Modern Innovative Pedagogical Technologies in Art Education

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Abstract The innovation of education allows the use of new technologies and teaching methods that allow memorising significant amounts of information and contributing to the shaping of a specialist who, in turn, will be able to implement the knowledge obtained in the social environment. The social significance of art education development makes it possible to raise the general level of cultural advancement. The novelty of the study is determined by the fact that pedagogical technologies cannot often be considered as part of the learning process. According to the authors, a significant part of modern educational technologies is aimed only at ensuring that students can acquire a certain amount of knowledge and apply it in their practical activities. Innovative technology makes it possible to educate students (or other trainees) to the level where they can apply the same pedagogical technology for further learning in life. This forms a deeper level of discipline knowledge and increases the potential level of skill. The practical significance of the study lies in the application of teaching technologies for the all-round and harmonious development of the individual and establishment of a civic position based on an independent assessment of artistic works of both fine art and popular art.

Keywords Education, Artistic Skill, Structure, Formation, Development

1. Introduction

At the modern stage of social development, which is characterised by globalisation and integration, an increase in the availability of information resources, means of communication, and the rapid development of technological innovations, a broad foundation is being created for the development of modern updated education paradigm. This ensures the shaping of a highly professional, competent art critic of a new generation, capable of comprehending traditional works and the latest achievements of artistic science. Such specialist will be able to generate new ideas, work creatively in a team, use innovative approaches during educational activities in the renewed school [1].

In accordance with the requirements of the modern information-oriented society, new trends are emerging in the system of higher art education – general trends characteristic of the educational space development [2, 3]. Smart education is one of the main educational trends in
modern higher education, since it most accurately reflects the current priorities for education development [4]. In the English language, the lexical item “smart” corresponds to many different translation options, which are based on such meanings as smart, technological, efficient [5]. The term was coined in the context of aerospace technologies, which were marked by the transition to new materials and their innovative possibilities, as well as advances in the field of electronics and information technology [6]. In the practice of educational activities, the overwhelming majority of teachers identify the concept under consideration with the usage of technological innovations and interactive teaching methods that contribute to the development of professional competencies in future specialists based on a systemic multidimensional vision and study of disciplines, taking into account their multidimensionality and continuous content updating [7].

The intensive introduction of modern technologies, services and Internet resources has led to a new stage in the development of the information space, which today is designated by the term “smart society”. It received special publicity after the Seoul G20 Summit (2010), during which strategic directions for the development of smart technologies in the world’s major economies (Germany, South Korea, the Netherlands, etc.) were announced [8]. Smart society is characterised by rapid changes in the external environment, adaptation to new conditions, and independent development. In accordance with this, the tasks of higher education are also changing, which consists in preparing specialists with creative potential, capable of living in modern conditions of the information society, able to work in a new way, changing the nature of interaction [9]. The goal of smart learning is to provide future art experts with the skills necessary to carry out effective professional activities in a digital society and rapid economic development [10, 11].

The implementation of modern education is ensured by the use of technological innovations and the Internet, which contribute to the search for new types of communication, collaboration and interaction between teachers and students [12]. Thanks to the unification of higher education institutions, the provision of free access to content, the joint activities of teachers to organise flexible, interactive learning, innovative education was created.

2. Specifics of Concepts and Principles of Smart Education

The concept of modern education is the development of an intellectual teaching environment, ensuring the continuous development of the competencies of participants in the educational process by means of technological innovation. The concept of smart education implies mobility of learning, flexibility in the use of didactic material, a variety of multimedia tools, the independence in searching and digestion of information, introducing technological innovations into pedagogical practice, generating new ideas, knowledge, and developing creative skills. So, in the concept of modern education in South Korea, seven basic skills of a modern specialist are defined: critical thinking and problem solving; creativity and innovation; cooperation and leadership; intercultural understanding; communication; literacy in the field of information and communication technologies; career and life skills.

