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Model of developing artistic and creative cultural values in prospective vocational education teachers

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In the current era of globalization, there is an increasing need to cultivate individuals who are not only intellectually enriched through the advancement of education, science, art, and culture but also creatively developed and culturally competent. Such individuals must be capable of integrating artistic creativity into their professional activities. In this context, fostering artistic and creative cultural values among prospective vocational education teachers emerges as a new and important area of research. This study aims to develop a structural-content model for developing artistic and creative cultural values in prospective vocational education teachers. The proposed model comprises three key components: target, content-procedural, and diagnostic-outcome sections. As part of the model, an elective course titled “artistic and creative cultural values” was developed. This course is designed to equip students with professional knowledge and creative skills necessary for organizing art-based instruction and engaging them in the appreciation and cultivation of artistic and creative cultural values.

KEYWORDS

model, artistic and creative cultural values, artistic creativity, prospective vocational education teachers, elective course

1 Introduction

In the current context of higher education, the growing demand for specialists with a deep mastery of new professional knowledge necessitates that their methodological competence, abilities, and qualifications meet modern standards. Their professional training must align with both educational and professional standards.

According to the [Concept of Cultural Policy of the Republic of Kazakhstan for 2023–2029 \(2023\)](#), “Contemporary Kazakhstani culture, grounded in the nation’s historical and cultural heritage as a genetic code, possesses all the prerequisites for active participation in the global cultural dialog. The main components of the national cultural code include heritage, tradition, customs, language, family, economic activity (lifestyle) systems, and celebrations.”

Cultural heritage is one of the essential elements of societal life ([Hani et al., 2012](#)). Encompassing works of art, it serves as a foundation for developing creative cultural values. The historical-philosophical study of cultural heritage strengthens spiritual culture ([Rahipova et al., 2020](#)). Research into cultural heritage, the support of traditional values, and the preservation of cultural-historical traditions are regarded as the basis for reviving and reinforcing the national cultural code through the development of artistic and creative cultural values.

Research has shown that creativity is a multifaceted human capacity to generate original ideas, discover new possibilities, and create novel outcomes. It is a vital quality for engaging in successful creative endeavors (Zhang et al., 2022). Creativity is a fundamental human trait that manifests in various contexts, including the production of artworks (Bryant & Throsby, 2006). Today, art is increasingly viewed as an integral part of everyday human life (Boorsma, 2006). In this regard, one of the key forms of introducing university students to the arts is through the transmission of cultural values in the system of art education.

Artistic and creative cultural values represent the process of expressing an individual's inner world, thoughts, feelings, and ideals through art. This creative activity involves conveying personal experience, cultural heritage, and natural phenomena in unique ways using various artistic tools. Works resulting from such creative endeavors not only satisfy aesthetic preferences but also contribute to the cultural development of society. In this sense, the process of creating artworks enables learners to express their ideas and emotions through artistic language.

Studying artistic and creative culture is a crucial area of research for reflecting both cultural heritage and the future of society. This is because artistic creativity is considered a form of cultural capital (Bennett et al., 2014).

In her exploration of creativity and culture, Rudowicz (2003) asserts that “creative expression is a universal human phenomenon that is firmly grounded in culture and has its own profound impact on culture itself.” Consequently, artistic and creative cultural values are methodologically examined within the context of intercultural studies. Independent and self-directed cultures tend to have a greater impact on the development of artistic creativity (Niu & Sternberg, 2001).

Throsby (2000) proposed several key characteristics of cultural values, including:

- Aesthetic value: beauty, harmony;
- Spiritual value: understanding, enlightenment, insight;
- Social value: connection with others, sense of identity;
- Historical value: connection with the past;
- Symbolic value: a repository or carrier of meaning.

These values serve as foundational elements in the development of artistic and creative cultural values.

The implementation of cultural and historical artistic projects and the study of cultural heritage stimulate students' interest in the arts and contribute to the formation of creative cultural values (Ivon & Kuscevic, 2013).

In her research, Stukalova (2017) identified the following general directions for cultural and creative development:

- Recognition of cultural values;
- Encouragement of self-improvement, self-education, and self-development;
- Development of a reflective stance;
- Enrichment of emotional responsiveness.

We believe that these directions will undoubtedly serve as the basis for developing artistic and creative cultural values.

