

Research on the Talent Cultivation Mode of Art Education in Universities Based on Interdisciplinary Perspective

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Abstract:

In the current era of deep integration of social culture and increasingly blurred industrial boundaries, the talent cultivation of art education in universities faces the urgent challenge of breaking through the confines of a single discipline and responding to the demand for compound innovation. This study is based on an interdisciplinary perspective, systematically examining the core challenges of talent cultivation models in higher education art education, and deeply analyzing their structural causes: knowledge integration barriers caused by strict disciplinary barriers, lack of cross domain integration due to rigid curriculum structures, composite teaching abilities constrained by a single teacher structure, and collaborative innovation shortcomings reflected by a lack of practical platforms. In response to the above difficulties, research focuses on building a core optimization path: breaking knowledge barriers by reconstructing modular interdisciplinary course clusters, innovating project driven collaborative teaching models to stimulate integrated practice, cultivating and introducing composite teacher teams to support cross teaching, and integrating multiple practical resource networks both inside and outside the school to build a collaborative education platform. The research results aim to provide theoretical reference and practical framework for reforming the ecology of art education in universities and cultivating composite art talents that can meet the needs of future social development.

Keywords:

College Art, Talent Cultivation, Interdisciplinary Perspective, Curriculum Restructuring, Project-driven

1. Introduction

In the era of deep integration of technology and humanities, college art education is facing unprecedented opportunities and challenges. The traditional single disciplinary training model is difficult to respond to the society's demand for composite art talents. The constraints of disciplinary barriers, rigid curriculum structures, limited teacher capabilities, and lack of practical platforms have hindered the innovative vitality of art

education. This article is based on an interdisciplinary perspective, exploring the path of talent cultivation in college art education, in order to provide theoretical reference and practical inspiration for building an open, collaborative, and innovative art education ecosystem.

2. The Significance of Cultivating Talents in Art Education in Universities from an Interdisciplinary Perspective

As the wave of technology continues to reshape the boundaries of artistic creation, social change increasingly calls for new artistic talents who possess both aesthetic insight and cross-border integration capabilities. Interdisciplinary perspectives are like a light that penetrates the fog, illuminating the deep meaning of the reform of art education in universities. It is not simply a combination of courses, but a re anchoring of the essence of art education - in the current era of artificial intelligence impacting traditional skill values, art education must transcend the physical boundaries of art studios and canvases, and fuse technological ethics, humanistic spirit, and social issues into a new knowledge graph. This fusion elevates aesthetic education from imparting techniques to incubating creativity: students decode the visual logic behind digital media, understand the sociological context of design thinking, and think about cultural inheritance in virtual reality creation, gradually transforming into cultural codebreakers who can handle complex contexts. More importantly, interdisciplinary education endows artistic talents with an irreplaceable humanistic warmth: when the medical and health fields require artistic healing solutions, and urban and rural renewal projects crave spatial aesthetic intervention, they can use critical thinking to bridge the gap between art and social needs, shifting art education from “skill inheritance” to “value creation”. This is not only an inevitable choice to respond to the propositions of the times, but also a spiritual beacon for art education to regain vitality - it allows the brush to no longer be isolated from the easel, but become a resilient link connecting the human spirit and the reality of the earth.

3. The Main Difficulties in the Current Talent Cultivation Mode of Art Education in Universities

3.1. Strict disciplinary barriers hinder the integration and cross penetration of knowledge

Currently, there is a widespread dilemma in the disciplinary structure of art education in universities, which has become the primary obstacle to knowledge integration and cross penetration. This barrier is mainly reflected in the rigid division of departmental majors and the self isolation of the curriculum system. Traditional art departments are often strictly divided based on single disciplines such as painting, design, and historical theory, forming relatively independent teaching units and evaluation systems. The curriculum is mostly focused on the core skills and knowledge depth of the subject, with few mechanistic designs that actively break disciplinary boundaries, systematically integrate interdisciplinary content such as humanities and social sciences, science and technology, digital media, and even business management. For example, students majoring in visual communication design may lack a systematic understanding of cutting-edge interactive technologies or user psychological cognition, while students majoring in pure art may have less exposure to knowledge related to art market operations or cultural heritage protection. Teachers' knowledge structure and research perspectives are often limited to their

