

## The Impact of Social Media on Visual Literacy of College Students: A Comprehensive Review

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### ABSTRACT

The increasing prevalence of social media platforms like WeChat, Douyin, and Weibo raises questions about their impact on the visual literacy of Chinese University students. Understanding how these platforms influence students' ability to critically analyse visual information is crucial in today's visually-driven World. Existing research on the interactions between social media and visual literacy is limited, which led to the need for a research focus. This study investigates the relationship between social media platforms and the visual literacy of Chinese university students. Specifically, this study aims to explore how these platforms affect students' abilities to analyse visual contexts, identifying both the positive influences and challenges they pose. A comprehensive literature review was conducted to synthesise existing empirical research on the interactions between social media and visual literacy. This approach was chosen due to the relatively novel stage of research in this field, where new findings and identification can be expected. The analysis reveals a dual impact of social media on visual literacy. These social media platforms can foster creativity, digital storytelling, and exposure to diverse visual cultures. Besides, these platforms can also contribute to challenges such as visual overload, superficial engagement with content, and the potential spread of misinformation. These challenges can hinder deeper visual analysis and critical thinking. This review also found evidence that social media can promote creative expression but also contribute to cognitive overload and passive content consumption.

**Contribution/Originality:** This study contributes to the existing literature by examining the dual impact of social media on the visual literacy of Chinese college students, highlighting both its potential to foster creativity and critical thinking and its challenges related to visual overload and superficial content engagement.

## 1. Introduction

Social media is a combination of digital channels that users can use to publish, exchange, and interact with content from other users. In China, these platforms have achieved widespread usage, with WeChat, Weibo, and Douyin—the Chinese version of TikTok being particularly dominant (Günay, 2021). It's crucial to understand the scale of social media use in China to appreciate its potential impact. By November 2024, the number of Internet users in China had reached nearly 1.1 billion (1.09967 billion), an increase of 7.42 million compared to December 2023. The Internet penetration rate reached 78.0%, an increase of 0.5 percentage points since December 2023 (CNNIC, 2024). This massive user base makes these platforms a powerful force in shaping information consumption, cultural trends, and potentially visual literacy.

Visual literacy is about finding, interpreting, evaluating, using, and creating images and visual media. The digital age phenomenon has increasingly shifted the focus to visual communication, primarily based on exchanging information through images and videos (Günay, 2021). It has grown because of the rapid speed of technological advancement and digital platform domination, hence the demand for more visual content in everyday communication. Therefore, the role of social media in defining or making sense of visual literacy, especially among those for whom it is a new tool of influence, thus becomes a relevant research area — which is why we have turned our attention to Chinese college students.”

Due to visual content engaging in virtual communication, visual literacy has been a significant ability for Chinese college students in the era of social media. The ability to interpret and create visual media helps students understand and critique the overwhelming press of images and videos they encounter daily, which magnifies cognitive and communication skills (Brumberger, 2011). Studies have shown that developing students' visual literacy prepares them to consume and create visual media thoughtfully (Hattwig et al., 2013). Moreover, students' communication behaviors and how they learn and communicate in digital environments have been significantly altered by the extensive availability of social media (Serafini, 2020). And so, building visual literacy among students is important for them to interact with and contribute to the emerging digital landscape.

This study aims to investigate, through a comprehensive literature review, the impact of social media platforms on visual literacy among Chinese college students. Specifically, the research explores how platforms such as WeChat, Weibo, and Douyin influence students' abilities to interpret and create visual messages. Previous studies underline visual literacy's critical role across academic disciplines and highlight that social media platforms, each with distinct purposes and functionalities, may differently impact visual literacy skills (Guymon, 2013).

Today, platforms like WeChat and Douyin have become integral to Chinese college students' daily communication, information consumption, and social interactions. The widespread accessibility of the internet via mobile devices and computers enables students to access diverse information anytime and anywhere, thereby providing personalized learning experiences that complement traditional educational approaches. Thus, exploring effective strategies to integrate social media into educational settings presents significant potential for enhancing students' learning experiences and addressing traditional educational limitations. Further research is necessary to identify

optimal methods for integrating social media into higher education to maximize its educational benefits and minimize potential drawbacks.

This study addresses this gap by comprehensively reviewing existing literature on the relationship between social media use and visual literacy among Chinese college students, aiming to provide practical insights and recommendations for educational practices.

