

Research on AIGC Empowering the Cultivation of University Media Talents

-- Taking the Course "Introduction to Journalism" as an Example

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Abstract. This paper delves into the transformative role of AIGC in the cultivation of university media talents, with a specific focus on its application in the "Introduction to Journalism" course. By analyzing the current status of media talent cultivation and the challenges faced by traditional teaching models, it elucidates the opportunities presented by AIGC in terms of enriching teaching content, innovating teaching methods, and enhancing practical teaching. Through case studies and empirical research, practical strategies are proposed to integrate AIGC into the teaching of "Introduction to Journalism", aiming to cultivate media talents with innovative and practical abilities to meet the demands of the media industry in the digital age.

Keywords: AIGC; University Media Talent Cultivation; Introduction to Journalism; Teaching Reform.

1. Overview of AIGC and Its Applications in the Media Field

1.1 The Concept and Development History of AIGC

AIGC, namely Artificial Intelligence Generated Content, is a new production method that uses artificial intelligence technology to automatically generate content. It breaks the traditional content production model and enables computers to mimic human thinking and creative methods to generate various forms of content such as text, images, audio, and video through artificial intelligence technologies such as machine learning and deep learning. The emergence of AIGC marks the entry of content production into a new stage from the PGC (Professional Generated Content) and UGC (User Generated Content) eras.

In recent years, AIGC technology has shown explosive growth. The emergence of large language models represented by OpenAI's GPT series and image generation models such as DALL-E and Stable Diffusion has greatly enhanced the capabilities of AIGC. GPT-4 can generate high-quality text covering multiple fields such as news reports, thesis writing, and story creation; DALL-E and Stable Diffusion can generate realistic images based on text descriptions input by users. The emergence of these technologies has not only changed the way content is produced but also brought new development opportunities and challenges to the media field.

1.2 Current Applications of AIGC in the Media Industry

AIGC is increasingly widely used in the media field, having penetrated into multiple links such as news gathering and writing, content editing and review, video and audio production, and personalized recommendation.

In terms of news gathering and writing, AIGC technology can quickly generate news articles to improve the timeliness of news reporting. In 2017, Xinhua News Agency launched the "Quick Pen Xiaoxin" intelligent writing robot, which can generate news articles within a short period after a news event occurs and is widely used in news reporting in sports, finance, and other fields. Toutiao's "xiaomingbot" can also automatically write news articles on sports events, financial data, etc., greatly improving the efficiency of news production. AIGC can also assist journalists in data collection and collation, providing journalists with valuable clues and opinions through the analysis of large amounts of data, helping journalists better complete in-depth reports[1].

In terms of content editing and review, AIGC technology can achieve intelligent review and screening of content to improve content quality and safety. Through natural language processing technology, AIGC can quickly identify sensitive information, false information, and grammatical errors in texts and provide timely reminders and corrections. Some media platforms have developed intelligent review systems using AIGC technology to conduct real-time reviews of content published by users, effectively reducing the spread of harmful information. AIGC can also provide personalized recommendations for content based on users' interests and preferences, improving users' reading experience. ByteDance's algorithm recommendation system can accurately recommend news and information of interest to users by analyzing users' behavioral data, enhancing user stickiness and activity.

The application of AIGC in the media field has not only improved the efficiency and quality of content production but also brought more personalized and diversified content experiences to users. However, the application of AIGC technology has also brought some problems, such as content authenticity and reliability, copyright protection, ethical and moral issues, which need our attention and solution in the development process.

2. Current Status of University Media Talent Cultivation and Analysis of Introduction to Journalism

2.1 The Status and Role of Introduction to Journalism in Media Talent Cultivation

Introduction to Journalism helps cultivate students' journalistic thinking abilities, such as news sensitivity, critical thinking, and logical thinking abilities. News sensitivity enables students to quickly capture valuable news clues and timely discover news events and problems in society. Critical thinking helps students conduct in-depth analysis and thinking on news events and information, not to follow blindly, and to distinguish the authenticity and value of information. Logical thinking ability enables students to be clear and rigorous in news writing and expression and accurately convey news information. Through the study of journalistic ethics and professional ethics, Introduction to Journalism guides students to establish correct professional cognition, clarifies the responsibilities and missions of journalists, and cultivates good professional ethics and conduct. It allows students to understand that news work is not only a profession but also a social responsibility and that they should always adhere to the principles of truth, objectivity, and fairness to provide the public with accurate and reliable information.

