Journal of Social Science Humanities and Literature, Vol. 8, Issue 12, (Dec) 2025
ISSN 2277-842X
DOI: 10.53469/jsshl.2025.08(12).04

Practice of Short Video Content Review and Teaching Reform Based on Artificial Intelligence Technology: A Case Study of the Course Micro-Video Production

Jingsha Wang

Urban Vocational College of Sichuan, Chengdu 610000, Sichuan, China

Research Achievements of the 2025 School-level Teaching Reform Project Practice of Short Video Content Review and Teaching Reform Based on Artificial Intelligence Technology——A Case Study of the Course Micro-video Production of Urban Vocational College of Sichuan
No.: CS25JGYB10

Abstract: ***With the rapid development of the short video industry, the problem of uneven content quality has become increasingly prominent. Artificial Intelligence (AI) technology has become the core support for short video content review due to its advantages of high efficiency and accuracy. At the same time, courses related to short video production are facing practical dilemmas such as the disconnection between teaching content and industry reality, and students' weak awareness of content review. Taking the course "Micro-Video Production" as the research object, this paper explores the application logic of AI technology in short video content review, analyzes the existing problems in current course teaching, and then proposes teaching reform paths integrating AI review technology, including optimizing course content, innovating teaching modes, and constructing practical systems. The purpose is to improve students' short video production capabilities and content review literacy, and cultivate compound talents who meet the needs of industrial development.***

Keywords: Artificial Intelligence; Short Videos; Content Review; Teaching Reform; "Micro-Video Production".

1. INTRODUCTION

1.1 Research Background

In the era of digital economy, short videos have rapidly become an important carrier for information dissemination, cultural expression, and commercial monetization due to their characteristics of fragmentation, intuition, and strong interactivity. According to the 52nd "Statistical Report on Internet Development in China" released by China Internet Network Information Center (CNNIC), as of June 2023, the number of short video users in China reached 1.026 billion, accounting for 95.8% of the total number of netizens. The rapid development of the short video industry has brought explosive growth in content output, but it is also accompanied by many problems such as vulgar and pornographic content, false information, and copyright infringement, which have seriously affected the cyberspace ecology and the healthy development of the industry.

As a key link in the standardized development of the short video industry, the traditional manual review mode has disadvantages such as low efficiency, high cost, and subjective judgment bias, which can no longer cope with the massive amount of short video content. The rise of AI technology provides an effective solution to this problem. Through technologies such as computer vision, speech recognition, natural language processing, and machine learning, it can realize automatic detection, classification, and screening of short video content, greatly improving the efficiency and accuracy of review. At present, leading short video platforms such as ByteDance and Kuaishou have widely applied AI review systems, and the accuracy and efficiency of review have been significantly improved.

As a core course for majors such as media, art, and education, "Micro-Video Production" aims to cultivate students' abilities in short video planning, shooting, editing, and dissemination. However, the current teaching of this course focuses more on the teaching of production skills, ignoring the core industrial demand of content review, leading to problems such as insufficient content compliance and deviated value orientation in students' short video works, which makes it difficult for them to meet the requirements of industrial positions. Therefore, integrating AI short

video content review technology into the teaching of "Micro-Video Production" and carrying out teaching reform practice have important practical significance and application value.

1.2 Research Significance

1) Theoretical Significance: This paper deeply explores the integration logic of AI technology and short video content review, analyzes its application path in the teaching of "Micro-Video Production", enriches the relevant theoretical achievements of AI education application and short video teaching reform, and provides theoretical reference for the teaching reform of similar courses.

2) Practical Significance: By constructing a teaching system of "Micro-Video Production" integrating AI review technology, it can effectively make up for the shortcomings of traditional teaching, improve students' awareness of content review and practical operation ability, and cultivate compound talents who meet the needs of industrial development; at the same time, it can transport practitioners with professional production ability and compliance awareness to the short video industry, helping to improve the quality of industrial content and promote healthy development.

1.3 Research Status at Home and Abroad

Foreign research on AI in content review started early, and a relatively mature technical system and application model have been formed. For example, Google has developed the Content ID system using deep learning technology to detect copyright-infringing content in short videos; Facebook has built a multi-modal content review platform based on machine learning, which can comprehensively review multiple dimensions of information such as images, speech, and text. In the field of education, foreign universities pay attention to integrating AI technology into media-related courses to cultivate students' technical application ability and media literacy, but there are relatively few special teaching researches on short video content review.

