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The Dilemmas and Improvement Paths of College Students' Media Literacy Education from the Perspective of Critical Thinking

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Abstract: With the full advent of the converged media era, media literacy education for college students has become a crucial component of higher education. This paper analyzes the various challenges facing current media literacy education from the perspective of critical thinking: a disconnect between educational content and practical needs, insufficient cultivation of critical thinking skills, an incomplete curriculum system, inadequate professionalization of teaching staff, and a simplistic evaluation framework. Building on this analysis, the paper establishes a theoretical framework for media literacy education grounded in critical thinking and proposes a four-dimensional cultivation model "Cognition-Analysis-Evaluation-Creation." It outlines concrete improvement pathways including curriculum restructuring, innovative teaching methodologies, professional development for educators, practical training platform development, and reform of evaluation mechanisms. The study demonstrates how to organically integrate critical thinking cultivation throughout the entire media literacy education process, effectively enhancing students' comprehensive abilities to identify misinformation, rationally analyze media content, and independently assess the value of media information.

Keywords: Critical Thinking; Media Literacy; Higher Education.

1. Introduction

With the full arrival of the converged media era, the landscape of information dissemination has undergone profound transformations, and the media environment exhibits unprecedented complexity and dynamism. According to statistics from the China Internet Network Information Center (CNNIC), the number of internet users in China has exceeded 1 billion, with college students constituting a pivotal and active force in internet usage. Contemporary college students have essentially become the most proactive and frequent recipients and disseminators of online information. Within the open discourse environments, vast discourse resources, diverse discourse styles, and integrated discourse platforms of the converged media landscape, individuals 'learning methods, thinking habits, and behavioral choices are profoundly influenced. However, the sheer volume of information does not necessarily lead to improved quality; issues such as misinformation, online rumors, and algorithmic biases have become increasingly prominent, posing direct and tangible challenges to college students' information discernment and critical thinking skills. The "China Student Development Core Competencies" repeatedly emphasize the need to cultivate in contemporary college students the ability to "consciously and effectively acquire, evaluate, identify, and utilize information," "possess digital literacy to proactively adapt to societal trends like 'Internet+,' " and "develop awareness of online ethics, morality, and information security." Therefore, media literacy education for college students, as a vital component of higher education, holds significant practical importance in addressing their current challenges and identifying pathways for improvement.

Media literacy—the ability of individuals to properly understand, critically evaluate, and creatively utilize media—is becoming increasingly vital in contemporary society (Feuerstein, 1999). As early as 1999, Feuerstein systematically demonstrated the positive role of media literacy education in fostering children's critical thinking. Over the subsequent decades, the concept of media literacy has expanded significantly, evolving from merely understanding media content to encompassing dimensions such as information discernment, critical analysis, and ethical judgment (Art, 2018). Critical thinking itself is a rational and reflective mode of cognition, serving as the foundational skill for analyzing information, evaluating evidence, and making sound judgments (Facione, 2011). Current research indicates a strong correlation between media literacy and critical thinking (Tommasi et al., 2023): media literacy education promotes the development of critical thinking, which in turn constitutes the core and most essential objective of such education. Orhan's (2023) study further corroborates this, showing that college students' critical thinking tendencies and their new media literacy significantly predict their ability to identify misinformation.

However, an examination of the current state of media literacy education for college students reveals significant challenges in content design, curriculum frameworks, faculty capabilities, and evaluation mechanisms. Particularly, the cultivation of critical thinking remains generally weak, failing to meet the higher demands placed on students' information processing skills in the era of converged media. Based on this, this paper conducts a systematic analysis of the current state of media literacy education from the perspective of critical thinking and attempts to establish a theoretical framework integrated with the core principles of critical thinking. This research not only deepens our understanding of the essence of media literacy education but also provides theoretical support and practical guidance for universities to advance relevant educational reforms in the converged media landscape.

2. Literature Review and Theoretical Basis

2.1. The Connotation and Development of Media Literacy

In 2007, Lü Qiaoping proposed in his book that media literacy consists of four components: "media cognitive ability, media usage ability, media critical ability, and media creative ability." In 2010, Wei Jia argued that defining media literacy should first expand its scope to include the media itself and the information it contains, as well as the abilities of self, others, and interaction during this process. In 2013, UNESCO outlined the key elements of media literacy as "the ability to apply media technologies to retrieve information, fully understand information and media content, and produce, share, connect with, and monitor information." In 2015, Lu Feng categorized media literacy based on audience needs into "media safety literacy, media interaction literacy, media learning literacy, and media cultural literacy."

