Dai ZHEN

Features of professional training of multimedia design specialists in higher education institutions of the People’s Republic of China

Introduction. Educational reforms in the People's Republic of China is part of the processes of community renewal and those changes related to the recovery of the country through science and education. China's professional education before "cultural revolution" was aimed at satisfying the staffing needs of the state economy. Nowadays, the Government of China gives priority to education modernization, the educational system faces rapid integration processes, new educational standards, content, forms and methods of training are being developed, the methods are aimed at forming a single educational space and eliminating the shortage of skilled specialists.

An analysis of the current state of teaching multimedia design in the artistic higher education institutions of the People's Republic of China and clarification of the real conditions for the development of professional skills of future designers of the specified profile are conditioned by the
requirements of the labor market to improve the quality of professional training and restructuring of institutions of artistic educational institutions on the principle of optimization of design education. However, despite the modernization of the system of design education, Chinese artists maintain their specific perspective, relying on the achievement of centuries-old spiritual culture.

Therefore, it is considered relevant to highlight the problem of specialists training in multimedia design and design components as the cultural and educational space of the People's Republic of China.

The design activity and the system of training of the relevant specialists have passed many challenges on the path of evolving from teaching crafts to modern design education. The analysis of the scientific and pedagogical composition of various artistic and pedagogical higher educational institutions has shown that the training of students-designers is carried out mainly by artists, architects or practicing designers with no pedagogical education. These teachers are usually specialists in the field, however, not all of them acquired proper psychological and pedagogical training. This testifies to the need to actualize and popularize psychological and pedagogical knowledge, appropriate pedagogical internships and advanced training among future designers in order to effectively develop their professional skills.

**The study aims** is to highlight the components of the training of future multimedia specialists, as well as to improve the teaching and methodological support for the professional training of designers.

**Analysis of recent research and publications.** The problem of professional training in China was highlighted in the scientific developments of Liu Guilin, Liu Chunilin, Shi Changfa, Yu Zhuang and others. The theoretical basis for the modernization of education in China is presented in the writings of Tan Songhua, Ma Shuatsau, Jiang Daoyuan, Chen Sivai, Hua Yao, Yang Jita and others. The following researchers focus their works on historical and pedagogical analysis of the system of higher education of the People's Republic of China: A. Antipovsky, N. Borevskaya, Van Itan, L. Kalashnik, Liu Donmin, S. Markova, O. Mykhailychenko, N. Pazura, Su Xiaohuan, N. Franchuk, Zhu Mutsu, O. Shatska and others. Aspects of professional education of designers, development and introduction of modern pedagogical technologies in the educational process of higher education were considered by O. Banit, V. Boychuk, Z. Makar, Jia Yachen, S. Chirchik. The theory of design and artistic creation was studied in the works of E. Antonovich, O.
Boychuk, I. Golod, V. Danilenko, T. Panyok, V. Prusak, A. Chebykin, M. Yakovlev and others.

Presenting the main material. The study of the materials on scientific, pedagogical, art-related publications of Chinese researchers, regulatory and legislative acts on the issue of research showed that the development of design and cultivation of its foundations is one of the priorities for the culture and education of the People's Republic of China. Moreover, in recent decades design and designers have become the image-making tools of the social and economic progress of the People's Republic of China. The need for specialists in multimedia design is especially acute due to the increasing demand for high-quality design projects based on modern scientific and creative concepts and the best achievements of the world design schools.

One of the important aspects of educating and training the future specialists in the multimedia design are the ability to find common patterns in unexpected crossings, crossroads and regularities in different design areas. A media designer develops projects for various media platforms and information channels, create sketches and visualizes design concepts (sites and landings, social networks, digital and printed magazines, video content, etc.).

The analysis of modern scientific and pedagogical literature gives a reason to assert that at present there is no clear definition of the concept of "multimedia design"; there is no clear position on the organization of professional training of specialists in multimedia design and no evident links with the educational process. Describing the basic concepts of research, there is a need to analyze key definitions.