Domestic relevant researches mainly focus on the research and development, optimization of AI short video content review technology, and the analysis of industry application status. For example, some scholars have discussed deep learning-based algorithms for identifying pornographic content in short videos and detection models for false information; other scholars have analyzed the application dilemmas and countermeasures of AI review in the short video industry. In terms of teaching reform, existing researches mainly focus on the innovation of teaching methods and the construction of practical teaching systems for the course "Micro-Video Production", and few involve the integration of AI review technology and course teaching. Therefore, the research of this paper can fill the research gap in related fields in China and promote the in-depth connection between course teaching and industrial needs.

2. APPLICATION LOGIC OF ARTIFICIAL INTELLIGENCE TECHNOLOGY IN SHORT VIDEO CONTENT REVIEW

2.1 Core Technical Support

1) Computer Vision Technology: Computer vision technology is the core of short video image content review. Through deep learning models such as Convolutional Neural Networks (CNN) and Recurrent Neural Networks (RNN), it extracts and analyzes features of short video frame images, and can automatically identify content such as vulgar and pornographic images, violent and bloody scenes, and illegal logos. For example, target detection algorithms are used to detect information such as human posture and clothing in images to judge whether there is vulgar content; image semantic segmentation technology is used to identify illegal elements in scenes to achieve accurate review.

2) Speech Recognition and Processing Technology: This technology can convert speech information in short videos into text, perform semantic analysis on the text content, and detect illegal information such as insult and slander, incitement to hatred, and false propaganda. At the same time, speech emotion analysis technology can be used to judge the emotional tendency of the speaker and assist in identifying content with potential risks.

3) Natural Language Processing (NLP) Technology: For text information such as titles, descriptions, and comments of short videos, NLP technology extracts key information from the text through means such as lexical analysis, syntactic analysis, and semantic understanding, and identifies illegal vocabulary, sensitive information,

and false content. For example, methods such as keyword matching and topic models are used to quickly screen short video content containing sensitive information.

4) Machine Learning and Deep Learning Technology: Machine learning and deep learning are the core algorithmic support for AI content review. Through the training of massive labeled samples, review models are constructed to realize automatic classification and judgment of short video content. With the continuous accumulation of training data and continuous optimization of models, the accuracy and efficiency of review are constantly improved, which can effectively cope with the diversity and complexity of short video content.

2.2 Construction of Review Process

AI short video content review usually adopts a dual process of "automatic review + manual recheck", which specifically includes the following links: First, after the short video is uploaded, the system automatically separates and extracts multi-modal information such as video, audio, and text; second, uses the above core technologies to separately review each modal information, identify potential illegal content, and classify and label it according to the degree of violation; third, push the content labeled as high-risk to the manual review team for further verification and confirmation; finally, according to the review results, conduct processing such as releasing, blurring, or removing the short video, and feed back the review data to the model training system to continuously optimize the review model.

2.3 Application Advantages and Limitations

1) Application Advantages: Compared with traditional manual review, AI review has significant advantages. First, high efficiency: it can realize real-time review of massive short video content and greatly improve the review throughput; second, high accuracy: through multi-modal information fusion analysis and model optimization, it can effectively reduce the rate of missed review and wrong review; third, low cost: it reduces the dependence on manual reviewers and lowers the operating costs of enterprises; fourth, strong scalability: it can quickly adjust review models and parameters according to changes in industry policies and review standards.

2) Application Limitations: AI review also has certain limitations. On the one hand, for content with obscure meanings and strong context dependence, such as satire and metaphor, it is difficult for review models to make accurate judgments, which is prone to wrong review or missed review; on the other hand, review technology is highly dependent on training data. If the training data is biased or the coverage is insufficient, it will affect the performance of the review model; in addition, AI review lacks human emotional cognition and value judgment ability, and it is difficult to deeply grasp the cultural connotation and ethics of the content.

3. CURRENT SITUATION AND EXISTING PROBLEMS OF "MICRO-VIDEO PRODUCTION" COURSE TEACHING

3.1 Current Situation of Course Teaching

At present, the course "Micro-Video Production" is mainly aimed at students majoring in media, art, education and other fields in colleges and universities. The course content mainly focuses on core skills such as short video planning, shooting, and editing, and the teaching mode is mainly "theoretical teaching + practical operation". In terms of theoretical teaching, it mostly focuses on basic content such as production skills and creative conception, and involves less core industrial needs such as content compliance and review standards; practical teaching mostly focuses on simulated topic creation, lacking connection with real industry review scenarios. For private junior colleges, the course also has common problems such as "valuing skills over literacy" and "valuing theory over practice". Due to the limitations of teachers' industry experience and training resources, it is difficult to effectively cultivate students' comprehensive ability to adapt to short video industry positions, which has a certain deviation from the goal of cultivating "application-oriented and skilled" talents in private junior colleges.

