The Effective Application of AIGC Technology in Visual Marketing Design Course Teaching

Xiao Tong*

Chongqing Construction Engineering Vocational College, Chongqing 400072, China

***Corresponding author:** Xiao Tong, 310204561@qq.com

A b s t r a c t :

With the rapid development of modern Internet technology, the advent of Artificial Intelligence Generated Content (AIGC) has revolutionized people's understanding of science and technology. AIGC technology has been widely applied across various fields, including education, where it enhances the quality of teaching and learning while accelerating the high-quality development of modern education. This paper focuses on the efficient visual marketing design course as the research object, exploring the significant value of AIGC technology in its teaching process. It analyzes the current application of AIGC technology in teaching this course and proposes effective strategies to maximize its potential. By integrating AIGC into the teaching of visual marketing design in colleges and universities, this study aims to highlight the transformative role of AIGC technology in education. Furthermore, it offers a fresh perspective on the high-quality application of AIGC technology in educational and teaching practices.

K e y w o r d s :

1. Introduction

In the digital information age, with the rapid advancement of Internet technology, Artificial Intelligence Generated Content (AIGC) is gradually permeating various fields of social production [1]. In addition to the practical application of enterprise production and management, AIGC technology has also been widely used in the field of education and teaching. More and more universities are incorporating AIGC technology into their curriculum. For the Visual Marketing Design course, the integration and application of AIGC technology in teaching practice provides innovative classroom teaching tools and ways of thinking for the teaching of this subject and also improves the overall learning efficiency for students from the perspective of combining practice and theory.

Compared with the integration of AIGC technology, the traditional teaching mode has been difficult to adapt to the development of modern society [2]. The comprehensive integration of artificial intelligence technology into the Visual Marketing Design course, step by step, not only

enhances students' theoretical understanding but also provides more opportunities for practical application, increases their interest in learning, and helps them master the subject more effectively. It can also innovate according to its actual situation, thus improving the overall teaching level and high-quality employment rate of students [3].

2. The important value of integrating AIGC technology into the teaching of Visual Marketing Design course

2.1. Improve classroom teaching efficiency

In the Visual Marketing Design course, under the traditional teaching method, students need to spend a lot of time on material collection and preliminary creation. For example, when making a poster, students have to look for appropriate image elements in numerous photo libraries, and then hand draw or use software to draw basic graphics [4]. The AIGC technology can quickly generate a variety of styles of images, copywriting, and other content according to the keywords entered by students. For example, if you input "fashion summer promotion poster," the AIGC system can provide poster sketches including different color matching, model pose, promotional information typesetting, and other design schemes in a short time, greatly saving students' time to find inspiration and build the basic framework [5].

In the teaching process, teachers often need to spend more time elaborating and demonstrating the feedback and modification of students' works. AIGC technology can quickly suggest specific changes by analyzing the gaps between the student's work and the target requirements. For example, for a brand logo design in a visual marketing design, AIGC can analyze the color contrast, graphic simplicity, fit with the brand concept and other aspects, and provide quantitative data and visual comparison results to help teachers guide students to modify more efficiently.

2.2. Inspires students' creative design

AIGC technology has powerful algorithms and massive data support that can generate a variety of unique design ideas. In Visual Marketing Design, it showcases visual design creativity in various styles and cultural contexts,

providing students with diverse perspectives [6]. For example, when students are designing visual marketing with traditional holiday themes, AIGC can provide creative combinations of traditional holiday visual elements from different countries and regions, such as integrating the red elements of the Chinese Spring Festival with the decorative styles of Western Christmas, inspiring students to break through the limitations of traditional thinking and open up to new creative directions.

Students are often limited to familiar design styles in the learning process. AIGC technology allows students to easily access works from a variety of art genres and design styles and incorporate them into their designs. For example, AIGC can generate examples of visual marketing works that combine surrealist painting styles with modern minimalist design styles, encouraging students to try mixing and matching visual elements of different styles to create marketing design works with unique visual impact.

2.3. Suitable for industry needs

The visual marketing design industry is developing rapidly, and the application of AIGC technology in the industry has become a trend. The integration of AIGC technology into the teaching of the course allows students to keep abreast of the latest developments in the industry [7]. For example, at present, many enterprises use AIGC technology to generate product display pictures and virtual fitting effects in e-commerce visual marketing. By learning the application of AIGC technology in the course, students can better adapt to the requirements of the future job market for visual marketing design talents [8].

In actual visual marketing design projects, enterprises have high requirements for efficiency and creativity [9]. By introducing AIGC technology into the course teaching, students can apply this technology to solve practical problems in simulated project practice. For example, when designing a visual image for a new brand, students can use AIGC technology to quickly generate preliminary plans for multiple brand logos and visual identity systems, which are then screened and optimized according to brand positioning and target audience, thereby improving students' operational ability and problem-solving ability in actual projects [10].