Cultural values within the system of art education aim to broaden students' worldview, develop their aesthetic sensibilities,

and foster the acquisition of knowledge, skills, and competencies in the visual arts, ultimately supporting their creative development. This, in turn, creates a need to deepen students' engagement with their nation's spiritual heritage, national culture, customs, and artistic traditions.

In this context, the evolving demands of society call for an enhanced level of methodological preparedness among prospective vocational education teachers in teaching cultural values through the art education system. This includes the development and improvement of elective courses in teaching methodology, the creation of scientific and methodological resources, relevant literature, and the modernization of the entire system of art education. Consequently, this study focused on designing a structural-content model for developing artistic and creative cultural values in prospective vocational education teachers.

2 Methodology

2.1 Research design

The study employed quantitative research methods. It followed a design-based, conceptual research approach aimed at developing and testing a theoretically grounded educational model with potential for practical implementation and intercultural adaptation. The research can be classified as an educational design study with a focus on innovation in curriculum development.

The primary objective of the study was to explore and define the artistic and creative cultural values of prospective vocational education teachers. The research design is presented in Table 1.

Statistical methods were employed to analyze the data collected during the study. Each method was selected in accordance with the research objectives and aimed to ensure the reliability and validity of the findings. The difference between the experimental and control groups was assessed using the Mann–Whitney U test, with statistical significance determined at $p < 0.05$.

2.2 Research sample

A random sampling method was employed to select participants from the target population. The main advantage of this approach lies in the equal probability of selection for each member of the population, which enhances the representativeness of the sample and helps to minimize systematic errors in the research process.

The study involved a total of 136 students from three universities in the city of Shymkent: Central Asian Innovation University, Zhanibekov University, and M. Auezov South Kazakhstan University.

TABLE 1 Research design overview.

Component	Group control	Experimental group
Sample size	69 students	67 students
Instructional method	Traditional curriculum	Based on the elective course “artistic and creative cultural values”
Analysis	U Mann–Whitney test	U Mann–Whitney test

The participants were randomly assigned to two groups: the control group ($n = 69$) and the experimental group ($n = 67$). The control group followed the traditional curriculum, while the experimental group participated in a specially designed elective course titled “Artistic and Creative Cultural Values.” This course was implemented for third-year students majoring in Vocational Education. The course was conducted once a week and facilitated by Laura Umrallieva, the author.

2.3 Research instruments

To assess the artistic and creative cultural values of prospective vocational education teachers, a combination of questionnaires and project-based assessments was employed. The evaluation was structured around four key components: motivational, cognitive, activity-based, and reflective.

2.3.1 Motivational component

To assess motivation, a questionnaire titled “What is your level of motivation for developing artistic and creative cultural values?” was applied.

Objective: To measure students’ level of interest and motivation in engaging with artistic and creative cultural values.

The questionnaire helps identify key challenges and barriers students face, while also highlighting their readiness for artistic and creative development. Respondents evaluated 5 statements using a five-point Likert scale: (1—Strongly disagree; 2—Disagree; 3—Neutral; 4—Agree; 5—Strongly agree).

Statements:

- 1 Assess your enthusiasm for learning about artistic and creative cultural values.
- 2 Rate your motivation to use digital resources aimed at fostering artistic creativity.
- 3 Evaluate your aspiration to preserve and promote historical, cultural, aesthetic, and national values.
- 4 Rate your interest in studying Kazakh and foreign countries’ traditional clothing and art.
- 5 Assess your engagement in professional self-development.

Scoring scale:

- *Low (5–11 points)*: Shows minimal interest in learning about creative cultural values; lacks understanding of the importance of national traditions and professional growth.
- *Medium (12–18 points)*: Demonstrates basic motivation, some engagement with digital tools (e.g., virtual museums, exhibitions, VR); moderate interest in national culture and professional development.
- *High (19–25 points)*: Highly motivated, eager to use digital platforms, strongly interested in national heritage, and actively engaged in professional self-improvement.

2.3.2 Cognitive component

A second questionnaire was used to assess students’ understanding of the conceptual and analytical aspects of artistic creativity.

Objective: To evaluate the ability to analyze the conceptual content and identify key trends in art.

This questionnaire consisted of 7 items designed to measure students’ knowledge, critical thinking, and practical understanding of artistic creativity. Each response was scored as follows: low—1 point, medium—2 points, and high—3 points. Questions included prompts such as:

“Do you believe that national identity is reflected in Kasteyev’s artworks?”