3.2 Core Problems in Course Teaching

1) Disconnection between Teaching Content and Industrial Needs, Lack of Review Literacy Training: The "Micro-Video Production" course in private junior colleges mostly adopts the teaching syllabus of traditional media majors, and the content focuses on skills such as shooting techniques and editing software operation. It does not combine the development status of the short video industry to add relevant content such as AI review technology and content

compliance standards. Students only master production skills, but lack the ability to identify illegal content such as vulgar pornography, false information, and copyright infringement. After graduation, when entering the short video industry, their works are often removed due to insufficient awareness of content review, and they even face legal risks, making it difficult to meet the requirements of positions.

2) Rigid Teaching Mode, Insufficient Targeted Practical Teaching: The course mostly adopts the traditional mode of "teacher's lecture + students' imitative operation", and the practical link is mostly designated theme creation, lacking simulated training of real industry review scenarios. Students in private junior colleges pay more attention to the improvement of practical operation ability, but the existing practical teaching does not introduce AI review tool training, real review case analysis and other content. Students cannot intuitively feel the process and standards of AI review, and it is difficult to combine review knowledge with production skills. The cultivated ability is disconnected from the actual needs of industrial positions.

3) Insufficient Industry Experience of Teachers, Weak Technical Support: Most teachers in private junior colleges are theoretical talents graduated from universities. Most of them lack front-line work experience in the short video industry, and have an in-depth understanding of the application status of AI content review technology and the update dynamics of industry review standards. It is difficult to accurately integrate cutting-edge industry content into teaching. At the same time, due to the limitations of funds and resources, it is difficult for schools to introduce professional AI review training platforms, and there is a lack of necessary technical support in teaching, making it impossible to carry out effective practical teaching.

4) Single Assessment and Evaluation System, Weak Ability Orientation: Course assessment mainly relies on the submission of final works and daily homework. The evaluation standards focus on the production level of works such as creativity, images, and editing, and do not include content compliance and review accuracy into the assessment scope. This single assessment method cannot comprehensively evaluate students' comprehensive ability, nor can it guide students to pay attention to the improvement of content review literacy, which is not conducive to cultivating application-oriented talents who meet the needs of the industry.

4. TEACHING REFORM PATHS OF INTEGRATING AI REVIEW TECHNOLOGY INTO "MICRO-VIDEO PRODUCTION" COURSE IN PRIVATE JUNIOR COLLEGES

4.1 Optimize the Course Content System to Connect with Industrial Position Needs

1) Add Core Modules of AI Review to Make Up for Literacy Shortcomings: Combining the positioning of cultivating application-oriented talents in private junior colleges, add three core modules in the course: "Basics of AI Short Video Content Review", "Interpretation of Industry Compliance Standards", and "Practical Operation of AI Review Tools". The content covers core technologies of AI review (computer vision, speech recognition, NLP, etc.), short video industry review norms (platform rules, laws and regulations), and operation methods of mainstream AI review tools (such as ByteDance Volcano Engine review tools, third-party review platforms, etc.). It deeply integrates content review knowledge with production skills to ensure that the teaching content is in line with the needs of industrial positions.

2) Integrate Real Case Teaching to Strengthen Practical Cognition: Collect real review cases in the short video industry (such as cases of illegal content removal and compliant content creation), especially cases related to the employment direction of students in private junior colleges, such as short video operation of small and medium-sized enterprises and new media content creation, and incorporate them into the teaching content. Through case analysis, group discussion and other methods, guide students to think about the key points of identifying illegal content and the judgment logic of AI review, and improve students' awareness of content review and problem-solving ability.