Tracing the evolution of the concept of media literacy reveals that its core components—content comprehension skills, critical evaluation abilities, and communication proficiency—have consistently defined its essence. Initially, media literacy referred primarily to readers' reading comprehension skills in the print media era. With the advent of radio and television, its scope naturally expanded to include understanding and analyzing audiovisual content. In the digital age, it further extended to encompass the use of digital technologies, evaluation of online information, and multimedia content creation. Entering the era of artificial intelligence, media literacy has acquired new dimensions. Hackletal (2025) proposed a seven-dimensional framework for AI literacy, explicitly designating critical thinking as the core dimension.

Therefore, this study integrates the refined insights of various scholars regarding cognitive processes, application scopes, and hierarchy of needs in media literacy. The research on college students' media literacy focuses on evaluating current proficiency levels in four core competencies—"cognition, retrieval, comprehension, and application" —while enhancing these abilities through the principles of "security, interactivity, learning, and cultural relevance." Media literacy is conceptualized as an enhancement of both personal capabilities and knowledge structures.

2.2. The Relationship between Media Literacy Education and Critical Thinking

A substantial body of literature has clearly and systematically elucidated the relationship between media literacy education and critical thinking: Jeon et al. (2012) conducted a systematic meta-analysis of 51 studies, demonstrating that media literacy interventions generally yield positive effects, though the magnitude of these effects is influenced by factors such as study design, intervention type, and measurement methods. Bergstrom et al. (2018) empirically demonstrated that implementing critical media literacy interventions in university classrooms effectively enhances students 'critical thinking skills and their understanding of media literacy. Chen et al. (2024) investigated the impact of social media use on college students' critical thinking abilities, revealing a complex relationship between social media usage and critical thinking, with media literacy playing a pivotal mediating role. Bekbayeva and Seidina (2025) provided direct and compelling evidence that educational interventions utilizing media resources foster the development of critical thinking skills among college students. Zhang Changhai (2016), drawing from the China context, proposed an information literacy education model that integrates critical thinking with creativity, combining the cultivation of critical analytical skills with innovative application abilities.

Overall, existing research has established a close relationship between media literacy education and critical thinking at both theoretical and practical levels, providing a methodological foundation for implementing relevant interventions. However, most current studies focus on verifying the relationship between the two or evaluating the effectiveness of single-intervention approaches, while a systematic theoretical framework that integrates critical thinking cultivation throughout the entire media literacy education process remains insufficient. Building on existing literature, this study aims to develop a theoretical framework for media literacy education that incorporates the core principles of critical thinking and explore systematic implementation pathways.

2.3. Current Research Status of Media Literacy Education for Chinese University Students

Chinese scholars have conducted extensive and constructive research on media literacy education for college students. At the theoretical level, Wang Lianhua (2012) was among the first to emphasize that the core of media literacy education in the new media era lies in cultivating critical media awareness, guiding students to analyze and consume new media information through critical thinking. Gao Ping (2015) further proposed the concept of "strengthening college students 'media literacy through critical thinking," stressing that critical thinking is not merely a supplementary element but an essential component of media literacy itself. Zhou Jian et al. (2015) examined the fundamental characteristics of contemporary college students' "digital existence" from the perspectives of generational differences and evolving information environments, noting that traditional media literacy education models struggle to address emerging challenges such as information overload, mixed truth and falsehood, and algorithmic influence. In terms of empirical research, scholars have increasingly focused on the actual levels and structural issues of college students 'media literacy. For instance, Ma Yiyang (2025) conducted a quantitative analysis of students' digital literacy, revealing widespread weaknesses in distinguishing AI-generated content and insufficient awareness of online ethics, while also highlighting deficiencies in current education and regulatory frameworks. Similar studies indicate that although modern college students frequently use digital tools, they exhibit significant gaps in deeper critical thinking skills—including information traceability, logical reasoning, and perspective reflection.

Overall, the domestic academic community has reached a consensus on the following points: First, media literacy education must move beyond mere technical training and focus genuinely on cultivating critical thinking skills; second, critical thinking serves as both the logical foundation and core objective of media literacy education; third, the converged media environment poses systemic challenges to traditional educational concepts and methodologies. However, existing

research still has limitations: Firstly, most studies remain at the level of describing current practices and identifying issues, lacking a systematic and actionable theoretical framework; Secondly, empirical research remains relatively weak, with existing quantitative studies exhibiting limitations in sample representativeness, variable control, and intervention design; Thirdly, few studies systematically examine the hierarchical objectives, content organization, and teaching strategies of media literacy education from the perspective of the complete cognitive process of critical thinking, resulting in "critical thinking cultivation" often remaining merely a slogan in curriculum and teaching practices without effective implementation.