Scoring scale:

- *Low (0–7 points)*: Cannot analyze artistic concepts or recognize artistic trends; demonstrates minimal awareness of personal artistic identity.
- *Medium (8–14 points)*: Shows some understanding of philosophical and scientific perspectives on art; limited recognition of teaching methods in artistic education.
- *High (15–21 points)*: Demonstrates deep knowledge of methods to develop students’ creative abilities; understands the role of art in professional subject teaching.

2.3.3 Activity-based component

To assess practical engagement, students were assigned a project-based task, where they designed and created an original applied art piece using materials such as wool, wood, textiles, or ceramics.

Objective: To apply artistic creativity in practice and demonstrate material handling skills and project planning using artistic methods.

During project defense, the following criteria were evaluated: originality of the idea, technological execution, material usage skills, and aesthetic quality.

Scoring scale:

- *Low (0–4 points)*: Passive engagement in demonstrating practical artistic skills; unable to connect theoretical knowledge with professional practice.
- *Medium (5–8 points)*: Shows inconsistent application of skills in educational settings; limited use of artistic methods across subject areas.
- *High (9–12 points)*: Demonstrates high proficiency in material handling and applying artistic methods to foster students’ creative development.

2.3.4 Reflective component

To assess cultural identity and self-reflection, a Likert-scale test was used to evaluate cultural awareness and intercultural competence.

Objective: To determine the student’s level of cultural identification and openness to cultural diversity.

Participants responded to 5 statements using a five-point Likert scale: (1—Strongly disagree; 2—Disagree; 3—Neutral; 4—Agree; 5—Strongly agree).

Statements:

- 1 I am aware of my national cultural values.
- 2 I find it easy to interact with people from different cultural backgrounds.
- 3 I believe culture is a core value.
- 4 I try to consider national and ethnic differences in communication.
- 5 I am open to accepting other cultures.

Scoring scale:

- *Low (5–11 points)*: Displays weak cultural identity; low interest in national heritage; limited intercultural openness; and cannot esteem professionally the perception of their abilities, their confidence in their future professions
- *Medium (12–18 points)*: Shows moderate implementation of professional skills acquired through practical experience in real professional contexts, and incomplete self-awareness as a future teacher, bearer of culture for identity formation.
- *High (19–25 points)*: Effectively applies professional skills and competencies in the educational process using modern educational technologies, and has a strong sense of connection with national or regional culture through involvement in traditional artistic practices.

The authors developed the questionnaire used in this study under the research objectives. The statements included in the questionnaire were derived from an analysis of both domestic and international scholarly literature on artistic and creative cultural values. To ensure content validity, the questionnaire was reviewed by subject matter experts. Their feedback was taken into account, and the statements were revised to align with the research goals and enhance clarity. This process contributed to the improvement of the reliability and accuracy of the research findings.

3 Results

3.1 Framework for designing a model

Our research aimed to develop a model for developing artistic and creative cultural values in prospective vocational education teachers. This model is designed to support the effective acquisition of knowledge, skills, and competencies by students while also fostering their motivation and readiness to engage in artistic creativity within the university learning process.

The concept of “model” has been explored by many scholars. [Conole et al. \(2005\)](#) define a model as “an abstract representation which helps to understand something that cannot be seen or experienced directly.” [Wright \(2014\)](#) emphasizes that “drawing a model or visualising it in the form of a diagram helps to convey how the elements connect.” Similarly, [Ludviga \(2023\)](#) notes that models are typically presented “as diagrams or schemas with boxes and arrows, illustrating the visualized relationships between variables.”

In our view, a theoretical model of the studied pedagogical phenomenon is designed to forecast the goal and expected outcomes of shaping future educators as professionals prepared for pedagogical activity that incorporates artistic creativity within higher education. The model also aims to structure student activities in interactive engagement with instructors, provide guidance for adjusting their pedagogical practices, assist in designing a system of pedagogical influences on the students’ professional and personal development, and supply mechanisms for the development of artistic and creative cultural values.

Among the numerous pedagogical models available, we have chosen a structural-content model, as illustrated in [Figure 1](#). The core

idea underpinning the design of the model is to manage the process of developing artistic and creative cultural values among prospective vocational education teachers in a goal-oriented manner aligned with the aims and objectives of professional education. As a process-oriented educational model grounded in constructivist learning theory and culturally responsive pedagogy, it reflects the dynamic interaction between students, artistic content, and the educational environment through clearly defined stages and developmental characteristics.

