

Influence of Design Thinking in Art and Design Majors on Cultivating College Students' Creativity

Guozhen Gao¹, Dubae Jeong²

¹Guangdong Polytechnic of Science and Trade, 511500 Guangzhou, China

²Department of Human Services, Sehan University, 58447 Yeongam gun, Jeollanam do, South Korea

Abstract: *This study aims to explore in depth how the design thinking of college students majoring in art and design has a profound and lasting impact on creativity. This study comprehensively reveals the positive role of design thinking in multiple dimensions, including stimulating innovative thinking, promoting the improvement of practical operation ability, and cultivating keen aesthetic ability. Design thinking, as a systematic and creative way of thinking, encourages students to examine problems from multiple perspectives, challenge traditional concepts, and continuously explore new possibilities in artistic creation. Furthermore, this article analyzes how the positive effects brought about by design thinking are subtly transformed into an enhancement of students' creativity in daily life and learning. Design thinking is not limited to professional fields; it can also enable students to more sensitively capture inspiration in their daily lives and face various challenges with a more open and flexible mindset. In addition, the multiple factors that affect the cultivation of design thinking, such as educational resources, teaching methods, and personal learning habits, are discussed in depth, and targeted training strategies and suggestions are proposed. These strategies aim to help art and design students develop their design thinking more effectively, thereby promoting a leap in their overall creativity and laying a solid foundation for their future careers.*

Keywords: Art and design major; Design thinking; Daily creativity; Innovative thinking.

1. Introduction

In rapidly changing modern society, innovation and design thinking have become important indicators for measuring an individual's comprehensive abilities. As an important platform for cultivating innovative talent, the cultivation of design thinking is particularly important in the education system of art and design majors. Design thinking is a systematic way of thinking that emphasizes solving practical problems for specific groups of people from the user's perspective through empathy, defining problems, creative ideation, prototyping, testing feedback, and ultimately implementation. This way of thinking is not limited to the field of design but can be widely applied in daily life and work. The integration of design thinking in art and design education not only enhances students' professional skills but also, more importantly, cultivates their innovative thinking and daily creativity. The cultivation of this ability not only helps students stand out in their future careers but also injects new vitality into the innovation and development of society. This article starts from the concept of design thinking and explores its specific impact on the daily creativity of art and design majors to provide a reference for relevant educational practices [1].

2. The Concept and Characteristics of Design Thinking

Design thinking, a user-centered and problem-solving mindset, is gradually becoming an important force driving social innovation and progress. Its core lies in a series of observation, imagination, experimentation, and reflection processes, which are interrelated and together form a complete framework aimed at exploring and locking in the optimal solution to the problem through creative means. In the field of art and design, which is full of infinite possibilities, the role of design thinking is particularly prominent. It is not only related to creating beautiful and practical works of art but also leads designers to deeply consider how to meet people's

growing and diverse needs through innovative design, thereby improving the quality of life of the public and truly integrating art into and serving people's daily lives.

The reason why design thinking can become the soul of the field of art and design is largely due to its unique fusion: it cleverly combines the rigor of scientific thinking with the creativity of artistic thinking, endowing designers with the ability to address complex problems comprehensively. This integration is reflected not only in the in-depth analysis of problems but also in the ability to break out traditional frameworks and explore unprecedented solutions through discontinuous and jumping thinking. The openness of design thinking encourages designers to maintain curiosity about new things and constantly absorb new knowledge; innovation drives them to have the courage to try and break through; and comprehensiveness and systematicity ensure that while creativity flourishes, various factors can be comprehensively considered to ensure the feasibility and sustainability of the design.

In addition, design thinking also exhibits clear, precise, and logical characteristics, which enables designers to advance in an orderly manner during the creative process, from conceptual conception to detail polishing, each step on the basis of in-depth thinking and precise judgment. This way of thinking not only improves the quality of design works but also exercises the comprehensive quality of designers, enabling them to face complex and ever-changing design challenges more calmly and creating works that meet market demand and are full of artistic charm.

3. The Impact Mechanism of Design Thinking on Daily Creativity

3.1 Stimulating Innovative Thinking

The core of design thinking lies in innovation. Through systematic design thinking training, college students majoring

in art and design have learned to observe problems from different perspectives, break free from conventional thinking constraints, and seek new solutions. The infiltration of this way of thinking in daily life enables students to more sensitively capture the sparks of creativity, be brave enough to try new things, and continuously enhance their daily creativity [2].

3.2 Promotion of Practical Operations

Design thinking is not just a theoretical exploration but, more importantly, a practical operation. In art and design education, students need to verify and improve their design ideas through extensive hands-on practice. This practical process not only exercises students' hands-on ability but also enables them to continuously accumulate experience and discover new creative points in practice. The accumulation of practical experience greatly promotes students' creativity in daily life.

3.3 Cultivating Aesthetic Ability

Art and design majors have high requirements for aesthetic ability. Design thinking further enhances students' aesthetic abilities by guiding them to pay attention to aesthetic elements, details, and quality. This improvement in aesthetic ability is reflected not only in professional work but also in students' daily lives, making them more adept at discovering beauty and creativity in life and thus integrating more aesthetic elements into daily creation.