3. Analysis of the Challenges in Media Literacy Education for College Students

3.1. The Educational Content is Out of Sync with Real-World Needs

The pace of updating media literacy curriculum content in higher education institutions significantly lags behind the rapid advancements in media technology. Specifically, students receive insufficient practical training in information discernment during classroom instruction, and lack adequate skills to identify false narratives within fragmented information on short-video platforms and social media. Non-media majors also receive limited systematic education on media literacy, with general education courses being scarce, superficial, and lacking depth—key topics such as how algorithms personalize information recommendations based on user profiles and their potential "information bubble" effects remain underrepresented. This disconnect between curriculum content and the real-world media environment leaves students ill-equipped to navigate the authentic information landscape outside the classroom. Bulger and Davidson (2018) explicitly highlight that one of the fundamental challenges in media literacy education is keeping pace with technological developments. Moreover, current curricula tend to prioritize theory over practice, focusing primarily on conceptual explanations and case analyses while lacking substantive hands-on opportunities for students to engage directly in media content creation and dissemination. Empirical research by Bergstrom et al. (2018) further demonstrates that practice-oriented media literacy interventions more effectively enhance students' critical thinking skills. Consequently, media literacy education exhibits notable shortcomings in both the speed of content updates and the emphasis on practical instruction: the former creates a mismatch between learners and teaching tools, while the latter limits the transfer and development of critical thinking skills in real-world contexts. The interweaving of these two factors further exacerbates the structural contradiction between educational supply and actual demand.

3.2. Insufficient Cultivation of Critical Thinking

Although the importance of critical thinking has been widely recognized in media literacy education, current teaching practices remain superficial in cultivating this skill, lacking systematic and robust cognitive training frameworks. The systematic review by Tommasi et al. (2023) explicitly states that effective critical thinking development requires structured instructional designs and well-organized, tiered training programs. In practice, educators often merely guide students to identify overt disinformation, with limited emphasis on analyzing deeper factors such as information sources, dissemination motivations, and discourse strategies. This stems from the need to reform teaching methodologies: traditional media literacy assessments primarily rely on knowledge-testing exams that evaluate students' mastery of media concepts and theories, failing to genuinely measure critical thinking abilities. Byrne (2009) candidly notes that evaluating the effectiveness of media literacy interventions poses significant challenges, as existing assessment methods struggle to accurately measure the development of higher-order competencies like critical thinking.

3.3. The Curriculum System is not Well-developed

There are significant variations in the curriculum positioning of media literacy education across universities: some institutions offer it as a specialized course for journalism and communication majors, while others integrate it into general education frameworks, with many providing it solely as an elective. Consequently, course objectives differ markedly, teaching resources are limited, and instructional quality varies widely. Zhou Jian et al. (2015) argue that media literacy education should form a foundational component of higher education rather than being treated as a peripheral elective. However, only a minority of universities have genuinely incorporated media literacy into their core curriculum systems for talent development. More critically, due to the absence of unified course standards and syllabi, media literacy courses vary significantly across institutions, exhibiting fragmented characteristics—some emphasize media technical operations, others focus on media ethics discussions, and still others prioritize information retrieval skills. Overall, there is a lack of a top-down, coherent, and systematically integrated design framework.

3.4. Insufficient Professionalization of the Teaching Staff

Media literacy education is a quintessential interdisciplinary field that integrates knowledge from communication studies, pedagogy, psychology, information technology, and other disciplines. However, most educators in this field currently possess a single-disciplinary background, with generally insufficient interdisciplinary knowledge and corresponding teaching competencies. Potter (2014) systematically argued that practitioners of media literacy education should have a multidisciplinary knowledge base and proactive learning abilities; yet in reality, teachers with such interdisciplinary capabilities remain scarce, significantly hindering the improvement of teaching quality. Furthermore, as "digital natives," college students generally demonstrate superior proficiency in adopting and utilizing new media technologies compared to their faculty counterparts, leaving educators lacking empathy when addressing students' media usage behaviors and consequently limiting the relevance and persuasiveness of instructional content.

4. Theoretical Framework for Media Literacy Education Based on Critical Thinking

This paper, drawing on critical thinking theory and media literacy education theory, systematically constructs a four-dimensional theoretical framework— "cognition-analytical-assessment-creation" (see Table 1)—with critical thinking serving as the central thread throughout the entire media literacy education process, aiming to cultivate college students' abilities to understand, critically analyze, and creatively apply media information. Specifically, the cognitive dimension serves as the foundation, involving mastery of media types and characteristics, along with an understanding of their social functions, economic logic, and ideological attributes; the analytical dimension is the core, requiring in-depth deconstruction of media content; the assessment dimension is pivotal, enabling independent and evidence-based judgment of information credibility and authenticity; and the creative dimension represents the advanced stage, where responsible media content production is undertaken based on thorough understanding and appropriate analysis.