In the framework of the study, the global educational trends highlighted in the Forbs magazine are especially valuable and correlated with the provisions of the Concept of modern education:

- prevalence of distance learning technologies;
- personalisation and unification of education in order to increase motivation;
- “gamification” of education (using game situations in the learning process);
- introduction of interactive textbooks that ensure the multidimensionality of the modern educational environment;
- “interactive immersion” in the virtual world.

In line with the problem under consideration, we note that the process of informatisation of education presupposes a radical restructuring of the entire education system. Changing the structure of the educational process, forming other methodological and didactic foundations, providing a competency-based approach, which requires from art teacher not only a system of knowledge of scientific theories, ideas and concepts of art, but also key competencies. Smart education has become a “new philosophy of education”, which involves generation of new ideas and knowledge, development of critical thinking, creativity, digital literacy, intercultural competence, ability to collaborate and compete in the modern digital space [13].

In theoretical and scientific thought, the basic principles of smart education are formulated [14]. First, the use of information in the educational program that meets the most important needs of our time, in order to solve educational problems. The modern globalised society is characterised by the rapid growth of information flow. That is why the existing teaching materials require systematic updating in order to prepare students for solving practical problems in future professional activities [15]. Secondly, the organisation of independent research, project activities of students. Scientists place an emphasis on the crucial importance of this very principle in the process of preparing specialists for creative professional activity, independent and research work. Thirdly, the learning process should be continuous and provide for training in a professional environment, using the means of professional activity. Fourth, the organisation of professional interaction with specialists. During the educational process, students should interact with
professionals in order to gain positive experience. Fifth, providing ample opportunities for the flexibility of individualised training and study of educational programs and courses [16].

Taking into account the above principles, we can note that smart education constitutes a new educational paradigm that ensures the development of competencies of future art experts for flexible, creative interaction in modern society and thus serves as an important tool for shaping the readiness of specialists in the art industry to innovate.

3. Features of the Development of Innovative Competence of a Teacher of Art Specialties

The transition to a new paradigm of smart learning predetermines new requirements for an art teacher who is aware of his role in a digital society, constantly improving himself, his own personal and professional qualities, uses flexible, non-standard approaches to learning, and is also capable of adapting to fast-paced living conditions. The organisation of innovative education provides for the creation of educational activities for the independent acquisition of knowledge, skills and abilities by young people. The function of the teacher in the context of smart education is high-quality content navigation, rather than the broadcast of ready-made truths and the transfer of knowledge.

In the process of scientific research, it was found that the new philosophy of education entails the expansion and renewal of the teacher's functions. Meeting the requirements of the updated school, the activities of an art teacher should be of a consultative nature. A modern teacher is a mentor who coordinates the cognitive process of students, ensures the improvement of educational material, constantly takes care of increasing creative activity and professional and pedagogical qualifications.

The platform of smart education provides art teachers with new opportunities to improve their professional and pedagogical competence. Thanks to the wide access to the knowledge from all over the world, teachers have the opportunity to freely exchange experiences and ideas, pay more attention to self-education, personalise the course of study in accordance with its purpose and the individual characteristics of students, save time. Determining the global strategies for the smart society development, one more feature of the activity of a modern teacher is identified, which is introduced on the Internet through the presentation of his own experience: portfolio; web pages; counselling; video lessons, web conferences; master classes; distance learning; web projects, virtualisation of scientific research [17].

In the conditions of smart learning, new perspectives of professional and pedagogical activity open up for a teacher of art: ensuring prompt communication with students; use of information and communication training tools; various types of multimedia; application of technological innovations; creation of a network for the exchange of information between other educational institutions and the establishment of cooperation with colleagues, including foreign ones; an increase in the volume of independent and group work; combining real and virtual space. In the course of the study, it was found that the expansion and renewal of the activities of art history teacher in the conditions of modern education, respectively, sets new tasks for mastering innovative teaching technologies.

