

Course Design of "Children's Painting" in Higher Vocational Education and Exploration of AIGC

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Abstract

This paper focuses on the course design of "Children's Painting" in higher vocational education and deeply explores the application and potential of AIGC in this course. Through a comprehensive analysis of the traditional course design, it reveals the challenges it faces, including limitations in teaching content and methods, deficiencies in the evaluation system, etc. On this basis, innovative strategies for integrating AIGC into the course are proposed, aiming to enhance teaching effectiveness and cultivate students' creativity and artistic accomplishment. Research shows that AIGC, with its unique advantages, can bring new vitality to children's painting teaching. It can not only generate a variety of artistic works, providing students with rich creative inspiration, but also achieve personalized customized teaching content to meet the learning needs of different students. Through innovative teaching models, expanding teaching content, and transforming the role of teachers, AIGC can effectively improve students' creative ability and artistic aesthetic level, providing a new direction for the development of higher vocational education.

Keywords

Higher vocational education; Children's painting; Course design; AIGC; Innovative education.

1. Introduction

"Children's Painting" is an important course in higher vocational education, carrying the responsibility of cultivating students' painting skills and artistic accomplishment. However, under the traditional teaching mode, there are problems such as limitations in teaching content, outdated teaching methods, and the confinement of students' creative thinking [1]. The positioning of the course objectives is not clear enough, lacking clear orientation and specific requirements, which makes it difficult for students to identify the key points during the learning process and fully tap their potential. The course content mainly focuses on painting techniques, color application, composition design, etc. The traditional teaching method mainly relies on teachers' explanations and demonstrations, with students passively receiving knowledge, lacking interactivity and innovation, and it is difficult to stimulate students' learning interest and creativity [2]. The course evaluation mainly depends on students' works, and the evaluation criteria are single and subjective, unable to comprehensively and objectively reflect students' learning situation and ability level. Students' feedback has not been timely valued and responded to, resulting in unsatisfactory teaching effects. With the rapid development of information technology, AIGC has brought new opportunities to the children's painting course. It can generate various artistic works, providing students with rich creative inspiration and resources, and helping to improve teaching quality and students' learning effects [3].

2. Application Exploration of AIGC in the "Children's Painting" Course in Higher Vocational Education

(1) Specific Applications of AIGC in Children's Painting Teaching

AIGC has multiple applications in children's painting teaching. Firstly, it can inspire creative thinking. Based on the input themes or keywords, it can generate children's painting works in different styles, providing students with rich inspiration. For example, when inputting the theme of "space", it can generate science fiction-style space scenes [4]. Secondly, in terms of personalized customized teaching content, it can generate customized teaching content according to students' learning progress and personalized needs. For students with slow learning progress, it can provide simple painting demonstrations and exercises on basic lines, etc. For students who like animal themes, it can generate relevant animal painting works and guide them to highlight the characteristics and vividness, allowing students to learn within their own ability range [5]. Moreover, in teaching interaction and feedback, AIGC serves as a teaching tool to promote teacher-student interaction. Students can have conversations and ask questions to get real-time feedback. Teachers can use the works generated by AIGC to guide students to discuss and analyze, encourage students to express their views and ideas, and at the same time record students' learning process and feedback information to help teachers adjust teaching strategies.

(2) Advantages of AIGC in Children's Painting Teaching

AIGC has obvious advantages in children's painting teaching. It enriches teaching resources, possessing a vast amount of painting materials and diverse creative styles, which can meet the different needs of students; it stimulates learning interest, as the generated works are interesting and innovative, attracting students' attention; it improves learning efficiency, providing targeted teaching content according to students' learning progress and personalized needs, and the timely feedback helps students adjust their learning strategies; it cultivates innovative ability, encouraging students to give play to their imagination and creativity, and enabling students to learn different creative ideas through the generation of works in different styles.

(3) Challenges Faced by AIGC in Children's Painting Teaching

AIGC faces some challenges in children's painting teaching. In terms of the technical threshold, its technology requires certain operational skills and knowledge reserves, and teachers need to have relevant technical knowledge to use it effectively; in terms of quality control, the quality of the generated works varies, and there may be problems such as copyright issues, poor picture quality, and styles that do not meet the requirements. Teachers need to screen and evaluate to ensure teaching quality; in terms of emotional communication, although it can provide rich teaching resources and interactive feedback, it is difficult to completely replace real emotional communication.

3. Implementation Paths of AIGC in the Course Design of "Children's Painting" in Higher Vocational Education

(1) Design of Teaching Models Integrated with AIGC

Teacher guidance: Teachers need to have an in-depth understanding of the functions and application methods of AIGC tools and provide students with comprehensive and detailed guidance. Through practical operations, show the process of generating children's painting works by AIGC, explain the operation skills, and guide students to think about how to combine the works generated by AIGC with their own creations, cultivating innovative thinking.

Student autonomous learning: Under the guidance of teachers, students independently learn AIGC tools, choose creative themes according to their own interests, and interact with AIGC to explore creative possibilities. By inputting keywords to obtain inspiration from works in different styles and adjusting parameters to create unique works, they can improve their painting skills, autonomous learning ability, and independent thinking ability.

Group cooperation: Group cooperation is an important part of teaching. Students are grouped to jointly complete creative tasks with clear division of labor to give play to their advantages. Within the group, they communicate and cooperate, share their understanding and ideas about AIGC works, discuss optimization and innovation plans, cultivate the spirit of teamwork, promote mutual learning and communication, and improve their comprehensive abilities.