Based on an analysis of the professional practices of teachers who have successfully implemented the objectives of art education in schools, we identified the structural components of the model as follows:

- Target section,
- Content and procedural section,
- Diagnostic-outcome section.

3.2 Target section of the model

Let us consider in greater detail the sections of the proposed model.

The target section defines the overall goal and specific objectives of the process of developing artistic and creative cultural values in prospective vocational education teachers, as well as creating an educational environment that fosters artistic and creative cultural values.

The model we propose is oriented toward the goal of developing artistic and creative cultural values among prospective vocational education teachers.

From this goal, the following objectives are derived:

- 1) Integration of traditional and contemporary Kazakh and international artistic practices (e.g., sculpture, embroidery, and felt-making) into vocational teacher education programs, promoting the inclusion of culturally rich content;
- 2) Engagement of students in practical, project-based, creative, and reflective artistic activities, fostering active learning and cultural exploration;
- 3) Utilization of digital tools and platforms, including virtual environments, to enhance accessibility, visualization, and intercultural exchange in the educational process;
- 4) Development of key pedagogical competencies, supporting creative self-expression, professional identity formation, and cultural awareness in future educators.

3.3 Content and procedural section of the model

The content and procedural section includes the content of the author-developed elective course titled “Artistic and Creative Cultural Values.” The primary aim of this course is to develop students’ professional knowledge and creative skills related to the organization of art education and their engagement with artistic and creative cultural values. The thematic modules potentially covered in this elective course are outlined in [Table 2](#).

The central objective of the course is to foster artistic and creative cultural values among prospective vocational education educators.