The focus of education on a competence-based approach, in our opinion, helps to maintain the correspondence of educational conditions to the needs of modern society, caused by dynamic economic development and information explosion. The competence-based approach is based on the essence of the concept of “competence”, which is also often equated with competency. Competency is defined as a certain rule, the norm of the student’s educational training. Competence is the high level of competency, which presupposes highly developed personal qualities of the student and work experience. Competency is referred to as a structure, characterising a competent teacher as a specialist who has inherent in-depth knowledge of a specific subject of a university education [13]. The competence of a future teacher must be formed during professional training in the field of knowledge of that science, which is the main subject of his future professional activity.

In the process of scientific inquiry, it was found that now of significant interest of scientists are issues of the formation of professional competence of a specialist as an important condition for the smart society functioning. Modern research has proven that the world’s leading countries (USA, England, Germany, France) are characterised by the shift in emphasis on the requirements of a modern worker: the social values of his personal qualities come to the fore. American sociologists have developed a model of a “competent worker”, in which an attempt is made to highlight a wide range of individual psychological qualities of a specialist, which, in our opinion, correspond appropriately to the requirements of modern society: discipline, independence, communication, striving for self-development. In the context of the subject matter, such quality as the ability to self-improvement, which presupposes a process of independent learning, in which a person perceives the rules, transforms them at the subconscious level, taking into account developed abilities and needs, is of particular importance.

Based on today’s realities and the requirements of modern society, the leading task of the professional and pedagogical training of specialists in foreign language education is the formation and development of personality,
capable of subject-subject interaction in the process of organising a foreign learning space, creating an intellectual creative atmosphere, using innovative educational technologies. In accordance with this, the importance of the innovative component of the professional and pedagogical competence of the future teacher is significantly enhanced, which allows us to emphasise the role of the innovative competence of a specialist in the art industry in the conditions of modern education. Emphasising the importance of the innovative competence of a future specialist, it should be noted that its absence delays the professional development of a highly qualified specialist [18].

Based on the works of scientists on pedagogical innovation [7, 9], it was found that the innovative competence of a teacher is one of the subsystems of his general professional and pedagogical competence. In the context of the organisation of smart learning, the formation of the teacher's innovative competence ensures compliance with the general and specific requirements for the teacher's activities at all stages of the implementation of smart learning. The structure of the teacher’s innovative competence is represented by external (goal, means, object, subject, result) and internal (motivation, content, operations) components that ensure the implementation of pedagogical activities based on the principles, standards and technologies of modern education. The content of knowledge, skills, and abilities that ensure the effective use of technological innovations contributes to the effective implementation of the functions of innovative activities (gnostic, predictive, design, constructive, communicative, organisational) in accordance with modern trends of the information-oriented society development.

There are the following criteria for assessing the teacher’s innovative competence [19]:

- individual readiness for the demonstration of professional and pedagogical skills when solving standard and non-standard tasks;
- motivational values-based attitude towards technological innovations;
- adjustment level to new conditions for society development and modern requirements for specialists in the respective industry;
- availability of a system of theoretical knowledge and a set of practical skills;
- experience in applying knowledge in real situations of the pedagogical process;
- ability to creatively solve problem situations, possession of modern innovative teaching technologies;
- self-awareness and self-assessment of personal knowledge level, abilities, skills, opportunities necessary for the effective implementation of innovative activities;
- the ability to self-reflection and self-correction of their own innovative activities.

The innovative competence of a teacher of art specialties determines the use of updated, more effective forms, methods, means of teaching art history and, accordingly, allows to achieve qualitatively new results of mastering art history, obtained as a result of the implementation of technological innovations. In the process of scientific research, it was revealed that in the models of structures of innovative competence, there is a systemic combination of its social, personal and professional-technological spheres, which determine the high professionalism and pedagogical skill of the teacher. The level of development of the personality sphere directly affects the quality of the operational components of innovation, since the teacher's positive attitude to technological innovations, awareness of their importance ensures the effective use of innovations in the educational process, which determines the generation of new ideas and knowledge, the development of an innovative environment and modern society.

