are offered by art and architecture museum that planning their activities, always appeal to children, their parents and teachers. Every museum has programs for children and family crafts and this is logical. Since the concern for the preservation of culture in the future will fall on the shoulders of children, it is a current necessity to cultivate respect for the cultural heritage in children. Then they will become conscientious successors [6].

Having determined the types of architectural schools and the place of the architectural academy, we will move on to tackling the final objective—searching for development options of continuing education that do not contradict their development strategies.

2.2 Supplementary Education Programs in Art and Architecture for Elderly People

A search for development options begins with the determination of contemporary challenges and their solubility by means of architectural education.

If we look at the challenges from the point of view of sociology and medicine, we will see that one of the most striking challenges that the developed countries are facing is the population aging trend in Europe and northern America [7]. The problem of population aging is accompanied by the spread of dementia; an effective way to prevent which is continuing education, along with research activities, physical exercises and computer games [8].

Should architecture, the arsenal of which has accumulated teaching methods in the field of art and crafts, be involved in solving the problems of society and develop programs for people of "the 3-d age"? The answer to this question depends not only on the type of a school of architecture, but also on the position of the educational institution in the national education system, its degree of openness, traditions of innovation and the university's willingness to participate in social programs.

What does the experience of European countries show us? In the UK, there are 1,046 local branches of the University of the "3-d age", with 439 thousand students which collaborate with British universities [9]. The course in architecture is one of the most popular. According to the University website, the information booklet has been downloaded over 1,100 times. The university also offers courses in History, Archeology, Craft, Gardening and other subjects that are components of professional training for specialists in architecture.

The tendency of universities to cooperate with social welfare centers and to create continuing education programs for older people is also in line with the policy of enhancing participation in urban planning programs. This is how the collaboration of the School of Urban Planning of the Canadian McGill University with the non-profit public Contactivity Center, which provides educational programs for the elderly, is organized [10].

The origins of interest in the search for new areas and methods of architecture and art studies of the Moscow Architectural Institute (State Academy) are to be found in its history. In 2020, the 100th anniversary of the foundation of the famous VKHUTEMAS Soviet architectural school will be celebrated, in which art and architecture in the style of modernism were created as well as methods of their training. They were based on social ideas of the accessibility and openness of art and work in this area for representatives of all classes—workers, peasants, soldiers demobilized from the Red Army, and the creative interaction of architecture, painting and sculpture.

Today, MARCHI is an academy of architecture, and its development has a monodisciplinary focus. Architecture and art education at the pre-university level manifests a widest possible social coverage. The preserved since the Soviet period practice of admission to the Moscow Architectural Institute after taking the competitive entrance examinations in composition technical drawing, and drawing, demonstrates recognition of the importance of innate abilities for architectural creative work. In MARCHI as well as leading art colleges a search for talented young people is accompanied by a career guidance program: organizations of exhibitions, public lectures, master classes, and youth competitions. From early 2000s, it became clear that senior relative: parents and

grandparents of students took part in these events. People of older generations without grandchildren attended lectures and master classes on architecture. This is how the answer to the question whether architecture and art are of interest for people of the "3-d" age in Russia was obtained.

An opportunity to create and evaluate new areas of continuing architectural education for people of the "3-d" age appeared simultaneously with the Moscow Mayor's Project "Moscow Longevity". The target audiences of the new programs are women over 55 and men over 60.

The programs were developed on the basis of two hundred years of experience in pre-university education and unique teaching methods "from scratch" in the fine arts.

Firstly, results of sociological surveys of older people, carried out by national and foreign experts, were studied and the practical experience was analyzed. It was identified that the Moscow Longevity participants in 2018 preferred to study information technology, the English language, to attend fitness and general physical training classes [11]. Programs on art and applied arts, which correspond to the artistic and compositional components of professional architectural education, were offered to the participants, but did not arouse much interest. And this is despite the fact that these are traditional classes offered to older people that help to solve at least two tasks for maintaining cognitive functions: activating intellectual activity and expanding social contacts [12].

According to medical research data, the reasons that push older people into learning are primarily of a socio-psychological nature. These are: need to socialize (25.7%), desire to learn new things (25.7%), desire to spend time in an interesting way (22.5%), and desire to be in the thick of events (8%). In total, this amounts to more than three quarters of the answers [13]. Therefore, when developing new programs, we focused on creating a positive attitude, tried to "make learn to see beauty", to introduce to the works of Russian artists and to keep socializing with interesting people [14].

When developing the "Drawing" and "Applied art" pilot programs, we applied the concept of art education similar to the content and teaching methods used for academy students. At the same time, it was obvious that it was necessary to adjust the content of programs, teaching methods and, probably, to take into account the diversity in art education the participants had. This defined the goal and composition of the tasks of sociological research. The motivation for participation in programs for the 3-d age people was studied using a written survey (Tables 1 and 2). Respondents: 10 persons are participants in the "Applied art" programs and 15 persons are

participants in the "Drawing" program.

When constructing the questionnaires, two tasks were identified: availability of art education, a degree of familiarity with architecture and art; the second category includes expectations from training and the reasons for participating in the Moscow Longevity program. The answers to the questions were supposed to show the diversity of the initial level of students, confirm or reject the hypothesis whether they have experience in the visual arts. The questions of the second category concerned unaccounted interests and preferences, perceptions of the proposed material and expectations for the future. The total points could exceed 100% because several questions gave options of more than one answer.

 Table 1 Results of a sociological survey of the motivation of the Moscow Longevity Project participants in the applied art program.