3. Current situation of integrating AIGC technology with Visual Marketing Design classroom teaching

3.1. Difficulties for teachers to adapt to AIGC technology

Many teachers of Visual Marketing Design courses have long been accustomed to traditional teaching methods and design tools [11]. They may lack in-depth knowledge and mastery of AIGC technology. For example, some teachers may not be familiar with the image generation algorithm and the principle of text-to-image conversion in AIGC technology, so they cannot effectively guide students on how to use AIGC technology to create visual marketing design in the teaching process.

Traditional visual marketing design teaching focuses on students' hand-drawing ability and proficiency in traditional design software. Teachers may find it difficult to accept the changes brought by AIGC technology in their teaching concepts, believing that over-reliance on AIGC technology will weaken students' basic skills. The lag of this concept makes teachers not actively integrate AIGC technology in teaching, which affects the promotion of AIGC technology in curriculum teaching [12].

3.2. Poor integration of curriculum system and AIGC technology

In the existing course system of Visual Marketing Design, the course setting of AIGC technology often lacks systematics [13]. For example, AIGC technology may simply be mentioned in one chapter without being taught throughout the course. This makes it impossible for students to fully and deeply learn the application of AIGC technology in Visual Marketing Design and to form a complete knowledge system. On the other hand, Visual Marketing Design courses lack effective synergy with other related courses, such as Computer Programming, Data Analysis, and many more. The application of AIGC technology often involves multidisciplinary knowledge [14]. For example, an in-depth understanding of image recognition algorithms in AIGC technology may require certain computer programming knowledge, but in the current curriculum system, these courses are not closely linked, which affects students' comprehensive understanding of AIGC technology and the improvement of application ability.

3.3. Students' excessive reliance on AIGC technology

When using AIGC technology, some students tend to overly rely on the generated results, which can hinder the development of their creativity and critical thinking skills. For example, in the Visual Marketing Design course, the design work generated by AIGC is directly used without in-depth analysis and personalized modification. As a result, students' creative abilities cannot be effectively exercised, and they cannot truly grasp the core connotation of Visual Marketing Design [15].

The weak skills of students are also a significant problem. Since AIGC technology can quickly generate some basic design content, some students may neglect the learning of traditional basic design skills, such as hand-drawing skills, color theory, and the like. However, these foundational skills are very important for Visual Marketing Design, and they are the foundation for students to engage in creative expression and design optimization. Over-reliance on AIGC technology may prevent students from performing high-quality design tasks that require solid basic skills.

4. Effective measures to integrate AIGC technology in Visual Marketing Design classroom teaching

4.1. Strengthen AIGC technology application training for teachers

4.1.1. Technical training

Based on the extensive and mature application of AIGC technology in classroom teaching, schools, and educational institutions should provide systematic AIGC technology training for teachers of Visual Marketing Design courses [16]. The training content can include the basic principles of AIGC technology, the use of commonly used AIGC tools such as Midjourney and Stable Diffusion, and the application cases of AIGC technology in Visual Marketing Design. For example, experts in the field of AIGC technology can be invited to give lectures and practical operation guidance, so that teachers can personally experience the powerful functions and application scenarios of AIGC technology, to improve teachers' proficiency in AIGC technology.

4.1.2. Updating teaching concepts

Organize teachers to participate in education and teaching seminars, and guide them to focus on the impact and reform of AIGC technology on Visual Marketing Design teaching [17]. Encourage teachers to actively explore new teaching methods and evaluation systems, and integrate AIGC technology reasonably into the teaching process. For example, themed seminars on "AIGC Technology and Visual Marketing Design Teaching Innovation" can be held to allow teachers to share their insights and experiences to promote the renewal of teaching concepts.

4.2. Reconstructing the curriculum system

4.2.1. Set AIGC technical courses in the system

In the course system of Visual Marketing Design, the AIGC technical course should be set up as an important part. From basic theory to practical application, students are gradually guided to learn AIGC technology. For example, courses such as "Foundation of AIGC Technology," "Creative Application of AIGC Technology in Visual Marketing Design" and "Collaboration between AIGC Technology and Other Design Tools" can be set up to enable students to fully grasp the application methods and skills of AIGC technology in Visual Marketing Design [18].

4.2.2. Strengthen curriculum coordination

Strengthen the collaboration between Visual Marketing Design courses and other related courses. For example, a joint teaching project on the Algorithmic Implementation of AIGC Technology in collaboration with the Computer Programming course. In conjunction with the Data Analysis course, students learn to use data to optimize Visual Marketing Design solutions generated by AIGC technology [19]. Through this course collaboration, students can broaden their knowledge and improve their ability to solve Visual Marketing Design problems by using multidisciplinary knowledge comprehensively.

4.3. Guide students to use AIGC technology correctly

4.3.1. Creative cultivation and guidance

In the teaching process, teachers should pay attention to guiding students to correctly use the content generated by AIGC technology [20]. Students are encouraged to use AIGC technology as a tool for creative inspiration, rather than as a substitute for creativity. For example, teachers can set creative extension homework, requiring students to make in-depth creative modifications and improvements based on the design generated by AIGC technology, adding their cultural understanding, emotional expression, and other elements to make the design work more personalized and in-depth.