Feedback and evaluation: Teachers conduct multi-dimensional feedback and evaluation on students' works, point out the advantages and disadvantages, and put forward improvement suggestions. At the same time, encourage students to conduct self-evaluation and mutual evaluation, cultivate self-reflection ability and critical thinking, and students adjust and improve their works according to the feedback opinions to improve their creative level.

(2) Update and Expansion of Teaching Content

Adding AIGC-related content: With the continuous development of AIGC technology, it has become an inevitable trend to add relevant knowledge and skills in the course content. Students need to learn knowledge in aspects such as artificial intelligence painting and image generation, and understand the application principles and methods of AIGC in children's painting creation. For example, learn how to use AIGC software for image generation and master different generation algorithms and techniques. Through learning these contents, students can broaden their horizons, understand the development trend and application prospects of AIGC, and at the same time think about its impact on traditional painting art, stimulating the desire for artistic innovation exploration. In addition, using AIGC technology to expand teaching resources is also an important way to enrich teaching content. Teachers can integrate resources such as online painting platforms and art work databases to provide students with more learning materials and creative inspiration. On online painting platforms, students can browse children's painting works in various styles, learn different painting techniques and expression methods; art work databases provide rich art work cases for students to learn from. Teachers also encourage students to use AIGC tools to create works and share them on the platform to communicate and learn with other students. Carrying out AIGC practical activities is also crucial, which can enable students to apply AIGC technology in practice, improve their practical ability and innovative ability. Teachers organize students to participate in painting competitions, creative exhibitions and other activities, allowing students to apply the learned knowledge and skills to actual creations. For example, in painting competitions, students use AIGC tools to create works with unique creativity and styles; in creative exhibitions, they display their own works and communicate and share with other students. Through these practical activities, students can not only improve their painting level, but also cultivate the spirit of teamwork and innovation awareness.

(3) Transformation of the Role of Teachers

Knowledge transmitter: Teachers should transmit AIGC-related knowledge and skills to students, conduct in-depth research on AIGC technology and combine it with children's painting teaching to provide a systematic and comprehensive knowledge system. Explain the operation process, functional characteristics and application techniques of AIGC tools in children's painting creation, and pay attention to the latest development trends of the technology and update teaching content in a timely manner.

Creative guide: Teachers help students expand their thinking and inspire creative inspiration through heuristic teaching. Guide students to think about problems from different angles,

encourage them to try new creative ideas and methods, provide creative cases for students to analyze and learn from, organize creative discussions, and cultivate students' creative thinking. Learning partner: Teachers establish a good teacher-student relationship with students, become learning partners. They learn and explore AIGC technology together with students, jointly solve problems, share learning experiences and insights when students encounter difficulties, encourage students to actively participate in learning, respect students' personalities and ideas.

Evaluator: Teachers conduct objective and fair evaluation and feedback on students' works from multiple dimensions such as creativity, skills, and completion degree, point out the advantages and disadvantages, and put forward specific improvement suggestions. For example, conduct detailed analysis and guidance on problems such as unreasonable composition and Inharmonious color combinations in students' works. Through evaluation and feedback, guide students to improve their learning quality and creative level, and cultivate self-reflection ability and critical thinking.

4. Conclusion

The application value of AIGC in the course design of "Children's Painting" in higher vocational education is significant. Integrating it into the course can improve teaching effectiveness, cultivate students' creativity and artistic accomplishment, provide rich creative inspiration and resources, break the limitations of the traditional teaching mode, and stimulate innovative thinking. However, in the implementation process, challenges such as students' mastery of the technology, innovation of teaching plans, and improvement of the evaluation system are faced. In the future, with the development and improvement of AIGC technology, the "Children's Painting" course in higher vocational education will have new opportunities. It is necessary to actively explore and solve problems, give play to the advantages of AIGC, and promote the continuous development of the course.

(1) Update and Expansion of Teaching Content

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not only improve their painting level, but also cultivate the spirit of teamwork and innovation awareness.

(2) Transformation of the Role of Teachers

Teachers play multiple roles in the teaching process. As knowledge transmitters, teachers should transmit AIGC-related knowledge and skills to students, conduct in-depth research on AIGC technology and combine it with children's painting teaching to provide a systematic and comprehensive knowledge system. For example, they should explain the operation process, functional characteristics and application techniques of AIGC tools in children's painting creation, and pay attention to the latest development trends of the technology and update teaching content in a timely manner. As creative guides, teachers help students expand their thinking and inspire creative inspiration through heuristic teaching. They guide students to think about problems from different angles, encourage them to try new creative ideas and methods, provide creative cases for students to analyze and learn from, organize creative discussions, and cultivate students' creative thinking. As learning partners, teachers establish a good teacher-student relationship with students, learn and explore AIGC technology together with them, jointly solve problems, share learning experiences and insights when students encounter difficulties, encourage students to actively participate in learning, and respect students' personalities and ideas. As evaluators, teachers conduct objective and fair evaluation and feedback on students' works from multiple dimensions such as creativity, skills, and completion degree, point out the advantages and disadvantages, and put forward specific improvement suggestions. For example, they conduct detailed analysis and guidance on problems such as unreasonable composition and inharmonious color matching in students' works. Through evaluation and feedback, teachers guide students to improve their learning quality and creative level, and cultivate students' self-reflection ability and critical thinking.

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