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CAREER GUIDANCE OF ARCHITECTS IN THE SYSTEM OF CONTINUOUS EDUCATION

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Abstract

Often, architects who have failed to embrace innovation, are “washed away” from the profession. Is it possible to reduce the risk of the unsuccessful career using vocational guidance? What are the career guidance goals in the post-industrial society? In which areas apart from the architectural design, could the architect`s career progress? By comparing the specificities of the human development, the human lives phases and goals of education in the ISCED 2011, identify the meanings of the professional guidance in the lifelong continuous architectural education system. Exploring the modern legislative practice in the field of academic and supplementary architectural education; the sociological research`s methods – the architect`s interviewing; online blog data analysis; analysis of the literary sources on the prestigious architect`s biographies. Existing research shows that the architects have six different areas of the professional implementation. But the High school of architecture focuses on career guidance only in design. They receive far too little attention for other opportunities of the professional development of the architects. Architects who mast change their profession sphere do not receive supports from Universities and Union of Architects. Professional architects are competitive in other areas of professional activity. The Architecture High schools should take into account the dynamic changes in the labor market and the possibility of changing the professional development. The Architects should develop the communication with colleagues who have “left the profession” in order to jointly implement programs for the reconstruction of the built-up environment.

Keywords: Career guidance, lifelong architect`s development.

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1. Introduction

Today the world's leading architectural schools are striving to ensure popularity by inviting renowned practicing architects to cooperate, developing scientific research and taking other measures that are contained in methods of compiling higher education institutions ratings. At that, universities do not guarantee stable development of the professional career of architects in design. Some graduates of architectural schools have much difficulty in entering architectural practice, and a considerable number of architects “retire from” the profession later. This study is focused on exploring the reasons forcing architects to part with the profession and discovering opportunities for career development in other areas

2. Problem Statement

For the first time, large-scale research in places of career guidance in architectural professions, as in other spheres of economic activity, was undertaken in the second half of the XIX century (Navazova, 2005). In this period economically developed countries were facing a task of providing actively developing economy with specialists, selecting most talented young people to study architecture. Forms of career guidance were focused at promoting architecture, increasing the number of people interested in architecture: public lectures, exhibitions, additional education courses. They appeared about two hundred years ago and have been used successfully until now (Pollak, 2017).

In the early 20th century which was a period of searching for new forms and trends in plastic arts, career guidance was supplemented with programs devoted to developing creative abilities of children.

In the period of planned economic management and formation of a system of continuous education in the 1960s-1970s, in the USSR many new career guidance programs for children appeared that helped to identify their natural abilities (Lomakina, 2006). Free higher education, “graduate placement” to design organizations and absence of unemployment demanded most accurate acknowledgement of children's intellectual abilities to predict their continuous and smooth employment career.

Revolutionary changes in the process of career guidance occurred at the beginning of the twenty-first century. The key trend of education in a post-industrial society is its humanization, which ensures its quality (Ivanova, 2019). The humanization of education means, among other things, “an opportunity to learn throughout one’s life, to have a flexible attitude towards one’s professional life and to be concerned of one’s own professionalism, as is required in a post-industrial society”; whereas the structure of pre-university architectural education has changed only to some extent, maintaining the existing form; with variety of methods and programs for developing children's creative abilities having expanded (Kosheutova, 2016; Leonova, 2011; Lihanova, 2017 and others), approaches to additional education for adults are undergoing greatest transformations in terms of forms (Klarin, 2016).

3. Research Questions

The professional architectural community and higher schools of architecture are challenged with finding new forms and methods of career guidance of architects in a changing labor market, ensuring their competitiveness in new professions, finding new career development vectors with a use to full advantage of their competence and expertise.

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4. Purpose of the Study

To find new forms and meanings of career guidance of architects in the modern system of continuous architectural education.

5. Research Methods

A study of various professional career development options in architecture and the possibility of realizing the architects' intellectual potential in related occupations is carried out by forecasting changes in the labor market in architecture, analytical data of recruitment agencies, survey findings and other media publications. Availability of information about the possibilities of changing the trajectory of the professional career of architects and other ways and forms of career guidance of practicing architects are highlighted.