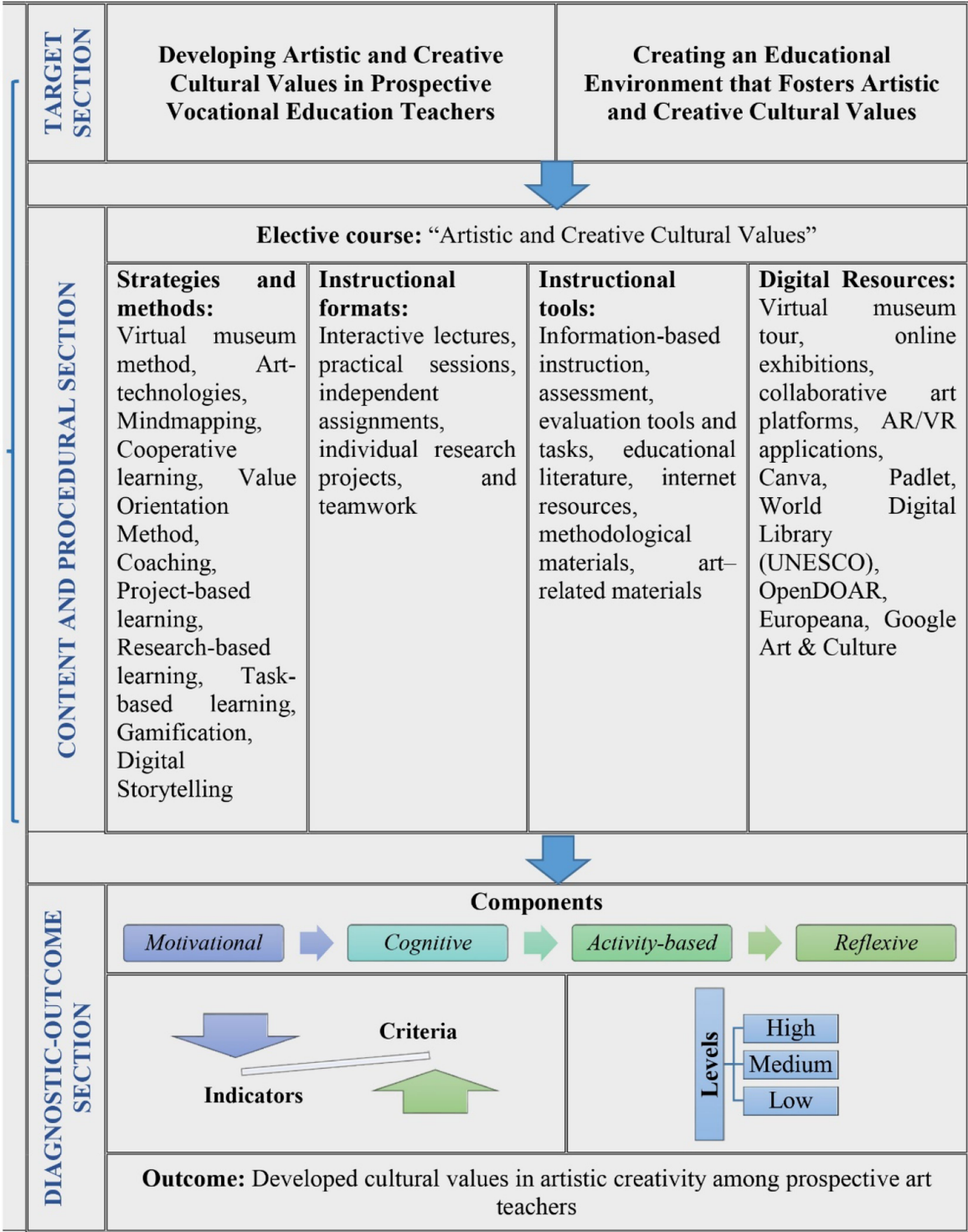


FIGURE 1
Model of developing artistic and creative cultural values in prospective teachers of vocational education.

Within the framework of this elective course, practical sessions were organized to familiarize prospective vocational education teachers more deeply with their nation's spiritual heritage, national culture, traditions, and the artistic and creative cultural values embedded in these customs. Creative projects (hands-on activities) were carried out in various areas, including “Felt-Making,” “Tapestry Weaving,” “Reed Mat Weaving” (shi toqū), “Embroidery,” “Sculptural Art,” and “Drawing” ([Appendix](#)).

Many components of the course curriculum are designed to promote student autonomy in learning, thereby encouraging active

TABLE 2 The plan of the elective course “artistic and creative cultural values.”

No.	Topics	Lecture (hours)	Practical classes (hours)	Lecturer's office hours	Independent student work (hours)
1	Theoretical foundations of artistic creativity	2	1	3	4
2	Types of artistic creativity and their interrelations	2	1	3	4
3	Research on artistic creativity	2	1	3	4
4	The issue of cultivating artistic creativity and cultural values in the education system	2	1	3	4
5	The creative culture and cultural values of the teacher and the learner	2	1	3	4
6	The virtual museum method as a tool for developing artistic and creative cultural values	2	1	3	4
7	The system of historical and cultural values	2	1	3	4
8	Research on traditional Kazakh and Turkish national ornaments	2	1	3	4
9	Traditional clothing and the art of jewelry making in Kazakhstan and EU countries	2	1	3	4
10	The art of Kazakhstani and Scandinavian Carpet Weaving	2	1	3	4
11	Kazakhstani and Mediterranean ceramics	2	1	3	4
12	The art of Kazakhstani and Hungarian embroidery	2	1	3	4
13	The art of Kazakhstani and Finnish felt making	2	1	3	4
14	The art of Kazakhstani and Italian sculpture	2	1	3	4
15	The art of Kazakhstani and Romanian woodworking	2	1	3	4
Total		30	15	45	60

assimilation of both theoretical knowledge and practical skills essential for artistic creativity within an art-educational context. This approach aims to prepare students for meaningful engagement with artistic and creative cultural values.

In addition, this section of the proposed model is represented through methods, tools, and instructional formats drawn from educational practice and conceptualized within didactic theory. Among these, the following strategies and methods are particularly emphasized: Virtual Museum Method, Art Technologies, Mind Mapping, Cooperative Learning, Value Orientation Method, Coaching, Project-Based Learning, Research-Based Learning, Task-Based Learning, Gamification, Digital Storytelling.

The instructional formats employed include: interactive lectures, practical sessions, independent assignments, individual research projects, and collaborative (team-based) work.

The instructional tools and resources integrated into the learning process comprise: information-based instruction, assessment and evaluation tools and tasks, educational literature, internet resources, methodological materials, digital (computer-based) resources, and art-related materials.

These strategies, methods, formats, and tools enable students to engage in practical, project-based, and reflective artistic activities.