Multimedia design is a kind of cognition and a way to solve creative tasks related to the visualization of complex information: CD presentations, product catalogs, photo galleries, the portfolio with the use of sound and video effects, creation of promotions and educational videos, games, and interactive descriptions of the software products. The multimedia design involves the development of the design and software of the final product, as well as the creation of an ergonomic interface for interactive work with websites, catalogs, presentations, etc.

Simultaneously the term "multimedia design", the definition of "media design" is used, which means the development of digital (network) content for publishing on different platforms and in different contexts, creating a new medium of communication (work with complex visual narratives, where the whole meaning is equally divided text and images equally divided is a semantic load). For example, the development of
designed content: the creation of a GQ-digital layout edition (magazine design), works with screen typography (design of digital media sites in the print analogy), etc.

The media environment is multidisciplinary in its own and is varied in the way of promotion, therefore the web design, art design, landscape design, and tile design all fall into the profile line of media design.

The modern media sector includes some traditional elements. Its channels combine television, radio, newspapers, magazines, books, movies and music. However, with the development of new technologies, this industry has expanded and now it also includes the Internet, video and computer games, mobile devices and smartphones.

Unlike applied designers who work with real objects, the multimedia designer first creates a virtual reality on a computer, and then transfers it to real life. Thus, the need to constantly master one’s skills arises, in order to be able to use the sound, video, graphics, animation and other elements to create a complete work.

A multimedia design specialist integrates their talent, creativity and knowledge into an electronic work of art (web sites, cinema, television, advertising in educational institutions, design and production firms, corporate companies, etc.). Such specialist contributes as well to the formation of a positive image of the company, develops concepts for the creation of media design, creates an image when working with advertising; cooperates with the media, audio, video and printing products, within the boundaries of its competence, one is also taking responsibility for the quality of the duties performed.

Therefore, the good quality education of specialists in multimedia design consists of many factors which include a high level of knowledge, skills and standards necessary for the performance of professional duties. Therefore, future multimedia design professionals should have the appropriate theoretical and practical skills. Some of the theoretical skills include: knowledge of the up-to-date trends in the interactive environment, graphic and communication design, the basic principles of the psychology of perception of visual information, the ability to apply the basis knowledge of painting and drawing, coloristic, composition to the design activities, processes and technologies of modern printing, functions of the media channels of communication, marketing principles of the publishing business, etc.

Practical skills include: the ability to create layouts for printed publications, Web-design and creating the social networking pages,
handling brand-book design, mailing lists, presentations, media-kits and other products, working with photos and images (Adobe Photoshop, Adobe Flash, Adobe After Effects, MAYA). They should be able to apply practical typography, ornamentalism, edit text according to the page making requirements, develop motion animation and videos, have the skills to work with raster and vector graphic editors (Adobe CC, QuarkXPress, CorelDraw, SketchApp), etc.

From the standpoint of our research, the humanistic paradigm and personality-oriented approach to learning influence the quality of the training of future specialists in multimedia design. The following personal qualities of the future specialist in the multimedia design are important: customer orientation, professional communication, time management, rational organization of the work process, teamwork, ability to handle several projects simultaneously, attention to detail, responsibility for the result, self-development.

It should be noted that the personality-oriented approach in higher educational institutions is aimed at the relations of the teacher and the student as of between two subjects and provides the implementation of the intellectual and value development of the student, which occurs when all forms and methods of active learning are used, the pedagogical technologies which enable modeling of the consequences of professional activity.

In our opinion, the essence of the professional training of specialists in multimedia design is in the development of multilevel, profile and multifunctional artistic educational institutions, the improvement of the skills of teaching staff, the development of the social partnership of the educational institution with the enterprise; an increase in the proportion of practice-oriented training through the creation of the original practical base at the artistic educational institutions.

In the course of studying at an artistic higher education institution, a future specialist must learn how to generate original ideas and to transform them into the material by appropriate means of fine arts (composition, drawing, color studies, art history, graphic techniques, etc.) on the basis of the skills of figurative-stylistic, artistic-design, productive-figurative, informational and communicative skills that are integral components of the professionalism of specialists in multimedia design, since it provides creative opportunities for their activities.