6. Findings

6.1. Modern approaches to the career guidance of students of architectural schools

Among now conventional measures for the career guidance of applicants to study at the Bachelor first professional level are events that offer an insight into the profession of the architect and the problems of architecture. These are public lectures, city art festivals, and additional education programs for children and teenagers. In the process of selection of future students, most of world's leading architectural schools evaluate their abilities for artistic creativity. This approach is characteristic of architectural schools of leading colleges. For young people enrolling in them, exams or a portfolio review is common practice. Career guidance in architecture occurs during the so-called pre-university architectural training. When future students as part of the process of creative development get acquainted with the profession of an architect and evaluate the degree of their compliance with the chosen profession. The system of pre-university architectural training is a global one and exists in all European and American countries. It involves universities, creative unions of architects and artists, museums, other organizations and individuals.

6.2. Tasks of career guidance in architecture during the period of Bachelor level study

In some countries, architectural professions are related to the engineering and technical sphere, and leading architecture schools are part of technological universities. Among them are Delft TU (Netherlands), Massachusetts TU (USA), TU Zurich (ETH Zurich, Switzerland) (Hennis, 2008; Dick, 2013). The career guidance of students in the above institutions occurs during 1st and 2nd courses. To clarify the choice of faculty, universities offer the so-called "minors" programs. Thanks to the programs, students can get a better insight in the specifics of their future professional engineering activity and choose most appropriate courses. Another option for students to learn about new trends and topics in architecture is to independently explore an available program through the Open Courses in Architecture.

Classes in summer and winter schools are another form of career guidance for students. Additional education in their free time from basic studies allows them to meet well-known practical architects, learn

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about current topics in architectural design, new design and research methods, culture and architecture of other countries.

Students who work in scientific laboratories have better familiarization with architectural science and research methods.

A number of architectural schools organize supplementary education courses that train for another academic year or another education level. These courses are devoted to absorbing techniques of using machinery, tools and equipment used in the training process. They cannot be fully considered as profession-oriented, since these courses are aimed at solving the practical issue of providing a context for more effective further education. Although the substantive content of additional education for students expands their insight in the opportunities of activity in architecture.

Of interest is the experience of career guidance in architectural professions of the educational institutions whose strategies are based on social interaction and support of public interests, for example, London Bartlett School, New York Cooper Union and French art colleges. Teachers and students involve members of the public as experts for identifying social problems and searching for ways to solve them by means of architecture. It draws attention that any deflection from the customary forms of design helps to improve the understanding of the profession of an architect and to find new vectors for its development.

6.3. Problems of development of professional career of architectural schools graduates. New forms of career guidance for graduates

Asking why architectural schools pay little attention to the development of graduates' professional careers, one should assume that their work is outside the boundaries of academic society. A successful career of graduates is not included in the ratings and has no impact on the place of universities in the ranking [5,6]. Today, when competition between universities and schools of architecture is on the rise, the number of opportunities and challenges of the architectural profession is changing, a concern for graduates employment can become a tangible competitive advantage.

The global Internet-united society allows architects at the beginning of their careers to self-evaluate their perspectives during the period of choosing a profession (Hinckley, 2018). Moreover, some graduates require support and adjustment of the trajectory of professional development.

Scientific surveys of the labor market in architecture, limiting and supporting career factors, are explored by National Associations of Architects. For example, the Architectural Institute of British Columbia (Canada), which has been for nearly 100 years “inspiring leadership and supporting equal opportunities for architects,” released a report with a list of most-in demand specialists in architecture and construction with an analysis of proposals in: alternative career courses, including educational requirements and previous experience, skills, certification requirements and average wages (Jolaoso, 2015). The studies are focused on exploring the “barriers” that impede the inclusion of certain social groups in the architecture, gender and racial discrimination, problems related to employment of immigrants in Canada and Western Europe (Liea, 2019; Hennis, 2017).