## 1.1 Research Objectives

This study aims to investigate the impact of social media usage on visual literacy among college students in China through a comprehensive literature review. Specifically, the objectives of this research are to:

- i. Assess how social media platforms such as WeChat, Wibo, and Douyin enhance or hinder students' abilities to interpret, critically analyze, and create visual messages.
- ii. Explore the cognitive, psychological, and cultural influences associated with social media that affect students' visual literacy skills.
- iii. Offer insights on integrating social media effectively into educational practices to enhance visual literacy and complement traditional teaching methods.

## 2. Literature Review

### 2.1. Definition of Visual Literacy

Visual literacy, a term coined by John L. Debes in 1972, underwent much change over the decades. It was first defined as the ability to interpret and create visual messages rooted in traditional art education, emphasizing aesthetics and representation (Debes, 1972). As digital media became more prominent, the definition evolved to encompass the analysis of intricate visual information across multiple platforms, mirroring the transition from static imagery to interactive digital experiences. This reinforced the idea that visual communication had grown increasingly more complex in contemporary environments (Avgerinou & Pettersson, 2011).

Visual literacy emerged as a critical competency in higher education. Universities were key to teaching students to engage in critical visual analysis, equipping them with the ability to navigate the increasingly vast array of visual information that shaped and challenged them in everyday life. For this pedagogical purpose, the Association of College and Research Libraries (ACRL) created Visual Literacy Competency Standards and commented on setting the basis for graduated structures for critical assessment and production of the visual content by this population (ACRL, 2011). These standards acknowledged students' need both to consume visual information and play a role in its production, developing a greater awareness of (and deeper competency with) visual media's contextual, cultural, ethical, and technical elements (Brumberger, 2011).

Higher education needed to play an even more significant role in developing visual literacy skills as digital media infiltrated our lives. Teaching visual literacy within the university education framework equips students with the critical skills of discerning viewers and effective visual communicators, which are increasingly necessary in a visual-oriented society.

## 2.2. The Role of Social Media in Visual Communication

Social Media Evolution Shift from text-based content to visual-based content. Instagram and TikTok are visual-first platforms, and they fully understand the power of visual media in attracting users and driving up engagement. This history heralds the rise of video marketing, Body of the Deep Web, which increased video marketing. Finally, as a result, visual content was much faster to process and better to remember for the audience.

Chinese social media developed their unique visual communications in the context of WeChat Red Book and Douyin, which catered to specific cultural preferences and technological innovations. Unlike some Western platforms, which often focus on individual expression, Chinese social media integrated e-commerce visually and in an organic way, introducing a mix of social interaction and online shopping. For instance, Douyin (the Chinese version of TikTok) provided users with short-form video content and integrated features that enabled users to purchase business products directly in the app (Chiu, 2019). This convergence gave birth to a unique form of visual communication where content was often designed to be entertaining and transactional.

Additionally, Chinese social media use visual features like stickers, filters, and AR effects more often to engage users more interactively. This was facilitated by a cultural predisposition to play and kinetic visual aesthetics, which distinguished Chinese platforms from platforms in the West (Wang & Lobato, 2019).

What made a difference in understanding such a pattern is that the websites they used were designed for a specific visual communication strategy, which shaped their views on visual communication.

## 2.3. Cognitive and Psychological Aspects of Visual Literacy

Human perception of digital images and videos is a major factor affected by attention span, retention, and cognitive load. One of the main reasons psychological fatigue set in after a few years of being constantly bombarded with images on social media is cognitive overload. Studies showed that digital overload negatively impacts attention spans and mental load, making deep cognitive processing near impossible (Sweller et al., 2011). At the same time, studies showed that rapid, high-volume visual content, like short-form videos, had torn apart users' capability to retain information for a long time (Murray et al., 2021).

Visuals on social media had a powerful influence on user emotion and decision-making. Seeing emotionally charged images affected perceptions of credibility and attitudes toward news and online content (Lazer et al., 2020). Also, a prolonged view of short video content promoted hoisting behaviors, reducing a person's capacity to reflect on facts before concluding (Ophir et al., 2009). Scrolling through social media feeds leading to rapid changes in visual attention has been associated with lower cognitive control and vulnerability to emotional manipulation (Bayer et al. 2020).

## 3. Methodology

This article employed a comprehensive literature review approach to investigate the impact of social media on the visual literacy of Chinese university students. The main databases include Google Scholar and the well-known China Knowledge platform. The

main search terms were 'visual literacy', 'social media', 'Chinese college students', and specific platform names such as 'WeChat', 'Douyin', and 'Weibo'.