4. Characteristics of the Components of the Teacher’s Innovative Competence

Integrating the findings of previous study by scientists [1, 4], we define the innovative competence of a specialist as an integrative personality trait, which is the result of a combination of foreign language training, practical professional pedagogical and personal experience, which determines a high level of mastery of technological innovations and is a necessary requirement of modern education. Based on the analysis of scientific and pedagogical sources [2, 19], we consider it expedient to single out the following components of the innovative competence of teachers: social competency, motivational value competency, cognitive competency, technological competency, digital competency, reflexive regulatory competency.

Social competency is interpreted in pedagogical circles as the unity of social knowledge, skills, qualities and social experience of an individual. The presence of a social component in the general structure of the teacher's innovative competence ensures his ability for intellectual interaction in a social environment and his willingness to take responsibility for the results of the presented professional and pedagogical activities. We adhere to the opinion that social competence depends on the environment, the life of society, the social activity of the individual. It provides the ability to interact, the ability to overcome obstacles in everyday life, the skills to establish contacts, the ability to highlight important social and civic values, discursive skills, mobility and flexibility in various conditions of socialisation, ability to determine personal
role in society. In modern society, the process of socialisation of the teacher's personality, his personal and professional self-determination are closely related to the mastery of technological innovations that develop critical thinking, creativity, computer literacy, intercultural communication, the ability to act and cooperate in a smart society.

Considering the importance of technological innovations in the process of innovative education, the authors note that the development of innovative competence of future specialists is associated with the processes of socialisation and personal and professional self-determination by introducing innovative technologies for teaching art history in their own work experience. Thus, the concept of modelling competence is based on the concept of the composition, structure and functions of social experience [20]. Consequently, the development of the innovative competence of the future teacher provides for the presence of a social experience, which makes it possible to interpret already known information in a new way, to interact productively in a modern information-oriented intercultural society, using technological innovations to improve own professional and personal status in society.

An expressive social and professional position is one of the main requirements that are put forward for representatives of the teaching profession, in particular in the conditions of modern education. It is because of social and professional activity development that the teacher manifests himself as a subject of innovative activity. On the one hand, the teacher's behaviour depends on the high requirements, conditions and opportunities that a smart society sets before him, and on the other hand, the teacher's behaviour is governed by internal factors – needs, aspirations, values, motives and personal goals. The internal needs for achieving success, the subjective value attitude and the desire for professional self-realisation determine the presence of motivational and values-based competence in the implementation of the teacher's innovative activities.

As it is known, the problem of accounting for motives and incentives is considered as one of the leading in choosing an individual trajectory in the professional activity organisation, in particular innovative. So, the high professionalism of the teacher is conditioned, first of all, by the specific nature of the personality motivation, aspirations, values-based orientations and the like. The motivational sphere of innovative activity cannot be reduced only to the fulfilment of professional duties, this process also has a personal character, it requires taking into account those motives and incentives, life prospects of the teacher, which play the role of a system-forming factor in relation to other motives of innovative professional activity. In the structure of professional motivation, the following components are distinguished: vocational aptitude, intentions, needs for professional activity, motives, values, incentives, goals, expectations, individual meaning of professional activity, attitudes, readiness, interests [3]. On the basis of this, polymotivated nature of innovation is noted, the stimulation and activation of which is provided simultaneously by several dynamic, interdependent factors. The dominant motive is referred to as the system-forming factor that ensures the unification of individual structural elements of the motivational sphere. At the same time, motivational activity is directional.

Consequently, the motivational and value sphere is an important component of the teacher's innovative competence, which is designed to stimulate the teacher to continuous self-improvement, professional and intellectual development with the aim of self-realisation and competitiveness in a resource-rich society, which requires a “smart”, adaptive, flexible approach to the organisation of training.

Cognitive competence in the structure of a teacher's innovative competence is determined by the presence of a body of knowledge on technological innovations, which are used in solving problems in various conditions of professional and pedagogical interaction. The knowledge of the teacher of art specialties about the content and characteristics of innovative activities is the basis for the development and substantiation of innovative technologies for teaching art history in the context of modern education. To select existing effective technological innovations, update existing ones or design own technologies for teaching art history, a teacher must have a deep knowledge of innovative pedagogical technologies, the mechanism of their functioning, innovative approaches, concepts of teaching art, creativity, the ability to act and compete in the labour market in an innovative environment.