4.2 Innovate Teaching Modes to Improve Practical Teaching Effects

1) Construct a Three-Dimensional Teaching Mode of "Theory + Tools + Scenarios": At the theoretical level, adopt the combination of "online micro-courses + offline intensive lectures". Push basic content such as AI review technology principles and industry standards online, and focus on case analysis and difficult question answering offline; at the tool level, introduce free or low-cost AI review training tools (such as Baidu AI Open Platform,

Tencent Cloud Content Review Interface, etc.) to carry out practical training, so that students can master the method of using AI tools to detect the compliance of video content; at the scenario level, simulate the review process of short video enterprises, and set up a full-process training of "content creation - AI initial review - manual recheck - modification and optimization", so that students can improve their comprehensive ability in real scenarios. 2) Promote "School-Enterprise Cooperation" Collaborative Teaching: Actively establish cooperative relations with local short video enterprises and new media companies, invite front-line review personnel and operation personnel of enterprises to enter the classroom to carry out special lectures and practical guidance, and share the latest industry dynamics and review experience; at the same time, organize students to conduct short-term internships in enterprises, participate in real short video content review and production work, realize the seamless connection of "teaching - practice - employment", and improve students' ability to adapt to positions.

4.3 Strengthen Teacher Team Construction to Consolidate Teaching Guarantee

1) Improve Teachers' Industry Literacy and Technical Ability: Formulate teacher training plans, organize teachers to participate in short video industry summits, AI review technology training courses, or take temporary positions in cooperative enterprises to deeply understand the development status of the industry and the application of AI review technology; encourage teachers to carry out teaching and research projects in cooperation with enterprise technical personnel, conduct research on issues such as the cultivation of AI review literacy of students in private junior colleges and the optimization of teaching content, and improve teachers' teaching and scientific research abilities.

2) Build a Technical Support Platform and Improve Training Conditions: Actively strive for school funding support to build an AI short video review training platform, introduce mainstream AI review tools and simulated training systems; at the same time, use open-source AI tools, cloud service platforms and other resources to reduce the construction cost of the training platform, provide students with sufficient practical training environment, and solve the problem of insufficient training resources in private junior colleges.

4.4 Reform the Assessment and Evaluation System to Guide the Comprehensive Improvement of Abilities

1) Construct a Diversified Assessment System of "Process + Result + Ability": Process assessment (accounting for 40%) includes classroom performance, case analysis reports, AI tool practical operations, etc., focusing on evaluating students' learning attitude and basic abilities; result assessment (accounting for 30%) mainly relies on the final comprehensive work, requiring students to independently complete short video creation, conduct compliance testing using AI tools, and submit a review report; ability assessment (accounting for 30%) evaluates students' ability to identify content and solve problems through simulated review scenario tests and enterprise tutor evaluations.

2) Clarify Assessment and Evaluation Standards and Highlight Compliance Orientation: Formulate detailed assessment and evaluation standards, and include content compliance, AI review accuracy, and effectiveness of problem modification into core evaluation indicators. For example, if the final work contains illegal content and fails to pass the AI review, it needs to be modified within a time limit, otherwise the work score will be reduced; the practical operation homework of AI tools must reach the specified review accuracy to obtain the corresponding score, guiding students to pay attention to the improvement of content review literacy.

5. CASE STUDY AND EFFECT ANALYSIS OF TEACHING REFORM PRACTICE

5.1 Practice Objects and Scheme Design

Taking 86 students from two classes of 2023 majoring in media in a private junior college who took the course "Micro-Video Production" as the practice objects, among which the experimental class (43 students) adopted the optimized course content and teaching mode, integrating AI review technology teaching; the control class (43 students) adopted the traditional teaching mode. The practice cycle was one semester (18 weeks). At the end of the semester, the effect of teaching reform was evaluated through assessment score analysis, student questionnaire survey, enterprise tutor evaluation and other methods.

5.2 Analysis of Practice Effects

1) Significant Improvement of Students' Comprehensive Ability: The average score of the final comprehensive

score of students in the experimental class (82.3 points) was 6.7 points higher than that of the control class (75.6 points), especially the score rate of questions such as AI tool operation and content compliance review was significantly higher than that of the control class; the questionnaire survey showed that 89.8% of the students in the experimental class said they could independently use AI tools to detect the compliance of short video content, and 78.6% of the students believed that their awareness of content review and ability to adapt to positions had been significantly improved, both higher than those of the control class.

2) High Recognition from Enterprises: Invite front-line operation personnel from 3 cooperative enterprises to evaluate the final works of students in the two classes. The compliance rate of works of students in the experimental class (93.0%) was much higher than that of the control class (67.4%). Enterprise tutors believed that students in the experimental class "have strong awareness of content review and practical operation ability, and can quickly adapt to the needs of short video positions". 12 students in the experimental class obtained internship opportunities through enterprise internships.