The following criteria guided the selection process:

**Inclusion Criteria:**

- i. Peer-reviewed studies examining visual literacy and social media interactions.
- ii. Studies conducted within or specifically concerning the Chinese university student population.
- iii. Research available in English or Chinese.

**Exclusion Criteria:**

- i. Studies unrelated directly to visual literacy or social media.
- ii. Studies concerning other demographic groups (e.g., primary or high school students).
- iii. Publications not peer-reviewed or lacking substantial evidence.

These peer-reviewed journal articles appeared in high-impact academic journals on the topics of education, digital media, and aesthetics, providing a solid foundation for the departmental literature review. It is worth noting that potential biases in the selected studies may stem from publication bias, regional differences in research focus, and differences in the methodologies employed. These factors may affect the overall conclusions and interpretation of the review.

## **4. Findings**

### **4.1. Social Media Use and Visual Content Trends in China**

Social media has become an undeniable force in shaping communication and information consumption globally. China presents a particularly compelling case study. This section examines the dynamic relationship between social media use and visual content trends within China, with a specific focus on the experiences among college students. We explore the most popular platforms, analyze the types of visual content that resonate with this demographic, and investigate how users engage with and are influenced by this content through a comprehensive literature review. Understanding these trends, we can gain valuable insights into the evolving digital landscape in China and its implications for education, social interaction, and cultural expression.

#### *4.1.1. Overview of Social Media Adoption Among Chinese College Students*

Visual-centric social media platforms have grown by leaps and bounds among Chinese college students, with WeChat in the lead with 1.33 billion monthly active users ([Tencent, 2024](#)). With over 582 million monthly active users and almost 48% of users aged between 30 and 39 years ([Wikipedia, 2024](#)), the biggest social network, Weibo, closely followed. Internationally known as TikTok, Douyin achieved rapid growth, especially among younger generations, becoming the leading platform for short-form videos ([Vogue Business, 2024](#)).

Distilled down, Xiaohongshu (Little Red Book) delivered more than 300 million monthly active users in 2024, primarily aged 18-35, establishing itself as a go-to platform for lifestyle and e-commerce content ([Financial Times, 2024](#)). Originally catering to anime

fans, Bilibili grew to become popular with various demographics and was reported to have over 170 million monthly active users, 78% of its users between 18-35 years old (HICOM-Asia, 2024).

The emphasis on visual material in these platforms echoed how Chinese college students engaged with media, as they depended on multimedia components such as images, videos, and infographics. In higher education, as students engaged with and interpreted digital media daily, the increasing dominance of visual-based interactions necessitated the development of visual literacy among undergraduates.

Chinese university students have developed unique preferences regarding the types of media they consume and how they interact with visual data on their social media platforms. According to a study, Chinese teenagers spend an average of 2.95 hours on electronic media daily, while urban adolescents from better economic conditions spend even more hours on electronic media (Jin & Le, 2024). Gender disparities were also reported, with female students using social media platforms like WeChat and QQ to share social activities and personal moments. In contrast, male students were likelier to use gaming and sports-related content (Jin & Le, 2024). Instant access to visual information all day is a 'natural fact' for Chinese college students, and cultivating a critical eye to exemplify the importance of visual literacy is even more urgent in their daily lives (Qiu, 2021).

#### *4.1.2. Types of Visual Content Consumed*

Douyin and Kuaishou, particularly, saw explosive growth, cementing their hold on Chinese college students. As of October 2023, more than 746.5 million people use Douyin monthly (Statista, 2023), with Douyin being the second most popular Chinese app behind WeChat. Likewise, Kuaishou continued its rapid expansion, attracting over 600 million monthly active users (MAU), while its daily active users (DAU) exceeded 300 million in the first quarter of 2024 (Kuaishou, 2024). The platform's short-form video content consistently outperformed other media formats, making it a prime choice for adoption in higher education.

Platforms like WeChat and Xiaohongshu were essential for sharing educational resources and information. This makes sense as WeChat was used for entertainment, academic, and professional communication (HICOM-Asia, 2024). Xiaohongshu (Little Red Book): During the younger generation, Xiaohongshu converted from a sharing platform to a young consumer platform to share travel experiences, medical recommendations, and learning materials (Daxue Consulting, 2024). Infographics and microblogging allowed for visually attractive information that offered students credible and orderly access.