NN question	Question u response options	Positive answers	% of the total
1	Have you ever made models or mock-ups?		
	Yes, I have.	5	50
	No, never.	2	20
	Yes. I have made them with children and grandchildren.	5	50
2	What attracted you to studying at MARCHI?		
	My children (grandchildren) studied at MARCHI.	0	0
	I graduated from MARCHI and I want to recall this time.	2	20
	Great teachers.	5	50
	Close to home.	2	20
	I like to visit the MARCHI building, a heritage site.	9	90
2	Why did you choose the Applied art program?		
	I love to be creative and to do things with my hands.	5	50
	I want to learn how to model.	3	30
	I need occupation for my spare time.	1	10
3	I want to improve my art skills.	8	80
	I want to find new friends who share my interests.	1	10
	I want to feel like a MARCHI student.	4	40
	I want to take part in the Moscow Gingerbread Festival.	2	20
4	What do you expect from training?		
	I can take part in the Moscow Gingerbread Festival.	2	20
	I will study with my grandchildren.	1	10
	I will enjoy socializing.	9	90
5	Are you familiar with other public programs and MARCHI initiatives?		
	I attended the University Saturday programs at MARCHI.	0	0
	I was at public lectures at MARCHI.	0	0
	I attended the Heirs of V. Shukhov contests.	0	0
	I attended other events.	0	0
	No, I am not familiar.	10	100

NN question	Question u response options	Positive answers	% of the total
1	Can you draw?		
	I can and I love it.	2	13,3
	No, I cannot draw at all.	8	53,2
	I once studied at an art school.	5	33,3
	I have an art education.	1	6,6
2	What attracts you to studying at the Institute?		
	My children (grandchildren) study (studied) at MARCHI.	1	6,6
	I graduated from MARCHI and I want to recall my student years.	2	13,3
	Great teachers.	8	53,2
	Close to home.	3	20
	I like to visit the MARCHI building, a heritage site.	9	60
	Why did you choose the Applied art program at MARCHI?		
	I like drawing.	4	26,4
	I want to learn to draw.	11	72,5
3	I need occupation for my spare time.	3	20
	I want to improve my art skills.	4	26,4
	I want to find new friends who share my interests.	3	20
	I want to feel like a MARCHI student.	1	6,6
	What do you expect from training?		
4	I will learn to draw and I will draw at home and while traveling.	12	80
	I will draw pictures for my home interior.	5	33
	I will draw together with my grandchildren.	4	26,4
	I will take part in an exhibition.	3	20
	I will make gifts for relatives and friends.	5	33
	I will enjoy socializing.	9	60
5	Are you familiar with other public programs and MARCHI initiatives?		
	I attended the University Saturday programs at MARCHI.	0	0
	I was at public lectures at MARCHI.	0	0
	I attended the Heirs of V. Shukhov contests.	0	0
	I attended other events.	0	0
	No, I am not familiar.	15	100

Table 2 Results of a sociological survey of the motivation of the Moscow Longevity Project participants in the drawing program.

3. Results and Conclusions

Analyzing the results, conclusions were drawn that are planned to be used in future work. The results' study led to several conclusions that are planned to be used in future.

3.1 Conclusions from the Results of the Sociological Study of the Motivation of the Moscow Longevity Project Participants in the Applied Art Program

While compiling the content of the Applied Art curriculum and developing teaching methods, the heterogeneity of modeling skills of the program's participants should be taken into account. For creating variations of educational knowledge, both a study of modeling techniques "from scratch", and improving existing skills should be chosen as main targets.

The reasons for participation in this program are diverse; because of the uniform distribution of preferences it is difficult to identify the dominant motive. The vast majority of respondents aspire to improve their artistic skills. This fact must be taken into account when evaluating the effectiveness of training in the Applied Art program. It is noteworthy that the initial idea of drawing students to participating in the Moscow Gingerbread Festival, which served as the basis for the development of this program, found support only in two out of ten participants. And this is despite the fact that this artistic initiative is exclusive and can be implemented on the basis of the exceptional artistic and design experience of architects-teachers.

3.2 The Results of the Sociological Study of the Motivation of Moscow Longevity Project Participants in the Drawing Program Show the Following

The analysis of the data on the training of students indicates a large disparity in skills—from complete inability to draw (3 persons), to the availability of higher art education (3 persons). The remaining 9 Program participants have limited experience in drawing obtained during training in art schools and in similar programs in other educational institutions. The above results in certain difficulties while developing the program. Differentiation of students by proficiency in drawing is possible with an increase in the number of participants, implying a targeted enrollment and targeted advertising, including involvement of creative unions of architects and designers.

It is of interest that respondents are aware of the limited period of study at the Moscow Architectural Institute and outline the prospects for using the acquired artistic skills for spending free time. Three quarters of the respondents indicated that they plan to "draw while travelling", thus outlining developing a Plein-air course and feasibility of organizing extramural studies.

A relatively small part (less than one third) of the respondents indicated a desire to find new friends who share their interests. Thus, the initial idea of the general need for socializing among people of the "3-d" age and their desire to use art for socialization was refuted. It can be suggested that participants in the Moscow Longevity Program at the Moscow Architectural Institute are more focused on individual artistic creation.

3.3 General Conclusions

The value of the MARCHI building and the

reputation of its teachers are the reasons for the overwhelming majority of respondents to participate in the Moscow Longevity programs at the Moscow Architectural Institute. This is demonstrated by almost 100% unanimity of answers to relevant questions. It should be assumed that the reputation of MARCHI that has developed throughout the twentieth century and zero information about the institute's current public cultural initiatives are important (100% in both questionnaires).

The results obtained show that the motivation for training for the majority of participants is the desire to have a great time at the Moscow Architectural Institute, the value of the building and also socializing. Thus, programs for the "3-d" age people can become one of the courses for the development of continuing education in architectural academies.

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Our Future: Children or Old Age? New Goals of Continuing Architectural Education

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692

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