A range of digital resources, including virtual museum tours, online exhibitions, collaborative art platforms, AR/VR applications, Canva, Padlet, the World Digital Library (UNESCO), OpenDOAR, Europeana, and Google Arts & Culture, enhances accessibility, visualization, and opportunities for intercultural engagement within the educational process.

3.4 Diagnostic-outcome section of the model

The diagnostic-outcome section of the proposed model is aimed at achieving the final goals of professional training for prospective vocational education teachers, namely, attaining a high level of development of artistic and creative cultural values.

Based on the results of theoretical research and the core principles concerning the development of artistic and creative cultural values among prospective vocational education teachers, we have developed a structural-component model. This model is conceptualized as a unified system consisting of four interrelated components: motivational, cognitive, activity-based, and reflective. The interconnectedness of these components ensures the stability and reliability of the results when assessing the effectiveness of the proposed elective course and facilitates the successful implementation of the overall model.

The motivational component serves a regulatory function within the structure of artistic and creative value development. It reflects the student's aspiration to improve their creative, organizational, methodological, and research activities in the professional domain, as well as their motivation to integrate artistic creativity with other scientific disciplines and to comprehend the specific role of artistic creativity in professional practice.

Indicators of the motivational component include:

- Demonstration of interest in learning about creative cultural values;
- Understanding of the importance of national traditions and professional growth;

- Practical application of digital tools and platforms (e.g., virtual museums, exhibitions, VR);
- Manifestation of interest in national culture and professional development.

The cognitive component involves a focus on creative, organizational-methodological, and research-oriented activities in the professional domain. It includes the integration of artistic creativity with other academic disciplines, the conceptualization of creativity in professional practice, engagement in research related to the analysis and interpretation of artistic materials, and the ability to adapt educational content to foster professional creativity.

Indicators of the cognitive component include:

- Analysis of the conceptual content and creative accomplishments of artistic works, along with the development of one's own artistic identity;
- Identification and interpretation of key artistic trends;
- Acquisition of philosophical and scientific worldviews;
- Understanding the importance of professional skills in the methodology of teaching artistic creativity;
- Comprehension of the essence of artistic creativity through specialized professional disciplines;
- Mastery of instructional methods and formats for fostering student creativity.

The activity-based component pertains to the practical implementation of artistic creativity. It includes following the correct technological sequence of creative processes, the ability to select appropriate methods for conducting artistic research, skills in working with various materials (e.g., silver, wood, wool, textiles, ceramics), and active participation in structured learning processes aimed at enhancing professional skills.

Indicators of the activity-based component include:

- Demonstrated ability to apply artistic creativity in developing professional competencies;
- Identification of the link between scientific-practical research in artistic creativity and knowledge gained through professional activity;
- Capacity to broaden the application of artistic creativity through professional coursework;
- High proficiency in applying methods and strategies to develop students' creative and technological abilities.

The reflective component evaluates the ability to apply acquired knowledge and skills in real-world settings. This includes a high-level understanding of the classification of artistic creativity, practical use of creative materials, effective application of research methodologies in vocational education, and the capacity to construct a purposeful educational trajectory for the development of professional creativity.

Indicators of the reflective component include:

- Ability to describe the properties of works of art based on modern educational technologies;
- Free application of professional skills and competencies in the educational process using modern educational technologies.

- Ability to implement professional skills acquired through practical experience in professional activities.
- Ability to esteem professionally the perception of their abilities, and their confidence in their future professions.
- Ability to be aware of themselves as a future teacher, bearer of culture for identity formation.
- Ability to strengthen a sense of connection with national or regional culture through involvement in traditional artistic practices.

An analysis of the criteria and indicators within each of the above components has allowed us to define three levels of development of artistic and creative cultural values in prospective vocational education teachers: low, medium, and high.

A low level of developing artistic and creative cultural values among prospective vocational education teachers is characterized by minimal interest in learning about creative cultural values; indifference and a weak understanding of the importance of national traditions and professional; an inability to analyze the conceptual content and creative achievements of artistic works or to develop one's own artistic identity; indifference toward identifying and navigating key trends in the arts; a passive stance on demonstrating practical skills in applying artistic creativity to the development of professional competencies; and a lack of engagement with opportunities to identify the interconnection between scientific-practical research in professional creativity and knowledge gained through professional training. Students at this level are unable to describe the properties of works of art using modern educational technologies and cannot professionally esteem the perception of their abilities, their confidence in their future professions.