own disciplinary fields, and substantive teaching discussions and collaborative project development between teachers with different disciplinary backgrounds are relatively weak. The structural disconnection between disciplines, characterized by a lack of interaction, results in students' knowledge structures appearing as "isolated islands" with more depth but less breadth. Their artistic thinking, creative vision, and problem-solving abilities are difficult to break through the confines of a single discipline, and they are unable to effectively perceive and respond to the increasingly prominent interdisciplinary and integrated issues in social and cultural development. This seriously restricts the cultivation of innovative artistic talents and makes it difficult to cope with the trend of deep integration between art, technology, culture, and industry [1].

3.2. The course structure is rigid and lacks cross domain integration system design

The current curriculum system of art education in universities still largely follows the traditional disciplinary framework for a long time, showing significant solidification characteristics. The core issue lies in the failure to establish an effective cross domain integration system design mechanism. Specifically, there are clear barriers between course modules, and courses in related fields such as basic skills training, professional core courses and theoretical literacy, humanities and social sciences, cutting-edge technologies (such as artificial intelligence and virtual reality), and business management are often in a fragmented state, lacking organic connection and deep integration. This "combination style" rather than "compound style" course arrangement leads to a discontinuity in the knowledge spectrum, making it difficult for students to form a coherent thinking mode and comprehensive ability to solve complex problems. The logical connections between courses are loose, and there is a lack of project-based, problem oriented integrated courses that revolve around specific themes or complex problem-solving and span across multiple knowledge domains. This limits interdisciplinary knowledge to surface level contact and makes it difficult to internalize as a core competency for students, which hinders the development of their cross-border integration, innovation, and knowledge transfer abilities needed in the future art ecology [2].

3.3. The teacher structure is single, and the comprehensive teaching ability is generally insufficient

The structural shortcomings of the current art education faculty in universities are mainly reflected in the dual singularity of sources and abilities, which has become a key bottleneck restricting the cultivation of interdisciplinary talents. On the one hand, the main body of the teaching staff is still based on traditional art disciplines, and has long been deeply rooted in a single professional field. They generally lack in-depth understanding and effective integration ability of the knowledge system, thinking methods, and cutting-edge dynamics of related disciplines such as design, art theory, humanities and social sciences, and technological applications. The limitations of this knowledge structure often make it difficult for teachers to guide students in deep knowledge transfer and creative integration when faced with interdisciplinary curriculum design or project guidance. On the other hand, teaching ability shows a clear tendency towards specialization rather than complexity. Although most teachers are proficient in their respective fields of teaching, they generally lack the ability to organically integrate knowledge, skills, and perspectives from different disciplines and transform them into effective teaching practices. For example, in new teaching

scenarios such as artistic creation that integrates technological means and design research that combines social issues, there are obvious deficiencies in teaching interdisciplinary knowledge, organizing interdisciplinary collaboration, and comprehensive guidance of innovative thinking. In addition, the systematic training mechanism for improving teachers' interdisciplinary competence is not yet sound, and the evaluation system has not fully motivated teachers to transform into "dual teacher" or "multi skilled" types, resulting in slow improvement of the composite teaching ability of the teaching staff and difficulty in meeting the urgent demand for cross-border integration talent cultivation in the new era of art education [3].