Therefore, for the professional education of specialists in multimedia design, it is important to include not only artistic and creative educational
subjects in educational programs, but also educational blocks and modules on entrepreneurship and marketing that enable the development of the entire multimedia industry as well as the appropriate practical experience.

To identify the main training blocks that provide professional training for multimedia design professionals: *block of computer science*: web-design, multimedia (the basis of light application, the theory of sound, video, photo), computer graphics in design and advertising, three-dimensional composition, visual advertising basics, virtual simulation and layout; *block of fine arts*: theory and practical knowledge of color, composition, drawing, plastic anatomy, history of Chinese and foreign animation art history, animation perspective, modern polygraphy; *block of psycho-pedagogical and humanitarian training*: professional psychology, the psychology of artistic creativity, psychology and pedagogy of artistic creation, teaching methods of fine arts and design, marketing, entrepreneurship, electronic commerce, foreign language, etc.

The study of the block of psychological and pedagogical preparation enables future designers to get engaged in teaching activities in general education schools and extracurricular educational institutions; it also provides knowledge to the practical implementation of pedagogical technologies, necessary techniques of fine arts and design, helps to develop creative skills, etc.

The application of psychological and pedagogical peculiarities when training future specialists in multimedia design provides the educational process by integrating psycho-pedagogical, design-artistic and informational-communicative competences, helps to strengthen motivation to self-developement, activates the desire to self-educate.

The analysis of curricula and programs, content and forms of education gives reasons to assert that in general such a list of educational blocks comprehensively cover all the necessary theoretical material and is aimed at developing practical skills in designing proficiency.

The determining function of a future multimedia design specialist’s education is the activities aimed at organizing the learning process in accordance with regulatory documents and combining theoretical and practical components.

The "dual" method of education is relevant for professional training of specialists in multimedia design in higher education institutions, which envisages that all theoretical knowledge obtained during studies in higher educational establishments is backed up by practical skills in organizations and in the enterprises of the design industry.
The professional training of a specialist in multimedia design should be considered from the point of view of the systematic structural approach, which has the content, structural and functional connections, which are in constant development. Such an approach allows to identify the integrated properties and qualitative characteristics of the components of the professional training of specialists in multimedia design in higher educational institutions, and it also allows to justifiably choose a set of general scientific and specific scientific theoretical and methodological approaches which help to increase the efficiency of training of the corresponding personnel, formation and development of their professionalism (Guziy, 2004).

While training it is expedient to apply the psychological and pedagogical features that ensure the integration of psychological and pedagogical, design-artistic and informational and communicative competences of the future specialist, their awareness of enhancement of motivation to self-development as the most effective source and driving force of professional growth; activation of self-education.

Conclusions. So, analyzing the peculiar features of the professional training of specialists in multimedia design, it can be noted that the study of modern terminology showed the uncertainty of the basic terms in the field of multimedia.

The article clarifies and specifies the concept of "multimedia design", "media design". These definitions will allow scientists, educators and specialists of the multimedia design to master the design branch more effectively.

Based on our research, we have identified the peculiarities of professional education of multimedia design specialists in higher education institutions of the People's Republic of China. The features include the dual education, the systematic and structured approach to professional training, the fluency of theoretical and practical bifunctional professional skills (conduction of knowledge on formation, color didactics, design charts, visualization of complex digital information, etc.), ability to reflex and analyze the process of creative activity and its results; consistent selection and usage of appropriate visual and design methods for professional training.

Prospects for further study. Further study of practical, artistic and aesthetic functions in the field of specialists’ education in multimedia design is foreseen. It is revealed that a universal program suitable for the formation of professional training of specialists in multimedia design in
higher educational institutions has not been developed, which, in turn, requires the development of an in-house system aimed at the development of personal and activity components of the future specialist in the process of his professional activities, on which further research will focus.