2.2 Traditional Teaching Models of Introduction to Journalism and Existing Problems

The traditional teaching model of the Introduction to Journalism course usually focuses on teacher lectures. Teachers systematically explain the basic concepts, theories, and knowledge of journalism in the classroom according to the order of textbook chapters, while students passively listen and take notes. In this teaching model, the teaching content often focuses on the imparting of theoretical knowledge and pays insufficient attention to the latest development trends and practical cases of the news industry, resulting in the teaching content lagging behind the development of the media industry. For example, today when AIGC technology has been widely used in the media field, the teaching content of some traditional Introduction to Journalism courses may not yet involve the impact of AIGC on news production and communication and other related contents[2].

The teaching methods are single, mainly based on the lecture method, lacking interactivity and practicality. In the classroom, there is little interaction between teachers and students, and students' participation is not high, making it difficult to stimulate students' learning interest and enthusiasm. Insufficient practical teaching is also a prominent problem of the traditional teaching model. Due to curriculum settings and teaching conditions, practical teaching links are often ignored, and students lack the opportunity to apply theoretical knowledge to practice, resulting in the ineffective cultivation of students' practical and innovative abilities. The assessment method is also relatively single, usually

based on final exam results, supplemented by usual results, which makes it difficult to comprehensively and objectively evaluate students' learning effects and ability levels. This single assessment method easily leads students to memorize mechanically in order to cope with exams, ignoring the understanding and application of knowledge, which is not conducive to the improvement of students' comprehensive qualities.

3. The Impact and Challenges of AIGC on Introduction to Journalism Teaching

3.1 Opportunities Brought by AIGC to Introduction to Journalism

The emergence of AIGC technology provides a new opportunity for the update of teaching content of the Introduction to Journalism course. It enables teachers to pay real-time attention to the latest developments in the media industry and timely integrate AIGC application cases in the news field into the teaching content. For example, when explaining the news production process, the case of Xinhua News Agency's "Media Brain" using AIGC technology to achieve intelligent writing and rapid generation of news articles can be introduced to let students understand how AIGC changes the traditional news gathering and writing model and improves news production efficiency. When discussing the effect of news communication, cases such as Douyin using AIGC technology for personalized recommendation to enhance user stickiness and activity can be combined to analyze the impact of AIGC on news communication methods and audience acceptance. Through the introduction of these cutting-edge cases, the teaching content is made more close to reality, stimulating students' learning interest and helping them better understand the close connection between journalism theory and practice.

AIGC also provides strong support for the innovation of teaching methods of the Introduction to Journalism course. Teachers can use AIGC tools to carry out interactive and inquiry-based teaching, such as using intelligent question-and-answer systems to answer students' questions in real-time during the learning process, enhancing the interactive communication between teachers and students. Using virtual reality (VR) and augmented reality (AR) technologies to create immersive news teaching scenarios, allowing students to experience the occurrence and communication process of news events first-hand, and improving students' learning enthusiasm and participation. For example, simulating on-site news interviews through VR technology, allowing students to play the role of reporters and communicate with virtual interviewees, exercising students' interview skills

3.2 Challenges Faced by Introduction to Journalism Teaching in the AIGC Era

The rapid development of AIGC technology has posed higher requirements for teachers' professional capabilities. In addition to solid theoretical knowledge of journalism, teachers must master AIGC-related technologies such as natural language processing, machine learning, and image recognition to effectively apply AIGC tools in teaching and guide students to use them properly. However, many current educators lack systematic training and practical experience in AIGC, leading to difficulties in integrating technology into teaching. For example, some teachers may struggle to operate AIGC-based teaching platforms or solve technical issues during class, which affects the teaching effect. Moreover, the continuous updating of AIGC technology requires teachers to constantly update their knowledge systems, presenting a significant challenge to their professional development[3].

AIGC has also posed challenges to students' learning abilities. On the one hand, students may become overly dependent on AIGC tools, relying on them to generate assignments or research content without independent thinking, which hinders the cultivation of critical thinking and innovative capabilities. On the other hand, AIGC-generated content may contain inaccuracies, logical flaws, or value deviations. Without strong critical thinking and information discrimination skills, students may be misled. For instance, when using AIGC-generated news reports as learning materials, students

may fail to distinguish between false information and objective facts, affecting their understanding of journalistic professionalism.