3.4. Lack of practical platforms: collaborative innovation mechanism is not yet sound

The practical stage is a key field for connecting interdisciplinary knowledge and honing composite abilities. However, current art education in universities generally faces constraints such as lagging construction of practical platforms and poor operation of collaborative mechanisms. On the one hand, there is a clear barrier between on campus and off campus resources. The resources such as laboratories, studios, and maker spaces between different departments and majors on campus are often fragmented, and the sharing channels are not smooth, making it difficult to support the deep incubation of interdisciplinary projects; The breadth and depth of substantive cooperative relationships established with industry leaders, cultural and creative institutions, cutting-edge technology companies, etc. outside the school are both insufficient. The integration of industry and education, as well as the integration of arts and sciences, often remains at the level of shallow project cooperation or short-term internships, failing to form a stable, in-depth, and sustainable platform for resource sharing and collaborative education. On the other hand, there is a lack of long-term mechanisms for collaborative innovation. The initiation, operation, evaluation, and achievement transformation of interdisciplinary practice projects lack effective institutional guarantees and driving mechanisms. The roles and responsibilities of teachers and students from different disciplinary backgrounds, internal and external mentors, and enterprises in the project are often unclear, resulting in low collaboration efficiency and difficulty in consolidating innovative synergy.

4. Construction of the Core Path for Talent Cultivation in Art Education Based on Interdisciplinary Perspective

4.1. Refactoring the curriculum system and creating a modular interdisciplinary cluster

The key to breaking through the shackles of traditional art education that adheres to a single disciplinary boundary and transforming the talent cultivation model lies in the structural reconstruction of the curriculum system. The core lies in deconstructing the linear curriculum chain that originally focused on technique training and imparting knowledge of a single art category, and replacing it with an open, flexible, and dynamically combinable modular interdisciplinary cluster. The specific construction path includes: firstly, consolidating the "basic sharing" layer, offering general core course modules that integrate humanities and social sciences, natural sciences, digital technology, and other fields to all art major students, such as art philosophy and technology ethics, materials science and visual expression, data analysis basics and art

applications, aiming to broaden cognitive horizons and lay the knowledge foundation for interdisciplinary thinking. The second is to refine the “professional core” layer, while ensuring the depth of knowledge and professional skills improvement of the art discipline itself, organically embedding interface courses or units that integrate with related disciplines, such as traditional painting innovation guided by design thinking, public art planning from a social anthropological perspective, etc., to promote students to naturally develop cross-border awareness and abilities in professional cultivation. The third is to activate the “cross-border integration” layer, designing highly integrated “project-based” or “thematic” interdisciplinary course modules around specific cutting-edge issues or complex social needs (such as sustainable design, cultural heritage revitalization, intelligent media art, etc.). These modules are collaboratively developed and taught by teachers from multiple fields such as art, design, technology, humanities, and business. They guide students to form interdisciplinary teams and achieve active knowledge transfer, integration, and internalization of innovative abilities in solving real or simulated comprehensive problems [4].

4.2. Innovative teaching mode, promoting project driven collaborative learning

Breaking through the limitations of traditional one-way classroom teaching, project-based collaborative learning transforms real social issues into teaching engines, allowing interdisciplinary knowledge to naturally integrate in dynamic practice. Teachers are no longer limited to demonstrating techniques, but rather act as project mentors to guide students in forming interdisciplinary groups - for example, around the topic of “Community Public Art Transformation”, design, sociology, and environmental engineering students jointly investigate residents’ needs, analyze spatial data, and collaborate to complete the entire process of creation from conceptual proposals to physical models. This model achieves deep learning through three stages: in the project establishment stage, students need to independently search and integrate interdisciplinary literature such as art history, cultural policies, and material technology; In collaborative execution, regular critical group discussions force members to break free from fixed thinking patterns. For example, when digital media majors explain interactive logic to traditional painters, it stimulates a re examination of the narrative structure of two-dimensional images; The final outcome evaluation introduces a dual track system, which not only assesses the completion of aesthetics, but also focuses on the integration quality of interdisciplinary thinking in the plan. When students actively use programming skills to improve dynamic devices or consult local chronicles to deepen visual expression for cultural heritage protection projects in order to solve specific problems, knowledge acquisition shifts from passive acceptance to active construction. This teaching transformation, which is anchored by problems and linked by collaboration, not only hones students’ abilities in resource integration and team leadership, but also cultivates core competencies for cross disciplinary innovation through real cognitive collisions.