Transliteration of References:

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Abstracts

DAI ŻEŃ. Cechy zawodowego kształcenia specjalistów w dziedzinie projektowania multimedialnego w instytucjach szkolnictwa wyższego ChRL. Rozważane jest zawodowe kształcenie specjalistów projektowania multimedialnego w instytucjach szkolnictwa wyższego ChRL. Wyniki analizy literatury naukowej i metodologicznej na temat problemu badawczego wskazują, że jego różne aspekty znalazły odzwierciedlenie w pracach naukowych badaczy, którzy rozpatrują umiejętności zawodowe przygotowujących specjalistów od projektowania na poziomie szkolnictwa wyższego (E. Antonowycz, Liu Gujliń, Liu Czunylin, Szczi Czanfa, Juj Czuhuan, A. Antypowski, N. Borewska, L. Kalasznyk, Liu Donmin, W. Danylenko, M. Opaliew, N. Paziura, Su Siaohuań, N. Franczuk, Czu Muciu, Czia Jaczen, M. Jakowliw itd.). równocześnie problem rozwoju zawodowego specjalistów w
dziedzinie projektowania multimedialnego nie jest wystarczająco zbadany. Zostały teoretycznie uzasadnione osobliwości psychologiczno-pedagogiczne oraz warunki organizacyjno-pedagogiczne rozwoju zawodowego kształcenia specjalistów w dziedzinie projektowania multimedialnego w placówkach szkolnictwa wyższego o profilu artystycznym ChRL. Przeprowadzono usystematyzowanie, zrozumienie i uogólnienie wyników badań; określono cechy i ogólne tendencje współczesnego medialnego przemysłu oraz jego wpływ na stan rozwoju zawodowego kształcenia specjalistów w zakresie projektowania multimedialnego na uczelniach wyższych; podano charakterystykę środowiska medialnego, uzasadniono treść i strukturę działalności multimedialnej, ujawniono jej klasyfikację. Została sprecyzowana istota podstawowych pojęć badania (przygotowanie zawodowe, projektowanie multimedialne, media design). Określono celowość głównych bloków edukacyjnych, które zapewniają aktywizację kreatywnych możliwości i zawodowe kształcenie specjalistów w dziedzinie projektowania multimedialnego w instytucjach szkolnictwa wyższego; ujawniono istotę ich składników; sprecyzowano teoretyczne wnioski, określono perspektywy badania danego problemu.

**Słowa kluczowe:** kształcenie zawodowe, umiejętności w zakresie projektowania, środowisko medialne, projektowanie multimedialne, projektowanie mediów.

**ДАІ ЖЕНЬ. Особливості професійної підготовки фахівців з дизайну мультимедіа у вищих навчальних закладах КНР.**

Розглядається професійна підготовка фахівців мультимедійного дизайну у вищих закладах освіти КНР. Результати аналізу наукової і методичної літератури з проблеми дослідження свідчать, що різні її аспекти знайшли відображення у наукових працях учених, які розглядають професійну майстерність майбутніх фахівців дизайну на рівні вищої освіти (Є. Антонович, Лю Гуйлінь, Лю Чунлін, Щі Чанфа, Юй Цзугуан, А. Антиповський, Н. Боревська, Л. Калашник, Лю Донмін, В. Даниленко, М. Опалєв, Н. Пазюра, Су Сюохуань, Н. Франчук, Чжу Муцю, Ція Ячен, М. Яковлев та ін.). Водночас, проблема професійного розвитку фахівців мультимедійного дизайну є недостатньо дослідженою. Теоретично обґрунтовані психологічно-педагогічні особливості та організаційно-педагогічні умови розвитку професійної підготовки фахівців мультимедійного дизайну у вищих закладах освіти мистецького профілю КНР. Проведено систематизацію, осмислення і узагальнення результатів дослідження; встановлені особливості і загальні тенденції сучасної медіагалузі та її вплив на стан розвитку професійної підготовки фахівців мультимедійного дизайну у вищих закладах
ОСВІТИ; оголошено характеристики медіасередовища, обґрунтовано зміст і структуру мультимедійної діяльності, визначено її класифікацію. Уточнено сутність базових понять дослідження (професійна підготовка, мультимедійний дизайн, медіа-дизайн). Визначено доцільність головних навчальних блоків, що забезпечують активізацію творчих можливостей та професійну підготовку фахівців мультимедійного дизайну у вищих закладах освіти; розкрито суть їх складових; уточнені теоретичні висновки, визначені перспективи вивчення досліджуваної проблеми.