4. Factors Affecting the Cultivation of Design Thinking

Multiple factors influence the cultivation of design thinking, which are intertwined and jointly affect an individual's growth process. These factors can be roughly classified into three categories: individual factors, educational factors, and environmental factors. Individual factors mainly involve an individual's intelligence level, nonintelligence factors, and personality traits, which determine their potential and tendencies in design thinking. Educational factors include teaching content and methods, faculty strength, and the evaluation system, which directly shape students' learning experience and thinking habits. Environmental factors, such as campus culture, practical opportunities, and social support, provide necessary external conditions and incentives for the cultivation of design thinking. These three factors interact with each other and jointly affect the cultivation effect of design thinking.

4.1 Knowledge Level

The knowledge level of a designer is an important factor affecting their design thinking ability. A rich knowledge reserve can provide a solid intellectual foundation for design thinking, enabling students to think and analyze from multiple perspectives when facing problems [3].

4.2 Observational and Analytical Skills

Sharp observation and comprehensive analysis skills are important components of design thinking. Designers need to discover the essence and potential needs of problems through

careful observation and analysis and then propose innovative solutions [4].

4.3 Imagination and Curiosity

Rich imagination and strong curiosity inspire design thinking. Designers need to have a broad view and unlimited imagination, dare to challenge traditional concepts, and explore unknown fields; meanwhile, curiosity drives them to constantly ask questions and seek answers, providing a constant source of motivation for design thinking [5].

5. Strategies and Suggestions for Cultivating Design Thinking

The cultivation strategies and suggestions for design need to consider multiple factors comprehensively. First, attention should be given to stimulating individual potential, guiding students to actively explore and innovate by providing diverse learning resources and practical activities. Second, in terms of education, the curriculum should be optimized, practical teaching should be strengthened, and the construction of teaching staff should be enhanced to improve the teaching level and innovation ability of teachers. Finally, creating a positive learning environment is crucial, including establishing an open and inclusive campus culture, providing abundant practical opportunities, and seeking support and resources from all sectors of society. Through the implementation of these comprehensive strategies, the cultivation of design thinking can be effectively promoted, laying a solid foundation for students' comprehensive development.

5.1 Strengthening the Combination of Theoretical Teaching and Practical Operation

In the education of art and design majors, attention should be given to the organic combination of theoretical teaching and practical operation. Through case analysis, project practice, and other methods, students can deepen their understanding and application of design thinking in practice and enhance their practical abilities and creativity [6].

5.2 Encouraging Interdisciplinary Communication and Cooperation

Interdisciplinary communication and collaboration help broaden students' horizons and ways of thinking. Art and design majors can collaborate with other majors, such as computer science and psychology majors, to explore the application and development of design thinking in different fields and cultivate students' comprehensive qualities and innovative abilities [7].

5.3 Strengthening the Cultivation of Critical Thinking and Systematic Thinking

Critical thinking and systematic thinking are important components of design thinking. Teachers should guide students to use critical thinking to analyze the essence of problems by posing challenging and open-ended questions. In addition, through systematic thinking training, students can view problems as a whole and understand the

interrelationships and influences among various elements [8].

6. The Importance of Cultivating Design Thinking in College Students' Career Choices

For college students, the cultivation of design thinking is highly important in various aspects of the process of career selection. First, design thinking can enhance the innovation ability of college students. In the job market, innovation ability is a highly valued skill by many employers. By cultivating design thinking, college students can learn how to examine problems from different perspectives, propose innovative solutions, and stand out in the job search process. This innovative ability not only helps college students showcase their unique strengths in interviews but also brings them more development opportunities in future work. Second, design thinking helps college students better adapt to changes in the workplace. With the continuous advancement of technology and changes in the market, the workplace environment is also constantly evolving. Design thinking emphasizes iteration and continuous optimization, which enables college students to respond more flexibly to changes in the workplace. They are able to adapt quickly to new work environments and task requirements and improve work efficiency and quality by constantly learning and adjusting their methods. In addition, design thinking can also enhance the teamwork and communication skills of college students. Teamwork and effective communication are crucial in the process of design thinking. College students can develop teamwork and communication skills by participating in team projects and collaborating with others to solve problems. These skills will also be crucial in their future work. Finally, design thinking also helps college students make wiser decisions in the process of career selection. By gaining a deep understanding of user needs and market trends, college students can more accurately determine which industries or positions have better development prospects and potential. This decision-making approach, which is based on data and user insights, helps college students avoid blindly following trends or making short-sighted choices when choosing a career.

7. Conclusion

The design thinking of college students majoring in art and design has a significant effect on their daily creativity. By stimulating innovative thinking, promoting practical operation, and cultivating aesthetic ability, design thinking not only enhances students' creativity level in their professional field but also promotes their creativity in daily life. Therefore, strengthening the cultivation of design thinking among students majoring in art and design has important practical significance and long-term value. Future research can further explore the application and development trends of design thinking in different fields, providing richer theoretical support and practical guidance for related educational practices.

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