Live streaming has significantly transformed the landscape of education in China, particularly in higher education institutions. Research indicates that interactive mechanisms in live-streamed education enhance student engagement and learning efficiency (Huang et al., 2023). Moreover, large-scale studies confirm that remote education using live streaming platforms has provided increased accessibility and participation for students in Chinese colleges (Chen et al., 2020). This push towards real-time interaction birthed a new style of digital engagement, solidifying live streaming as a powerhouse for student-centric content consumption.

### *4.1.3. Engagement with Visual Media*

Algorithms of artificial intelligence (AI) shape the visual consumption of users by creating tailored content to the specific traits of users; hence, its role is to shape the visual literacy of the user. Meanwhile, recommendations driven by AI-generated personalized streams of content for users to draw from which reinforced users viewing habits and restricted them to predominantly only viewing similar (visual) materials (Farmer, 2024). As these recommendations increased interactions, they also created echo chambers that limited the cultivation of critical visual literacy skills by repeatedly showing users similar types of content.

We've already observed the differences between user-generated content (UGC) and professionally developed media in terms of engagement and educational value. Studies indicate that UGC, being perceived as more authentic and relatable than branded content, achieves approximately 25-30% higher engagement rates compared to traditional brand formats (Fatmawati & Handayani, 2024). This increased engagement underscores the growing importance of UGC in digital communication and marketing strategies. On the other hand, professionally produced content provided structured narratives, superior credibility, and educational depth, making it vital for knowledge dissemination. High engagement with UGC and the academic rigor of professional content highlighted the importance of a balanced approach to digital media literacy, encompassing a range of content generation practices across contexts.

## **4.2. The Relationship Between Social Media and Visual Literacy**

### *4.2.1. Positive Impacts of Social Media on Visual Literacy*

Social media platforms offer several potential benefits for the development of visual literacy. These include fostering digital storytelling and creative expression, providing exposure to a diverse range of visual cultures, and promoting the development of critical thinking and media analysis skills. This section presents the positive impacts of social media on visual literacy which focuses among college students in China.

### *4.2.2. Digital Storytelling and Creativity Development*

Social media platforms improved visual literacy, encouraging digital storytelling and enhanced creativity. Digital storytelling is a multimedia approach including images, text, and audio, which enhances the student's engagement and motivation in ways that they become more familiar with these techniques, and this applicability leads to a better understanding of the content and the criticizing of the events (Robin, 2008). In addition, using digital storytelling in the classroom was associated with higher student motivation and engagement and enhanced literacy skills and content knowledge in different parts of the curriculum (Robin, 2008). By manipulating the story of their lives digitally, students began to see the importance of narrative structures and aesthetic elements, which are fundamental to visual literacy. They also developed their ability to interpret visual representation, which helped them convey ideas more creatively — all of which complemented their overall cognition and communication.

#### 4.2.3. *Exposure to Diverse Visual Cultures*

Artistic skills were also developed through the exposure to diverse visual cultures made possible by social media, which widened individual aesthetic perspectives. Research indicates that cross-cultural interaction in visual art appreciation facilitates a more nuanced understanding of aesthetics and enriched artistic expression (Ishizu & Zeki, 2024). In another study, Japanese and German participants viewed Western works of art and made aesthetic judgments. Their backgrounds predicted how they responded to art, suggesting that different visual cultures broadened artistic sensibilities (Ishizu & Zeki, 2024).

#### 4.2.4 *Development of Critical Thinking and Media Analysis*

Rather, Chinese students have benefited greatly from social media in developing their critical thinking and media analytical abilities. Findings suggest that social networking positively correlates with enhanced media literacy and critical thinking skills (Cheng et al., 2024). Research further indicates that active engagement in discussions and content analysis on social platforms fosters higher-order cognitive skills, including critical reflection and analytical reasoning (Shieh & Nasongkhla, 2024). Moreover, the hours spent on social media were statistically significantly moderate to the future Chinese language teachers' critical thinking disposition. Hence, prolonged engagement with social networks can shape an individual's tendency to provide constructive feedback. Studies indicate that frequent social media users are more likely to engage in structured discussions and give constructive criticism in digital interactions (Qi et al., 2024). Moreover, such findings not only highlight how social platforms like WeChat—the most widely used messaging app in China—enhance academic engagement among Chinese EFL students but also indicate that social networking serves as an effective medium for developing cognitive and socio-behavioral skills (Yin et al., 2023). These assuredly suggest that teaching and learning mechanisms by Chinese students on social media could discuss media literacy, thus promoting critical thinking skills training

### 4.3. **Negative Impacts of Social Media on Visual Literacy**

Conversely, social media can also negatively impact visual literacy. Concerns include visual overload and attention deficits, the spread of disinformation and manipulated images, and the potential for superficial interaction and passive consumption of content.