The application of AIGC in the news field has raised a series of ethical and moral issues, such as fake news, privacy violations, and copyright disputes, which need to be addressed in Introduction to Journalism teaching. How to strengthen students' ethical education and guide them to establish correct professional values has become an urgent task. For example, when students use AIGC tools for news creation, they may unconsciously infringe.

4. Practical Exploration of AIGC Empowering Introduction to Journalism Teaching

4.1 Updating and Optimizing Teaching Content Based on AIGC

In the AIGC era, the teaching content of Introduction to Journalism needs to be updated in a timely manner to reflect the latest developments in the media industry. Teachers should pay close attention to AIGC application cases in the news field and integrate them into the curriculum. For example, when explaining the news production process, the case of Xinhua News Agency's "Media Brain" can be introduced. The "Media Brain" uses AIGC technology to achieve intelligent mining of news clues, rapid writing of news articles, and automatic generation of video news. By analyzing this case, students can understand how AIGC transforms each link of traditional news production and improves efficiency and quality.

Teachers can use AIGC tools like ChatGPT to generate journalism-related cases and analyses, enriching teaching materials. For instance, instructing ChatGPT to generate diverse viewpoints and commentaries on a hot news event can guide students to analyze the event from multiple perspectives and cultivate critical thinking. AIGC-generated data analysis reports can help students understand the effects of news communication and changes in audience needs. By analyzing user data on social media, students can grasp different groups' preferences for news content, enabling them to understand how to plan and create news based on audience needs.

With the development of AIGC technology, the interdisciplinary integration of journalism with computer science and artificial intelligence has deepened. Therefore, Introduction to Journalism teaching should expand disciplinary boundaries and construct an interdisciplinary knowledge system. Teachers can introduce knowledge from related fields such as machine learning, natural language processing, and data mining, enabling students to understand the application.

4.2 Strengthening Practical Teaching with AIGC

Introducing AIGC tools in practical teaching can provide students with more practical opportunities and richer platforms. Students can use AIGC tools for news content creation and communication practice, such as using image generation models to create news illustrations, intelligent writing tools to compose news articles, and social media platforms with AIGC technology for news distribution and promotion, thereby enhancing their practical and innovative abilities. Teachers can organize AIGC tool-based practical activities, such as news creativity competitions or AIGC news work creation, to stimulate students' learning interest and innovative thinking. For example, holding a news creativity competition where students are required to use AIGC technology to design innovative news reporting forms or products. During the competition, students need to fully leverage their imagination and creativity, combining the characteristics of AIGC technology to create unique news works, thereby improving their practical and innovative skills while deepening their understanding of AIGC applications in journalism[4].

Students can follow enterprise journalists and editors to participate in actual news interviews and writing, learning how to use AIGC technology to improve the efficiency and quality of news gathering and writing. They can also participate in news review and distribution work to understand the application of AIGC technology in content review and personalized recommendation. Through

learning and practice at the bases, students can integrate theoretical knowledge with practical work, improving their professional literacy and practical abilities.

Universities can organize students to carry out AIGC-related practical projects and competitions to stimulate their learning interest and innovative thinking, and enhance their practical and teamwork skills. For example, launching AIGC news content creation projects, where students are required to use AIGC technology to create innovative news works, such as short video news or interactive news. During project implementation, students need to form teams, divide tasks, and collaborate to complete the planning, shooting, editing, and production of news works. This process helps students improve their teamwork and communication skills while exercising their innovative and practical abilities.

Holding AIGC news application development competitions can encourage students to develop news applications based on AIGC technology, such as intelligent news recommendation apps or news content creation tools. During the competition, students need to integrate their computer science and journalism knowledge with AIGC technology to develop innovative and practical news applications. Such competitions can enhance students' programming skills and innovative thinking while deepening their understanding of AIGC's application prospects and development trends in journalism.

5. Guarantee Measures for AIGC Empowering University Media Talent Cultivation

5.1 Construction of Teaching Staff

The rapid development of AIGC technology has imposed higher requirements on the capabilities of university media professional teachers. Teachers should not only possess solid professional knowledge of journalism but also master AIGC-related technologies such as natural language processing and machine learning to effectively apply AIGC tools in teaching and guide students to use AIGC technology for learning and practice. Universities should increase investment in teachers' information technology training, regularly organize AIGC technology training courses and academic seminars, and invite industry experts and technology researchers to give lectures and training, helping teachers understand the latest developments and application cases of AIGC technology and enhancing their AIGC technology application capabilities.