A medium level is marked by basic motivation, some engagement with digital tools (e.g., virtual museums, exhibitions, VR), moderate interest in national culture and professional development; incomplete practical use of processes such as perception, interpretation, revision, and presentation in artistic activity; vague and insufficiently developed ideas about scientific and philosophical worldviews; and a limited ability to recognize the relevance of professional skills in mastering pedagogical methods of artistic creativity. Students at this level demonstrate partial capability in expanding the scope of artistic creativity through engagement in profession-oriented courses. They apply their professional skills and competencies inconsistently within the educational process and rarely utilize modern educational technologies. Nevertheless, they are able—with minor deviations—to implement professional skills acquired through practical experience in real professional contexts, and show incomplete self-awareness as a future teacher, bearer of culture for identity formation.

A high level reflects a clearly expressed desire to use digital platforms, as well as a strong interest in national heritage, and actively engaged in professional self-improvement; the cognitive component at this level is represented by deep knowledge of methods and forms for fostering students' creative development and a strong understanding of the conceptual content of artistic creativity through specialized coursework. Students at this level demonstrate high proficiency in applying methods and forms that support the development of students' innate technological and creative capabilities. They are also able to effectively apply professional skills and competencies in the educational process using modern educational technologies, and have a strong sense of connection with national or regional culture through involvement in traditional artistic practices.

3.5 Statistical analysis and results

Before conducting the main statistical analysis, the collected data were tested for normality and homogeneity of variance. The Shapiro–Wilk test indicated that the data were not normally distributed ($p \leq 0.05$), and the assumption of homogeneity of variances was also violated. Consequently, the non-parametric Mann–Whitney U test was employed instead of the parametric t -test (according to Pre-test results in Table 3).

As shown in the table, the mean ranks of the two groups are very similar, indicating that the initial conditions at the pretest stage were equivalent. The mean ranks are approximately equal (17.06 and 16.94), suggesting that both groups demonstrated comparable performance prior to the intervention. This finding is further supported by the p -value (0.971) presented in the Test Statistics (Table 4).

The Mann–Whitney U test results for the pre-test phase showed no statistically significant difference between the control and experimental groups ($U = 135$, $Z = -0.037$, $p = 0.971$). This suggests that both groups started from a similar baseline. The exact significance value ($p = 0.986$) further confirms the absence of significant differences. The effect size ($r = -0.003$) was also negligible, indicating equivalence between groups at the beginning of the study. Post-test results are outlined in Table 5.

In the post-test phase, the experimental group had a significantly higher mean rank (20.97) compared to the control group (12.78), suggesting an observable difference in outcomes following the intervention (Table 6).

The Mann–Whitney U test revealed a statistically significant difference between the groups in the posttest stage ($U = 68.5$, $Z = -2.452$, $p = 0.014$). Since the p -value is below the 0.05 threshold, this result indicates that the experimental group outperformed the control group after the intervention. Although the effect size was small ($r = -0.21$), the results demonstrate a positive and meaningful improvement in the experimental group, supporting the effectiveness of the applied intervention.

4 Conclusion

In this study, quantitative research methods were effectively integrated to ensure a comprehensive approach to data collection and analysis. A total of 136 students from three higher education institutions were randomly selected as participants. To evaluate the motivational component of the proposed model, a questionnaire titled “What is your motivation for developing artistic and creative cultural values?” was administered. The cognitive component was assessed through tasks involving the interpretation and analysis of the conceptual content of artworks, as well as a questionnaire aimed at identifying key trends in art. The activity-based component was examined through project-based assignments, while the reflective component was measured using a cultural identity test. Assessment was conducted using a three-level scale: low, medium, and high. This indicates that the experimental group was positively influenced by the intervention and demonstrated significant development as a result. Overall, the applied methods ensured the scientific rigor of the study and contributed to the reliability of its findings.

The proposed model is aimed at developing artistic and creative cultural values in prospective vocational education teachers. This

TABLE 3 Ranks for pre-test scores.

Group	Mean rank	Sum of ranks
Control	17,06	273,00
Experimental	16,94	288,00

TABLE 4 Mann–Whitney U test results (pre-test).