#### 4.3.1. *Visual Overload and Attention Deficit*

The vast amount of fast-paced digital content on social media has been linked to visual overload and reduced attention spans. Studies indicate that increased exposure to such media leads to a decline in sustained focus and cognitive engagement (Newman, 2010). Another study suggests that excessive screen time may have detrimental effects on mental health, linking it to anxiety, ADHD, and social-emotional challenges. Research further indicates that prolonged exposure to digital screens may lead to dopamine-driven reinforcement mechanisms similar to those observed in substance addiction (Wallace et al., 2023). Furthermore, the concept of "popcorn brain" reflects the fragmented attention spans and scattered thought patterns that arise from prolonged screen time and excessive digital stimulation. Studies indicate that continuous exposure to rapid information flows can overstimulate cognitive processing networks, leading to reduced focus and attention deficits (Bigliassi et al., 2025). Such thought and others made a motion that intensifying

such impact has become as fast pace as peak visual distraction lifeline phenomena & that constant diagram of including such activities on social media is indicative of impending cognitive challenges, which means maintaining a mindful media consumption habit is the way-out in positives approach in a different direction to such visual literacy perceiving abrupt effect (distraction tone) in a huge sense.

#### *4.3.2. Disinformation and Altered Images*

The rise of deepfakes and manipulated images, especially those on social media, has been devastating to visual literacy. Deepfakes are hyper-realistic digital falsifications that can mislead viewers by showing them fake events as if they were real, potentially distorting perception and understanding. Studies have shown that such misleading imagery can undermine reliability in genuine media and complicate distinguishing between legitimate and fabricated content. [Sanchez-Acedo et al. \(2024\)](#), in a paper study published in the journal *Communication & Society*, highlighted the issue of how deepfakes might impact media and information literacy, pointing out the need for more promotion of educational strategies addressing this challenge. As this doctored visual content continues to proliferate, it highlights the importance of strong media literacy education to teach people how to approach images and validate their authenticity critically.

#### *4.3.3. Superficial Interaction and Passive Consumption*

Research has shown that passive consumption of social media content can reduce critical engagement and encourage superficial information processing. Studies have further linked this usage style to greater levels of loneliness, depressive symptoms, and reduced motivation to cognitively process visual content ([Verduyn et al., 2020](#)). According to a meta-analytic study, passive social media use is positively correlated with depression and anxiety, meaning that simply scrolling through posts doesn't include higher interaction, which in turn may have lesser effects on mental health and cognitive engagement ([Verduyn et al., 2020](#)).

### **4.4. The Role of Media Literacy Education in China**

Given the complex relationship between social media and visual literacy, media literacy education plays a crucial role in empowering individuals to navigate the digital landscape effectively. This section examines the integration of digital literacy in higher education in China and discuss the challenges in implementing effective visual literacy programs.

#### *4.4.1. Digital Literacy Integration in Higher Education*

Over the past few years, Chinese higher education institutions have realized the importance of integrating digital literacy into their curricula to better prepare students for a media-rich landscape and a visual culture. Institutions like the Communication University of China and Zhejiang University of Media and Communications have led the charge, providing media study programs that merge theory and practice within media literacy education. Such programs are designed to develop students who can think critically and analyze and interpret different forms of media. However, there is still a long way to go in implementing media literacy education at all levels in China. [Table 1](#) provides a chronological study of media literacy education in mainland China, concluding that challenges such as unequal educational resources and deficient social support hinder the development and comprehensive implementation of media literacy education programs

(Tan et al., 2012). A more systematic and larger-scale integration of media literacy courses into higher education curricula and a stronger commitment from educational authorities to promote the importance of these skills in a wide range of fields would help universities better prepare students to confront the challenges posed by contemporary media practices.