The reports include data on these specialists’ requirements for the period up to 2024, and this allows assessing the potential of sustainable career development for a relatively short period. Constant

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changes in the labor market hamper making recommendations in the years ahead. And this means that architects need to be ready for subsequent career transformations.

In the period of global economic crisis, when international migration has increased several times, immigrants' professional trajectory is more susceptible to changes. Professional architects - immigrants can rely on employment in a number of related, high-demand professions. Among the jobs most in demand in architecture and construction are Architectural Technologist / Technician; Cost Estimator / Construction Estimator; Construction Inspector; Construction Manager. It is noticeable that there is no demand for artistic and creative components of the architectural profession. At the same time experience in organizing the design process, ability to install internal and external infrastructure are noted.

One of the reasons for changing the profession is instability in contracting, therefore, poor or absence of wages. Wages for new specialties range from $ 28.88 for the Architectural Technologist / Technician to $ 39.00 per hour for the Cost Estimator / Construction Estimator. For comparison, according to the US Employment Bureau, the average wage rate for the Interior Designer in the USA is $ 28.42 ($ 59,120 per year), while for the Architectural, Engineering, and Related Services group, is $ 31.00 ($ 64,480 per year). The average wages of an architect who is a project manager in the Russian Federation, according to the data of HeadHunter, Russia's largest Internet recruitment company, is 60,000-85,000 rubles (equivalent to $ 11,000-17,000 a year). This means that the difference in wages can differ by 5-6 or more times. It is not entirely proper to compare the incomes of counterparts from different countries, without considering other indices, like the size of monthly expenses, social security, etc. But it is obvious that emigration can be caused by economic reasons.

In 2017, the author of this article, used sociological research data, obtained from English-language Internet blogs and publications in professional journals, to identify five alternative activities of architects "who withdrew from the profession" (Topchiy, 2017). The aim was to identify the career opportunities of architects who changed their profession and apply "architectural" knowledge and experience to participate in the implementation of environmental projects for reconstruction of the anthropogenic environment. Disagreement of the project with the opinions of citizens may result in social conflicts, while popular support contributes to project implementation. It was taken into account that the majority of projects aimed at sustainable city space need endorsement and support of various social groups of the city. These are projects for reconstruction of historical territories and sites of historical and cultural heritage, transport infrastructure; organization of landscape and recreational spaces (Lerner, 2016).

It is worth mentioning that it is not an economic component or professional skills and experience that form the basis for the career guidance of architects who start "new" professions, but a *humanitarian idea of living space sustainable development*. Relying on public interest is a prerequisite for sustainable professional development in new skills (Dege, 2016).

6.4. Groups of new professional activities for the architect, built around an idea of sustainable development of the anthropogenic environment

Among the "new" professions of architects, a group of related, design-based professions (skills) was identified that required minimum additional education: urban planning, landscape architecture and landscape design, reconstruction of the spatial environment on the basis of sustainable design, architec-

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tural environment and interior design, object design, including interior items and children's toys. A "design" group is directly involved in creation of projects, filling them with ideas of sustainable development.

The second "administrative and managerial" group of professions uses available project management skills, analytical and organizational skills of architects. Administrative and managerial activities involve determination of strategic areas of development and selection of project proposals. It includes: prefeasibility study, investment activities, construction management, stock analytics of the construction market, management of local territories, branding of territories, law in architecture, land use, environmental protection, management and marketing of territories.

The third "informational-visualization" group includes professions related to popularizations and promotion of ideas of sustainable development. These professions comprise work in the media, PR, theater, cinema, animation and other types of literary and creative arts. In most of the developed world, many former architects are stage artists, art and architectural critics, book publishers, journalists, web designers, popular bloggers, place-making and "pep-talk" specialists.