Encouraging teachers to take temporary positions in media enterprises and participate in actual corporate projects can help them deeply understand the application processes and practical experiences of AIGC in the media industry. Through temporary positions, teachers can bring corporate practical experiences back to the classroom, making teaching content more practical and relevant. During their tenure in enterprises, teachers can participate in AIGC news production projects, understand the application scenarios and operation methods of intelligent writing robots, and the role of AIGC in news content review and distribution, integrating these practical experiences into the teaching of Introduction to Journalism to help students better understand the real-world applications of AIGC in the media industry.

5.2 Construction of Teaching Resources

The integration and development of digital teaching resources are important guarantees for AIGC to empower the cultivation of university media talents. Universities should strengthen cooperation with media enterprises and scientific research institutions to jointly develop AIGC technology-based teaching resources, such as teaching cases, teaching courseware, and online courses. These teaching resources should be closely aligned with the practical needs of the media industry, covering the applications of AIGC in news gathering, writing, editing, reviewing, and distribution, enabling students to deeply understand the application principles and methods of AIGC in the media field through learning these resources.

Universities can cooperate with media organizations like Xinhua News Agency to obtain their actual cases in AIGC news production and develop them into teaching case collections for students

to learn and analyze. AIGC tools can be used to generate teaching courseware and online courses—for example, using intelligent courseware generation tools to automatically generate richly illustrated teaching courseware based on teaching syllabi and knowledge points, or developing AIGC technology-based online courses on online course platforms, allowing students to learn AIGC-related knowledge and skills anytime, anywhere.

Constructing an AIGC teaching practice platform can provide students with hands-on practice opportunities. The platform should have application functions of AIGC tools, such as intelligent writing, image generation, and video production, enabling students to carry out news content creation and communication practice on the platform, improving their practical and innovative abilities.

Establishing a teaching resource sharing mechanism can promote the sharing of teaching resources among universities and between universities and enterprises. Through resource sharing, universities can complement each other's advantages and improve the utilization efficiency of teaching resources. Universities can establish teaching resource sharing platforms, uploading their developed high-quality teaching resources to the platform for download and use by other universities and enterprises, while also obtaining high-quality teaching resources from other universities and enterprises on the platform to enrich their own teaching resource libraries. Through the sharing of teaching resources, the overall quality of university media talent cultivation can be promoted.

6. Conclusion

In terms of practical exploration, through the update and optimization of teaching content based on AIGC, application cases of AIGC in the news field have been integrated into teaching, disciplinary boundaries have been expanded, and an interdisciplinary knowledge system has been constructed. By using AIGC to innovate teaching methods and means, intelligent teaching scenarios have been built, project-based and case-based teaching have been carried out, and intelligent teaching management and evaluation have been realized. By strengthening practical teaching with AIGC, practical activities using AIGC tools have been introduced, university-enterprise cooperation practice bases have been established, and practical projects and competitions related to AIGC have been organized, effectively enhancing students' practical capabilities and comprehensive qualities.

To ensure the smooth implementation of AIGC in empowering the cultivation of university media talents, a series of guarantee measures have been proposed. In terms of teaching staff construction, teachers' information technology training has been strengthened, teachers have been encouraged to take temporary positions in enterprises, and part-time teachers have been hired to build a high-quality teaching team. In terms of teaching resources construction, digital teaching resources have been integrated and developed, and a teaching resource sharing mechanism has been established to provide abundant resource support for teaching. In terms of teaching management system reform, talent cultivation plans have been adjusted, curriculum settings have been optimized, teaching evaluation systems have been reformed, and teaching management mechanisms have been improved, providing a strong system guarantee for AIGC teaching.

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References

- [1] Cheng Qiyun, Sun Caixin, Zhang Xiaoxing, et al. Short-Term Load Forecasting Model and Method for Power System Based on Complementation of Neural Network and Fuzzy Logic [J]. Transactions of China Electrotechnical Society, 2004, 19(10): 53-58.
- [2] Fangfang. Research on Power Load Forecasting Based on Improved BP Neural Network [D]. Harbin Institute of Technology, 2011.

- [3] Amjady N. Short-term Hourly Load Forecasting Using Time Series Modeling with Peak Load Estimation Capability [J]. IEEE Transactions on Power Systems, 2001, 16(4): 798-805.
- [4] Ma Kunlong. Short-term Distributed Load Forecasting Method Based on Big Data [D]. Changsha: Hunan University, 2014.