Table 1. The Four-Dimensional Theoretical Framework of "Cognition-Analytical-Evaluation-Creation"

Cognitive Dimension	Analysis Dimension	Evaluation Dimension	Creation Dimension
Media Cognition Ability	Information analysis skills	Value Assessment Capability	Content creation ability
Information identification	Structure Analysis	Reliability Assessment	Creative Expression
Source Tracking	utterance analysis	Prejudice Identification	Responsible Communication
Context Understanding	Motivation Recognition	Ethical Judgment	social participation

5. Approaches to Enhancing Media Literacy Education for College Students

5.1. Restructuring of the Curriculum System

Building upon the four-dimensional cultivation model, the concept of a three-tiered curriculum system— "Basic, Advanced, and Extended" —naturally and logically emerges: The Basic Level consists of compulsory general education courses. All undergraduate students take the compulsory course "Media Literacy and Critical Thinking," spanning 32–48 class hours, which systematically and thoroughly covers fundamental media knowledge, information discernment skills, and introductory critical thinking to establish a solid foundation in media literacy. The Advanced Level comprises discipline-specific integrated courses tailored to each major's characteristics—for example, journalism and communication programs offer courses like Deep Media Analysis and Journalism Ethics & Regulations; STEM programs provide Data Literacy and Science Communication; while humanities and social sciences programs include Media Cultural Criticism and Digital Humanities. The Extended Level features practical elective courses such as Digital Content Creation, False Information Identification, and Social Media Analysis, effectively addressing students' individual developmental needs.

5.2. Innovation in Teaching Methods

Teaching methodologies can incorporate various approaches such as project-based learning, case-based instruction, flipped classrooms, blended learning, and interdisciplinary collaborative teaching. Specifically, project-based learning enables students to complete learning tasks in real or simulated media environments: the misinformation identification project requires students to collect online rumors and write analysis reports, while the digital storytelling project involves creating short videos or podcasts on social issues. Research by Bergstrom et al. (2018) demonstrates the tangible benefits of project-based learning in enhancing students 'critical thinking and media analysis skills. Meanwhile, case-based instruction utilizes authentic media examples, making the teaching more relevant to real-world contexts. Suitable case sources include typical misinformation dissemination and debunking scenarios, as well as students' everyday media usage experiences. Flipped classrooms and blended learning fully leverage online learning platforms; recent research by Chen et al. (2024) conclusively shows that the judicious use of social media and online learning tools significantly fosters the development of students' critical thinking skills.

5.3. Development of the Faculty Team

On one hand, establish a professional development system for media literacy education teachers, encompassing pre-service training, regular professional development programs, industry internships, and teaching research. Provide newly appointed teachers with systematic training in media literacy education theories and methodologies, organize their participation in domestic and international academic conferences and workshops to update their knowledge base, arrange practical training opportunities at media organizations and internet companies to expose them to industry advancements, and encourage research in media literacy education to enhance teaching practices. On the other hand, form interdisciplinary teaching teams that integrate faculty members with diverse professional backgrounds, and establish mechanisms for joint course development and teaching resource creation involving both teachers and students. Encourage students to share their personal media usage experiences to make instructional content more relevant to their actual contexts.

5.4. Development of the Practice Platform

The development of on-campus and off-campus practical platforms can be advanced in a tiered manner: First, establish campus media practice bases equipped with necessary multimedia devices and software, integrating campus news reporting and publicity efforts with the creation of online cultural content, enabling students to directly engage in media content production. By collaborating across various platforms such as campus radio, television stations, the school newspaper, and the new media center, an online cultural creation platform can be established. Second, develop off-campus practice bases by proactively establishing partnerships with mainstream media outlets, internet

companies, and government agencies, creating media internship bases and internet platform practice bases that allow students to participate in public information dissemination practices. Third, organize students to participate in social practice activities aimed at promoting media literacy, adopting a "teaching-driven learning" approach that enables students to naturally and thoroughly consolidate their knowledge and enhance their skills through teaching others.

6. Conclusion

This paper adopts a critical thinking perspective to systematically analyze the interconnected challenges in college students' media literacy education—including the disconnect between educational content and practical needs, insufficient cultivation of critical thinking skills, an incomplete curriculum framework, and inadequate professionalization of teaching staff. Building on this analysis, the study proposes a four-dimensional theoretical framework— "Cognition-Analysis-Evaluation-Creation" — along with corresponding enhancement pathways that integrate media cognition, information analysis, value assessment, and content creation, thereby providing effective guidance for media literacy practice. Enhancing media literacy education requires coordinated, systematic efforts across multiple dimensions: curriculum restructuring, innovative teaching methodologies, faculty development, and practical platform establishment, ensuring seamless integration and mutual reinforcement among these approaches. Against the backdrop of rapid advancements in media technologies during the digital and intelligent eras, the importance of media literacy education has become increasingly prominent. Universities should incorporate media literacy into the core of their talent development systems, effectively cultivating students into information-savvy citizens equipped with critical thinking, a sense of responsibility, and robust information discernment skills.

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