4.3.2. Emphasize the importance of basic skills

Teachers should constantly emphasize the importance of traditional basic design skills in Visual Marketing Design. For example, the proportion of basic course content such as hand-drawing exercises and color-matching experiments should be reasonably arranged in the course teaching, so that students can understand that these basic skills are the necessary foundation of their Visual Marketing Design [21]. At the same time, students are guided to integrate basic skills with AIGC technology and use these skills to optimize and enhance the generated content, thereby improving their comprehensive design abilities.

5. Conclusion

The progress of modern Internet technology has promoted the development of human society. Especially the AIGC represented by ChatGPT has attracted much attention since its advent [22]. It can be said that the application of AIGC technology in the teaching of Visual Marketing Design is of great value, but there are still some problems. Effective measures such as strengthening teacher training, reconstructing curriculum systems, and guiding students to correctly use AIGC technology can improve the application effect of AIGC technology in Visual Marketing Design course teaching, cultivate talents who are more in line with industry needs, and have innovative abilities.

┌─ **Disclosure statement** ─────────────────────────────────┐

The author declares no conflict of interest.

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References

[1]   Chu YA, 2024, Communication Research on Reshaping the Content Ecosystem of New Media Platforms Based on AIGC Technology. Frontiers in Computing and Intelligent Systems, 9(3): 24–27.

[2]   Liao L, He L, 2024, Teaching Conception of Web Design and Production Course under AIGC Background. Advances in Educational Technology and Psychology, 8(5): 46–52.

[3]   Kang SO, 2024, Translation Instruction Method for Passive Sentences in Liberal Arts English Using Chat-GPT. Journal of Interpretation and Translation Education, 22(1): 5–23.

[4]   Zhang L, 2024, Reform and Innovation of Higher Vocational Information Technology Courses from the Perspective of AIGC. Advances in Vocational and Technical Education, 6(3): 199–205.

[5]   He X, Zhang Y, 2024, Teaching Reform of the "Principles of Management" Course in the Context of Artificial Intelligence. Higher Education and Practice, 1(6): 19–23.

[6]   Pitso T, 2023, Telagogy: New Theorisations About Learning and Teaching in Higher Education Post-Covid-19 Pandemic. Cogent Education, 10(2): 2258278.

[7]   Kang WG, 2023, Exploring Classical Novel Education Methods Using Generative AI. Donam Language and Literature, 44: 35–69.

[8]   Mireia E, 2023, The Use of Artificial Intelligence (AI) to Enhance Academic Communication, Education and Research: A Balanced Approach. The Journal of Hand Surgery, European Volume, 48(8): 175.

[9]   Leung TW, 2022, Research on IP Creative Design Driven by Big Data. Chinese Journal of Image Graphics, 27(1): 127–135.

[10]   Zhang M, 2023, Research on Tourism Advertisement Design Based on AIGC Technology. Media Research and Review, 20(4): 112–119.

[11]   Lee J, Seo Y, 2021, AI-Powered Creativity in Advertising: A Systematic Review and Future Research Directions. Journal of Advertising, 50(3): 302–319.

[12]   Du D, Zhang Y, Ge J, 2023, Effect of AI Generated Content Advertising on Consumer Engagement. International Conference on Human-Computer Interaction, Springer Nature Switzerland, Cham, 2023: 121–129.

[13]   Smith AB, Johnson CD, 2021, The Impact of AI on Creativity in Advertising: A Case Study of Coca-Cola's "Masterpiece" Campaign. Journal of Marketing Analytics, 9(4): 245–259.

[14]   Chen T, Pang B, Shao W, 2024, Exploration of Brand Visual Communication Innovation Design Method Based on AIGC Technology. Procedia Computer Science Volume, 2024: 519–528.

[15]   Wu F, Hsiao SW, 2024, An AIGC-Empowered Methodology to Product Color Matching Design. Displays, 81: 102623.

[16]   Wu F, Lin YC, Lu P, 2022, Research on the Design Strategy of Healing Products for Anxious Users During COVID-19. Int. J. Environ. Res. Public Health, 19(10): 6046.

[17]   Li H, 2024, Application of AI Technology in Professional Courses of Visual Communication Design in Undergraduate Vocational Education. Shanghai Packaging, 2024(9): 223–225.

[18]   Liu J, 2024, Practice Research on Digital Teaching Reform of AIGC Enabling Visual Communication Design. Art and Design (Theory), 2(8): 143–145.

[19]   Lu Y, 2019, Research on Teaching Reform of E-Commerce Visual Marketing Course Based on Visual Design. Journal of Nanchang Normal University, 45(02): 101–105.

[20] Meng G, Tian S, 2024, Application of AIGC in Packaging Design Teaching. Screen Printing Industry, 2024(03): 121–124.

[21] Tian S, 2024, Research on the Application of Project-Based STEAM Education Concept in E-Commerce "Visual Marketing Design" Course. Time-Honored Brand Marketing, 2024(01): 207–209.

[22] Yan Y, 2023, Application of AIGC Technology in Teaching Reform of Animation Design Major in Universities. Shanghai Clothing, 2023(10): 154–157.

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