Ключові слова: професійний підготовка, дизайн-середовище, мультимедійний дизайн, медіа-дизайн.

ДАЙ ЖЕНЬ. Особенности профессиональной подготовки специалистов по мультимедийному дизайну в высших учебных заведениях КНР. Рассматривается профессиональная подготовка специалистов мультимедийного дизайна в высших учебных заведениях КНР. Результаты анализа научной и методической литературы по проблеме исследования показывают, что различные его аспекты нашли отражение в научных трудах ученых, которые рассматривают профессиональное мастерство будущих специалистов дизайна на уровне высшего образования (Е. Антонович, Лю Гуйлинь, Юй Цзугуан, А. Антиновский, Н. Боревскую, Л. Калашник, Лю Донмин, В. Даниленко, М. Опалев, Н. Пазюра, Су Сяохуань, Н. Франчук, Чжу Муцю, Цзя кипяченой, М. Яковлев и др.). В то же время, проблема профессионального развития специалистов мультимедийного дизайна исследована недостаточно. Теоретически обоснованы психолого-педагогические особенности и организационно-педагогические условия развития профессиональной подготовки специалистов мультимедийного дизайна в высших учебных заведениях художественного профиля КНР. Проведена систематизация, осмысление и обобщение результатов исследования; установлены особенности и общие тенденции современной медиаотрасли и ее влияние на состояние профессиональной подготовки специалистов мультимедийного дизайна в высших учебных заведениях; обозначены характеристики медиаиндустрии, обосновано содержание и структура мультимедийной деятельности, выявлены ее классификации. Уточнена сущность базовых понятий исследования (профессиональная подготовка, мультимедийный дизайн, медиа-дизайн). Определена целесообразность главных учебных блоков, обеспечивающих активизацию творческих возможностей и профессиональную подготовку спе-
DAI ZHEN. Features of professional training of multimedia design specialists in higher education institutions of the people’s Republic of China. The professional training of specialists in multimedia design in higher educational establishments of the People’s Republic of China is considered. The results of the analysis of scientific and methodological literature on the research problem indicate that its various aspects were reflected in the scientific works of scientists who considered the professional skills of future design professionals at the level of higher education (E. Antonovich, Liu Guilin, Liu Chunlin, Schi Chanfa, Yu Zuguan, A. Antipovsky, N. Borevskaya, L. Kalashnik, Liu Donmin, V. Danilenko, M. Opalev, N. Pazura, Su Xiaohuan, N. Franchuk, Zhu Mutsu, Jia Yachen, M. Yakovlev, etc.). At the same time, the problem of professional development of specialists in multimedia design is not sufficiently researched. The psychological and pedagogical peculiarities and organizational and pedagogical conditions of the development of professional training of specialists in multimedia design in higher educational institutions of the artistic profile of the People’s Republic of China are theoretically proven. The systematization, comprehension and generalization of the research results are carried out; the features and general tendencies of the modern media industry and its influence on the development of professional training of specialists in multimedia design in higher educational institutions are established; the characteristics of the media environment are outlined, the content and structure of multimedia activities are substantiated, its classification is identified. The essence of the basic concepts of research (professional training, multimedia design, media design) has been specified. The expediency of the main educational blocks, which provide activation of creative possibilities and professional training of specialists in multimedia design in higher educational institutions, is determined; the essence of their constituents is revealed; the theoretical conclusions are specified, the prospects for studying the problem in question are specified.

Keywords: professional training, design skills, media environment, multimedia design, media design.