4.3. Optimize the teaching staff and cultivate and introduce a composite teaching staff team

The structural transformation of the teaching staff is the core driving force for breaking down disciplinary barriers, and it is necessary to reconstruct the teacher development ecology through a dual track system. On the one hand, we will implement a cross domain competence cultivation plan, establish a normalized teacher

workshop mechanism, and conduct in-depth training around cross disciplinary fields such as digital art technology and cultural heritage protection. The focus will be on strengthening teachers' understanding and application abilities of related subject knowledge spectrum, such as guiding traditional painting teachers to master basic programming logic to expand the dimensions of digital media creation; On the other hand, we will promote flexible talent introduction projects, systematically introduce industry experts and scholars with interdisciplinary backgrounds, and pay special attention to attracting practical talents with composite resumes such as "art+technology" and "design+sociology". We will establish specially appointed professor mobile positions to achieve knowledge feedback. In specific teaching implementation, innovative construction of interdisciplinary teaching and research communities, breaking through departmental administrative boundaries to form specialized teaching teams, and adopting a "dual mentor collaborative guidance system" to ensure the professional depth of project-based courses - when art teachers and engineering mentors jointly guide students to solve the structural stability problems of intelligent devices, the collision of cognitive logic in different disciplines directly catalyzes a qualitative breakthrough in teaching energy efficiency. The key value of this mechanism lies in the continuous participation of teachers in interdisciplinary teaching practices, gradually completing the role evolution from a single skill transmitter to a knowledge integration catalyst, expanding their own cognitive boundaries and innovating teaching paradigms to form a two-way mutual benefit, ultimately forging a dynamic teacher matrix that can handle complex knowledge networks.

4.4. Building multiple platforms and integrating on campus and off campus practical resource networks

Breaking down the physical boundaries and disciplinary resource barriers on campus, and building an open and collaborative network of practical resources, is a key support for the implementation of interdisciplinary art talent cultivation. The primary task is to systematically integrate fragmented resources within the school. It is necessary to break down the division of departments and promote the opening and sharing of physical spaces such as art studios, studios, digital media laboratories, and material workshops to relevant disciplines throughout the school. Functional restructuring and equipment upgrades should be carried out based on interdisciplinary project needs to form a comprehensive practice base group on campus that supports diverse creation and experimentation. The core lies in deeply activating high-quality resources outside the school. Actively linking with social forces such as art museums, design institutions, intangible cultural heritage workshops, technology enterprises, and community cultural centers, we introduce cutting-edge industry trends, real project requirements, and diverse cultural fields into teaching practice through models such as co building joint laboratories, setting up off campus mentor workstations, and developing customized internship projects. For example, collaborating with technology companies to explore new media art expression, or partnering with communities to carry out public art planning. The key is to establish a long-term collaborative mechanism. Establish a two-level resource coordination organization between schools and colleges, responsible for information release, demand docking, project evaluation, and risk management. Utilize digital platforms to establish resource libraries and project pools, and achieve dynamic matching and efficient circulation of resources both inside and outside the school. By constructing a three in one practical resource matrix of "on campus base group off campus collaboration

network digital management platform”, it provides rich fields, real situations, and sustained motivation for interdisciplinary art education, empowering students to break through a single disciplinary perspective and achieve knowledge integration and ability leap in diverse practices.

5. Conclusions

The innovation of talent cultivation mode in college art education from an interdisciplinary perspective is a key path to solving traditional difficulties and responding to the needs of the times. This study systematically sorted out core issues such as disciplinary barriers and curriculum solidification, proposed integrated solutions such as curriculum restructuring and teaching innovation, and emphasized the promotion of knowledge integration and practical collaboration through modular clusters and project driven approaches. In the future, it is necessary to continuously deepen teacher training and platform construction, strengthen school enterprise cooperation, and use dynamic optimization mechanisms to address the challenges of the integration of art and technology, ultimately enhancing the core competitiveness and social adaptability of talents.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

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