The fourth group of professions is "educational". It consists of teaching specializations of all types and levels of education ranging from additional artistic and design education of children to professional education of architects. In many countries of the world, participation of practicing architects in teaching activities does not require additional education, and therefore is not a different specialty; whereas in a number of countries a certificate of retraining is required. Students prefer gaining knowledge from practicing architects whom they treat with more confidence than scientists with vocational education and analytical knowledge. This group includes school teachers, heads of children's art studios, clubs and the like. An enormous potential and the possibility of involving schoolchildren and their parents in implementation of environmental projects for sustainable development of the city, led by school teachers, was demonstrated by the Mayor of the Brazilian city of Curitiba Jaime Lerner (Lerner, 2016). His experience was embraced by mayors of a number of cities in Latin America, the USA and European countries.

The fifth group of professions is "production-commercial"; it covers a wide range of professions in the area of commercial activity related to the results of intellectual activities of architects and designers: investment and construction business, real estate transactions, trade in building materials and technologies, creation and production of elements of the architectural environment (Topchiy, 2018).

The sixth "legal" group comprises a group of specialties related to protection, preservation and commercialization of intellectual activity in architecture and design.

6.5. Reasons for changing the profession of an architect

On the basis of the conducted analysis, we can draw the following conclusions about the reasons for changing the profession of an architect:

- seeking for stable employment opportunities and higher wages;

- competitiveness in the profession, unstable incomes due to a recession in the construction industry, economic instability of society, hyper-urbanization of the territory;

- relocation, emigration, a need for an adaptation and employment of the architect in new environment;

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- willingness to be involved in meeting global challenges of society, implementation of environmental, educational, historical and cultural programs;

- changes in marital status, childbirth, and other reasons for a forced working rhythm change;

- disappointment in the profession and own role in it, conflicts in professional environment and a design office, dissatisfaction with the results of their performance, a desire to set up their own business and other socio-psychological reasons.

6.6. New forms and methods of career guidance of architects

Most accessible today is a study of possible activities targeted at development of a professional career, new trends in architectural and other professions with the help of the media, including online publications of recruitment agencies. One *can conduct* own sociological research by surveying colleagues who have changed the field of professional activities.

Of interest is the experience of the Canadian Architectural Institute of British Columbia which assists in the employment of qualified architects by facilitating to establish professional and public communications, involving them in *volunteer activities*.

The idea of students of architecture and environmental design schools to participate in volunteer programs during summer or winter holidays is not new. But the most interesting feature is developing own volunteer programs. In this case, we witness a combination of a scientific-analytical approach to studies of urban environment challenges with cogitation about practical actions for their elimination or reduction. And it is not always that this involves large material inputs and development of an architectural design (Glazychev, 2005).

Another effective form of career guidance, which allows obtaining the necessary skills and certificate, is getting additional professional education and career guidance. The most effective choice of the institution of additional education will be made by those who are interested in introducing their own innovative achievements in architectural practice, and this choice can contribute to employment. In this case, specialists receive a new, demanded specialty and competitive advantages over those already employed in this field.

7. Conclusion

Career guidance at all stages of continuous education is relevant in a post-industrial society; it helps to determine a most appropriate vector of personal and professional development, giving the diversity of career development opportunities, continuing growth of requirements for professionalism, changes of labor market demands and life circumstances.

There are two dialectic tendencies in the career guidance of specialists: an increase in the degree of independence in search for career development activities and the development of institutional forms and types of career guidance of adults, including architects.

Architects enjoy broad career development opportunities in the architectural and construction industry and other areas, which makes them demanded in the changing labor market conditions and life circumstances.

To ensure successful career development in a new area and to increase competitiveness, it is necessary to preserve the available experience and professional skills, supplementing them with the necessary new competencies based on innovative knowledge.

Among the new forms of career guidance it is possible to identify self-education through the Open Educational Resources on the Internet, volunteer work, additional education in educational, creative, and scientific-production organizations; self-education, informal and non-formal additional education, obtained through social work, scientific conferences, public lectures and discussions.

It is important for the architectural community to maintain intellectual communications with colleagues who have changed their profession to ensure collaboration in implementing large-scale environmental, urban planning and other projects.

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