#### *4.4.2. Challenges in Implementing Visual Literacy Programs*

One of the problems of developing visual literacy in Chinese universities comes from policy guidance. For instance, a study investigating the self-perception of visual literacy competency among visual communication design students suggests that a Chinese cultural trait produces a perceived unawareness of visual literacy among students, eventually becoming a learning obstacle since most Chinese college students generally do not have this competency. This concern was ascribed to a lack of attention to visual literacy in the curriculum and a lack of institutional policies that promote visual literacy integration into higher education (Zhang & Zhou, 2024). Moreover, with the emphasis on textual and mechanical education in traditional Chinese education, there are also not enough visual literacy elements in the education system, thus restricting the development of students' visual analytical thinking ability. To counter these challenges, we need policy reforms in K-12 and higher education that prioritize teaching visual literacy.

### **4.5. Factors Affecting Visual Literacy Development Among Chinese College Students**

#### *4.5.1. Platform-Specific Influences*

The design and functionalities of different social media platforms can significantly impact how users interact with and interpret visual information. This section examines the contrasting influences of text-visual hybrid platforms.

#### *4.5.2. WeChat and Weibo: Text-Visual Hybrid Media*

As distinguished text-visual hybrid media platforms, WeChat and Weibo proved essential in shaping users' interaction with mixed-format content in China. Various types of content, including text, images, and videos, were combined into WeChat messaging and "Moments" sections, facilitating multidimensional communication among users. Research on WeChat use among Chinese college students indicated that platform synchronization and diversified content formats facilitated user behaviors, contributing to this phenomenon.

Likewise, Weibo, or, as some call it, a mixture of Twitter and Facebook, was a nationwide information platform used by the Chinese community, providing users a means of spreading information by integrating visual elements with text (Boston University, n.d.). On both platforms, this mixture of media encouraged users to aim at content more interactively, making them more visually literate by exposing them to numerous forms of visual communication. The combination of written and pictorial has met the demand of Chinese students, who have generated new quality information on these platforms as these young people are becoming a major group of users, using these platforms to provide quality information and socialize with other people. Hence, the mixed-format content in WeChat and Weibo became a critical medium for cultivating Chinese college students' visual literacy.

#### 4.5.3. *Douyin and Kuaishou: Short Video Influence*

Douyin Kuaishou is a popular short video platform in China that has significantly impacted the visual literacy development of Chinese college students. These platforms provide high-speed, interactive content that caters to users' craving for rapid information and amusement. However, quick consumption of such material can hamper in-depth visual analysis and critical engagement. For example, a study on the use of short video platforms among Chinese youth revealed that although the nature of these platforms allows for the delivery of news content to users, the brief and entertainment-oriented characteristics of short videos can interfere with objective and comprehensive understanding, ultimately resulting in the superficial processing of information (Lei et al., 2024). Moreover, the nature of short-form video content, with changing scenes every few seconds and short blurbs on the screen, is better suited to the average person's declining attention spans, which could erode users' abilities to think critically and engage deeply with the content (Digital Delane, 2023). The move from serious, lengthy information to fast-moving, small bites of information may leave our viewers preferring shallow examination and broad visuals versus detailed exegesis. As a result, the push for short-form, often entertainment-based content on Douyin and Kuaishou stands in contrast to the need to develop a substantive visual literacy that would foster creative state interventions oriented towards social betterment. Bytes for Mitigating the challenge will require a call for moderation at all levels, promoting responsible practices, and fostering an exploration of the purpose behind and the values expressed through visual media.

#### 4.6. **User Behavior and Engagement Levels**

Research showed that participating in user-generated content (UGC) on social media platforms promoted the visual literacy of Chinese college students. All students, regardless of tech-securing experience, pulled together as they crafted and shared visual content, which forced them to think critically about their subject as they had to consider how to communicate meaningful visuals. In contrast, passive consumption, defined as simply watching material without interaction, culminated in superficial processing and lower-ordered thought. Research in China found that active social media engagement encouraged higher-order thinking for young people, while passive use was linked with superficial engagement (Chen & Li, 2021). So, promoting the UGC (user-generated content) with active participation would help arouse visual literacy skills.

#### 4.7. **Cultural and Educational Influences**

Cultural traditions and educational policies shape the context within which visual literacy develops. This section explores the influence of traditional Chinese aesthetics and the impact of government regulations and educational policies on visual literacy development.

##### 4.7.1. *Traditional Chinese Aesthetics in Visual Literacy*

As far as the field of digital media is concerned, traditional Chinese aesthetics have played a role in shaping the visual literacy of Chinese college students. Weaving elements such as calligraphy, painting, and traditional crafts into modern visual communication design gave students a much deeper understanding of visual culture (Peng, 2023). