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The Influence of Design Thinking in Music Major on Self-Efficacy and Creativity

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Abstract: ***This article aims to explore the impact of design thinking in music majors on self-efficacy and creativity. Design thinking, as an innovative problem-solving approach, emphasizes user centricity and systematically extracts, teaches, learns, and applies human centered technologies through five stages: empathy, definition, conceptualization, prototyping, and testing. In music education, design thinking not only helps to enhance students' innovation ability, but also has a profound impact on their self-efficacy and daily creativity. Research has found that 1) Design thinking guides students to examine issues in music creation and performance from a broader perspective, encourages them to think from multiple angles and dimensions, breaks conventions, explores new forms of artistic expression, and ultimately enhances the self-efficacy of music majors. 2) Design thinking promotes the creative development of music majors. Design thinking emphasizes the ability of teamwork and collaboration. Through collaboration and communication with team members, students can learn different creative ideas and techniques, expand their horizons and ways of thinking. This cross disciplinary communication and collaboration not only enriches their music creation materials, but also stimulates their innovative thinking and imagination, making them more creative and imaginative in music creation. 3) Design thinking encourages students to transform theoretical knowledge into practical operations through practice and application, and to improve their works through continuous trial and error and improvement. This practice oriented teaching method helps to enhance students' practical operation ability and problem-solving ability, making them more confident and composed in music performance, and demonstrating higher artistic level.***

Keywords: Music Major, Design Thinking, Self-Efficacy, Creativity**.**

1. Introduction

Design thinking has a positive impact on the creative self-efficacy and daily creativity of music major college students. Through training and practice in design thinking, music major college students can enhance their innovation ability and confidence, expand their horizons and ways of thinking, and lay a solid foundation for future music creation and performance.

Design thinking is a non-linear iterative process that encourages people to be user centered and systematically extract, teach, learn, and apply human centered technologies through five stages: empathy, definition, ideation, prototyping, and testing, to solve problems in a creative and innovative way. This way of thinking is not only applicable to designers, but also to all fields that require innovation and problem-solving, including music majors. For college students majoring in music, design thinking can guide them to examine problems in music creation and performance from a broader perspective, and find solutions through multi angle and multi-dimensional thinking. This way of thinking not only helps them break conventions in music creation and explore new forms of artistic expression, but also enhances their daily creativity, making them more innovative and imaginative in learning and life. Meanwhile, design thinking can also enhance the creative self-efficacy of music majors.

Here, creative self-efficacy refers to an individual's confidence in their ability and performance in creative tasks. Through the training and practice of design thinking, music majors can gradually establish confidence in their innovative abilities, believe in their ability to overcome difficulties and challenges, and create unique music works. This increase in confidence will further stimulate their creativity and innovative spirit, making them more actively involved in music creation and performance.

In addition, design thinking also emphasizes the ability for teamwork and collaboration. In the music profession, this ability is equally crucial. Through collaboration and communication with team members, music majors can learn different creative ideas and techniques, expand their horizons and ways of thinking. At the same time, teamwork can enhance their sense of responsibility and belonging, making them cherish every opportunity to create and perform, and strive to showcase their best selves.

2. Self-Efficacy in the Concept of Music

The self-efficacy in the concept of music refers to the subjective judgment or belief of music majors in whether they can successfully complete music tasks or performances. This sense of efficacy is crucial in music learning and performance, as it influences students' behavioral choices, effort levels, and attitudes towards challenges. Specifically, the self-efficacy of music major students is reflected in the following aspects:

Attitude towards challenges: Students with high self-efficacy are more confident and willing to try new music styles and techniques when facing challenges in music learning and performance. They are not afraid of failure and see challenges as opportunities for growth. Setting learning goals: Students with high self-efficacy will set higher learning goals for themselves and devote themselves wholeheartedly to learning. They believe that these goals can be achieved through hard work. On the contrary, students with lower self-efficacy may set lower learning goals and even feel frustrated during the learning process. Effort and perseverance: In the process of music learning, students with high self-efficacy will put in more effort and persist for longer periods of time when faced with difficulties. They believe they have the ability to overcome obstacles and achieve learning goals. Students with low self-efficacy may be more likely to give up and doubt their own abilities. Psychological health: Self-Efficacy is also closely related to students' psychological health. Students

with high self-efficacy are usually more optimistic and positive, able to better cope with academic pressure and challenges, and maintain mental health. Students with low self-efficacy may be more prone to psychological problems such as anxiety and depression.

3. The Profound Impact of Design Thinking on Enhancing Self-efficacy among Music Major Students

On the vast stage of music education today, design thinking is leading the growth and transformation of music majors in an unprecedented way. It is not only a methodology, but also a way of thinking that guides students to examine various issues in music creation and performance from a broader and more inclusive perspective, greatly expanding their cognitive boundaries and thinking depth. The core of design thinking is to encourage students to break out of traditional frameworks, no longer limited to a single music technique or style, but to learn to think about problems from multiple perspectives and dimensions. This transformation is undoubtedly a liberation of thinking and a leap in creativity for music majors.

In the vast world of music creation, design thinking first teaches students how to 'see'. It guides students to be like designers, using keen observation to capture the subtle aspects of life, drawing inspiration from multiple fields such as nature, society, and culture, and skillfully integrating seemingly unrelated elements into music creation. This cross-border perspective teaches students how to build bridges between tradition and modernity, local and international, and create music works that have both profound cultural heritage and a sense of the times. Through this process, students gradually realize that music is not just a pile of notes, but also a carrier of emotions, ideas, and culture. This sublimation of understanding greatly enhances their control and confidence in music creation.

Furthermore, design thinking encourages students to 'think'. It advocates an open thinking mode, encouraging students not to be satisfied with the status quo, daring to challenge existing rules, and daring to propose innovative ideas and solutions. In music creation, this means that students can freely explore different music styles, structures, harmonies, and even try to incorporate non musical elements such as visual arts, theatrical performances, etc., creating unprecedented art forms. This multi angle and multi-dimensional way of thinking not only stimulates students' creativity, but also allows them to constantly discover themselves in practice and realize their infinite possibilities in music creation.

More importantly, design thinking allows students to personally experience the entire process from creativity to final product through a series of practical steps such as prototype production, testing feedback, iterative optimization, etc. In this process, students not only face the challenge of creation, but also learn how to accept criticism, adjust strategies, and continuously improve. This cycle of "trial and error, learning, and trying again" not only exercises their resilience, but also gradually establishes trust in their own abilities through practice, that is, self-efficacy. Whenever a creative idea is successfully realized or a difficult problem is cleverly solved, students' self-efficacy is significantly enhanced, and they begin to believe in their ability to overcome any difficulties and create unique musical works. Ultimately, design thinking not only teaches music majors how to examine issues in music creation and performance from a broader perspective, but more importantly, it inspires their inner creativity and exploratory desire, enabling them to find their own voice through continuous experimentation and innovation. This increase in self-efficacy not only makes them more confident and determined on the path of music, but also lays a solid foundation for their future artistic career. Design thinking has become an indispensable part of music education, leading students towards a broader and more colorful world of art.

4. Design Thinking is a New Engine to Stimulate Creativity among Music Majors

In the rapidly developing field of music today, creativity is regarded as one of the most valuable assets for music majors. Design thinking, as a way of thinking centered on innovation and emphasizing practice and user experience, is gradually demonstrating its enormous potential in promoting the creative development of music majors. Design thinking not only focuses on improving individual abilities, but also emphasizes the importance of teamwork and collaboration. Through deep communication and interaction in this process, music majors are able to cross traditional boundaries, absorb diverse nutrients, greatly enrich their music creation materials, and stimulate unprecedented innovative thinking and imagination.

Teamwork in design thinking first builds an open and inclusive learning platform for students. On this platform, students from different backgrounds and with diverse skills can gather together to face challenges in music creation. In a team, each person is a unique contributor, whether they are skilled in composition, proficient in instruments, or have in-depth research on music theory, they can find their own position and leverage their strengths. This complementary cooperation model encourages students to break free from personal thinking limitations, learn to listen to others' voices, understand and respect different creative concepts. In such an atmosphere, students can not only learn the professional skills and creative ideas of other members, but also inspire new sparks of inspiration through the collision of ideas.

Cross disciplinary communication and collaboration are another highlight of design thinking in promoting the creative development of music majors. Design thinking encourages students to step beyond music itself and explore its integration with other art forms, technology, social issues, and more. For example, collaborating with visual artists can allow students to incorporate more visual elements into their music creation, creating music performances with greater visual impact; The collaboration with computer scientists may open a new chapter in the integration of music and technology, exploring cutting-edge fields such as electronic music and artificial intelligence composition. This cross-border attempt not only broadens students' horizons, but also provides them with more diverse means of expression in music creation, making music works more colorful and creative.

More importantly, design thinking allows students to

personally experience the entire process from ideation to product formation through a series of practical steps such as prototype production, user testing, iterative optimization, etc. In this process, students need to constantly try and make mistakes, reflect, and adjust. This "learning by doing" approach greatly exercises their practical and problem-solving abilities. At the same time, every collaboration with team members and every adjustment in the face of user feedback is a test and tempering of students' innovative thinking and imagination. In such practice, students learn how to find freedom within limitations and unleash their potential through challenges, and their creativity also undergoes a qualitative leap in this process.

In summary, design thinking provides strong support for the creative development of music majors with its unique team collaboration concept, cross disciplinary communication mechanism, and practice oriented learning methods. It not only teaches students how to shine in a team, but also allows them to find their own voice in the fusion of diverse cultures, inspiring their deep love for music and desire for innovation. Design thinking, with its unique charm, is leading music students towards a broader and more infinite creative world.

5. Design Thinking is a Bridge to Build Confidence and Excellence in Music Majors

In the field of music education, design thinking, with its unique practical orientation, is gradually becoming an important way to cultivate students' innovative and practical abilities. The core lies in encouraging students to transform theoretical knowledge learned in the classroom into practical operational skills through practice and application. This process not only deepens their understanding of knowledge, but also challenges and enhances their own abilities. Design thinking emphasizes "learning by doing", allowing students to gradually improve their works through continuous trial and error. This teaching method is undoubtedly a golden key to opening the door to the art world for music majors.

Firstly, the practical orientation of design thinking enables students to overcome the dilemma of "talking on paper" in traditional education models. It encourages students to step out of the theoretical greenhouse, touch music with their own hands, and feel the emotions and power behind every note. Whether composing, arranging, or performing, design thinking requires students to translate theoretical knowledge into concrete music practice. In this process, students not only need to apply the music theory they have learned to guide practice, but also need to discover and solve problems in practice. The close combination of theory and practice greatly enhances their practical skills.

Trial and error, as well as improvement, are an indispensable part of the design thinking practice oriented teaching method. In music creation, there is no smooth sailing, and every attempt may be accompanied by failure and challenge. But design thinking teaches students that failure is not the end, but a necessary path to success. It encourages students to be brave enough to try, dare to make mistakes, and more importantly, learn to learn from their mistakes and constantly improve their works. This iterative creative process not only exercises students' patience and perseverance, but also allows them to gradually explore their own creative methods and styles in practice, thus becoming more confident and determined in their future music path.

The practice oriented teaching method also greatly enhances students' ability to solve problems. In music performances, unexpected situations may occur. How to quickly respond, adjust the state, and ensure the smooth progress of the performance is a major test of students' comprehensive abilities. Design thinking simulates performance scenarios and sets various possible challenges and obstacles, allowing students to learn how to adapt flexibly and maintain calmness and focus under pressure in practice. This kind of training allows students to be more calm and composed on the real stage, able to quickly adjust to any situation and showcase their best artistic state.

More importantly, the practical orientation of design thinking allows students to experience the joy of success in practical operations, a sense of achievement that cannot be replaced by any theoretical teaching. The completion of every work and the successful conclusion of every performance are a recognition of the students' efforts and a great boost to their confidence. This confidence is not only reflected in music performances, but also permeates into students' daily lives, enabling them to maintain a positive attitude, be brave in exploration, and dare to innovate when facing any challenges.

6. Conclusion

Design thinking in music majors has a significant positive impact on self-efficacy and creativity. Through the training and practice of design thinking, music majors can not only enhance their innovation ability and confidence, but also demonstrate higher artistic level and creativity in music creation. Therefore, in music education, emphasis should be placed on cultivating students' design thinking, providing them with diverse practical opportunities and communication platforms to stimulate their innovative potential and artistic creativity.

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