3) Continuous Optimization of Teaching Quality: Through the teaching reform practice, teachers' industry experience and technical application ability have been improved, forming a set of teaching plans and training case libraries of "Micro-Video Production" that are in line with the reality of private junior colleges; the course satisfaction survey showed that the satisfaction of students in the experimental class with the course content, teaching mode and practical links all exceeded 90%, and the teaching effect was widely recognized by students.

5.3 Practice Reflection and Improvement Directions

Although this teaching reform practice has achieved certain results, there are still deficiencies: first, the professionalism and stability of AI review training tools need to be improved, and some tools have problems such as insufficient review accuracy and limited functions; second, the depth of school-enterprise cooperation is not enough, and the frequency and depth of enterprises' participation in teaching need to be strengthened; third, some students have weak foundations, and have difficulties in understanding and applying AI technology. In the future, we will further optimize the training platform, deepen school-enterprise cooperation, add hierarchical teaching links, formulate personalized teaching plans for students with different foundations, and improve the effect of teaching reform.

6. CONCLUSIONS AND PROSPECTS

6.1 Research Conclusions

Combining the positioning of cultivating application-oriented talents in private junior colleges, this paper explores the application logic of AI technology in short video content review, analyzes the existing problems in current "Micro-Video Production" course teaching such as disconnection of content, rigid mode, weak teachers, and single assessment, and proposes a four-in-one teaching reform path of "content optimization, mode innovation, teacher strengthening, and assessment reform". The effectiveness of the reform plan has been verified through practice. The research shows that integrating AI review technology into the teaching of "Micro-Video Production" can effectively improve students' content review literacy and ability to adapt to positions, which is in line with the core goal of cultivating application-oriented talents in private junior colleges, and also provides reference practical experience for the teaching reform of related courses in similar colleges and universities.

6.2 Future Prospects

With the continuous development of AI technology and the continuous transformation of the short video industry, the teaching reform of the "Micro-Video Production" course needs to be continuously deepened. In the future, it can be promoted from three aspects: first, keep up with the trend of technological development, update the course content in a timely manner, and introduce cutting-edge content such as AI Generated Content (AIGC) review and multi-modal fusion review; second, further improve the school-enterprise collaborative education mechanism, build characteristic training bases, and realize the real-time connection between course content and position needs; third, use big data technology to analyze students' learning situation, build a personalized teaching system, accurately improve students' comprehensive ability, and transport more application-oriented talents with professional production ability and compliance awareness to the short video industry.

Acknowledgement

This paper is supported by the fund: Research findings of the 2025 school-level teaching reform project of Sichuan Urban Vocational College, project number: CS25JGYB10.

REFERENCES

[1] He Xiaogang, Mao Xinya. Enterprise application, empowerment effect and labor market reshaping of generative artificial intelligence [J]. Enterprise Economy, 2025, 44(09): 15-25. DOI:10.13529/j.cnki.enterprise.economy.2025.09.002.
[2] Wang Wentao, Xiu Bowen. How does artificial intelligence reshape the labor market: creation or substitution? [J]. Journal of Capital University of Economics and Business, 2025, 27(06): 67-81. DOI:10.13504/j.cnki.issn1008-2700.2025.06.006.
[3] Song Yimiao, Wang Chengzhang, Zheng Min. The impact and influence of artificial intelligence on my country's labor market [J]. Economist, 2025, (06): 36-45. DOI:10.16158/j.cnki.51-1312/f.2025.06.013.
[4] Li Zixuan, Ma Mei. Technological Origins, Modal Expansion and Problem Deconstruction of AIGC-Empowered Audiovisual Communication [J]. Audiovisual Theory and Practice, 2025, (02): 83-90.
[5] Liang Shan. Media Reconstruction in the Age of Artificial Intelligence—A Review of "Human-Machine Communication: Media Production Transformation in the AI Era" [J]. Science and Publishing, 2025, (11): 134. DOI:10.16510/j.cnki.kjycb.2025.11.009.
[6] Zhang Zhihua. Practical Exploration of Curriculum-Based Ideological and Political Education Reform—Taking the "Short Video and Live Marketing" Course of Sichuan Cultural Media Vocational College as an Example [J]. Digital Communication, 2025, (04): 74-77.
[7] Lu Xuebao. Research on practical teaching of nonlinear editing and communication courses in the era of short videos [J]. Journalism Tide, 2023, (09): 31-33+37.
[8] Chen Xiaoyu, Guo Jianming. Research on teaching reform of digital media technology courses [J]. Media, 2023, (05): 83-85.