The modern smart society requires a teacher who teaches art history while constantly developing his cognitive abilities, systematically renew his intellectual and creative potential in modern society. The theory that
the intellectual ability of a person is the leading one turned out to be valuable within the framework of the study. The following components of intelligence are distinguished [11]:

- synthetic ability (unconventional approach to a problem, going beyond the limits of knowledge);
- analytical ability (identification of ideas for the purpose of their further development and implementation in practice);
- practical skills (the ability to present own innovative ideas and prove their effectiveness).

Technological competence in the structure of a specialist's innovative competence is represented by a set of diagnostics, designing, constructive, communicative and organisational skills in the use of technological innovations in the process of teaching art. Diagnostic skills involve the collection and analysis of information on innovative technologies for teaching art history. Design skills enable the development and design of technological innovations in art history teaching. Constructive skills allow to consciously perform actions for the rational implementation of technological innovations in the process of teaching art history. Communication skills include the teacher's ability to present material creatively, emotionally, to lead pedagogical discourse in a foreign language, to effectively solve communication problems in the process of innovative pedagogical activity.

As it is known, in recent years, the latest technologies have brought a lot of information, communication and technical capabilities to modern education. The allocation of digital competence as part of the teacher's innovative competence is predetermined by the need of modern society for the critical and responsible use and interaction of the teacher with digital technologies in order to create favourable conditions for the study and participation in a multicultural society. Digital competence is associated with the skills of a specialist in the art industry to use the didactic capabilities of digital technologies in the process of carrying out educational activities, exchange experience, information in the global educational environment, create and distribute digital content, etc.

The use of the ideology of reasonable teaching in the educational process also requires serious self-reflection and self-analysis of innovative pedagogical activity in order to clarify the main shortcomings, barriers in the process of such activities, eliminate them and correct further methods of training organisation. In accordance with this, we consider it expedient to single out reflexive and regulatory competence as a component of the teacher's innovative competence, which is expressed during the implementation in self-control, introspection and self-assessment of the results of the implementation of technological innovations, identifying the reasons for achievements and failures and timely adjusting the methods of innovative activity.

Gaining innovative experience is a rather difficult process, since it requires the implementation of the reflective activity of the acquired experience. Emphasising the special importance of the reflective component in the implementation of innovative learning technologies, it is defined as a "personal achievements regulator". Reflection of personal innovative activity allows to outline the ways of personal development and correction of self-education, stimulates self-knowledge, contributes to the improvement of professional and pedagogical skills and development of an individual style in the conditions of modern education. Reflexive and regulatory component of innovative activity of the teacher realised in the process of understanding the teacher's own professional expertise and experience of colleagues. Only conscious experience is important, because in the process of analytical activity, reflection is carried out, during which the transformation of "raw" experience into personal knowledge occurs. In the process of reflection and introspection, the teacher gains new knowledge that helps him to manage the strategy of his own self-development, to carry out a creative search, reaching new levels of his professional and pedagogical self-improvement. This is how the teacher's innovative competence is formed in the changing conditions of a modern "smart" society.

5. Conclusions

A modern competitive successful teacher must demonstrate sustainable skills in the use of digital technologies that ensure the interactivity of the learning process, increase the availability of teaching material, contribute to the development of skills for performing complex interdisciplinary tasks, increase students' interest in studying art, and contribute to the development of critical thinking. Consequently, in the context of the development of the modern information-oriented society, digital competence is one of the new requirements for the training and retraining of art critics in the field of modern education.

Thus, among the main trends in education in the context of global changes, we can name the following: changing the role of the teacher through the digitalisation of learning, individualisation of the educational process through adapted and personalised learning, learning through virtual reality, opening up new opportunities for formal assessment, gamification, creativity and innovation,
focus on development of practical skills and abilities of future specialists, and the like. One of the main educational trends of modern higher education is smart education, which is characterised by mobility, flexibility, provides for the generation of new ideas and knowledge, the development of critical thinking, creativity, digital literacy, and the like.

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