Test statistics ^a	Pre-test
Mann–Whitney U	135.000
Wilcoxon W	288.000
Z	−0.037
Asymp. Sig. (2-tailed)	0.971
Exact Sig. [2*(1-tailed)]	0.986 ^b

^aGrouping variable: group.

^bNot corrected for ties.

TABLE 5 Ranks for posttest scores.

Group	Mean rank	Sum of ranks
Control	12.78	204.50
Experimental	20.97	356.50

TABLE 6 Mann–Whitney U test results (post-test).

Test Statistics ^a	Post-test
Mann–Whitney U	68.500
Wilcoxon W	204.500
Z	−2.452
Asymp. Sig. (2-tailed)	0.014
Exact Sig. [2*(1-tailed)]	0.014 ^b

^aGrouping variable: group.

^bNot corrected for ties.

model encompasses the target, content and procedural, and diagnostic-outcome sections, the content of the elective course entitled “artistic and creative cultural values,” as well as the methods, instructional formats, and tools designed to develop such values. It also includes motivational, cognitive, activity-based, and reflective components, along with their respective indicators and criteria.

This model is intended to provide methodological support for students of vocational education in mastering cultural values within the framework of art education. The process contributes to shaping the inner world of a creative learner, enriching society spiritually, forming cultural values, and expressing individual worldviews through artistic language.

The elective course draws on the rich history, profound content, and diverse artistic characteristics of Kazakh national art, exerting a significant cultural, aesthetic, and emotionally intellectual influence on future teachers of vocational education. Undoubtedly, it enhances their artistic and creative competencies.

In developing this course, special attention was given to its intercultural adaptability and flexible structure. This structure allows for integration into European educational systems, which are characterized by diversity and a strong emphasis on learner-centered approaches.

Thus, the proposed model supports adaptation to European cultural contexts and fosters a deeper connection with national heritage within an international artistic framework. It also encourages students to explore the role of art in shaping social identity and promoting intercultural dialog. Through tools such as comparative art projects and digital storytelling, future educators are equipped to implement culturally responsive teaching methods and to foster mutual respect within diverse learning environments.

Moreover, the use of various digital resources and tools—including virtual museum tours, online exhibitions, and other digital art platforms—broadens access to global artistic practices, cultural heritage sites, research in art education, and case studies on creativity and cultural learning. This approach contributes to intercultural communication and supports the digital transformation of arts education.

In summary, the significance of artistic and creative cultural values encompasses several key aspects:

- 1 Self-expression: Through artistic creativity and cultural values, individuals convey their emotions, thoughts, aspirations, and personal experiences.
- 2 Representation of the world: Art serves as a medium through which individuals aesthetically depict their environment, nature, society, and human relationships.
- 3 Aesthetic impact: The primary aim of artistic creativity is to cultivate aesthetic values and to evoke deep emotional and intellectual responses.
- 4 Social relevance: Artistic creativity enriches the spiritual life of society and contributes to cultural development. Art functions as a medium for expressing the ideals and values of both individuals and society as a whole.
- 5 Imagination and creative freedom: Artistic creativity fosters imagination and creative freedom, enabling the generation of new ideas, forms, and meanings.

Looking ahead, we plan to integrate this research into the curriculum for vocational education majors. To enhance the outcomes of this study, the following steps are proposed:

- Refining the content of the elective course by incorporating feedback from university faculty, and subsequently implementing and evaluating the “artistic and creative cultural values” course within higher education curricula;
- Effectively assessing the potential of Kazakhstani and European national art in developing the creative competencies of prospective vocational education teachers;
- Disseminating the research findings concerning the educational objectives of artistic and cultural values, their artistic development, and the revival of traditional continuity;
- Enhancing innovative methods and digital resources to cultivate cultural values in artistic creativity.

Data availability statement

The original contributions presented in the study are included in the article/[Supplementary material](#), further inquiries can be directed to the corresponding author.

Ethics statement

Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

Author contributions

LU: Visualization, Formal analysis, Conceptualization, Writing – review & editing, Writing – original draft. MT: Writing – original draft, Data curation, Conceptualization, Writing – review & editing. KM: Writing – original draft, Data curation, Writing – review & editing. ZB: Writing – review & editing, Validation, Formal analysis, Writing – original draft. BK: Resources, Writing – review & editing, Data curation, Writing – original draft.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/feduc.2025.1631036/full#supplementary-material>

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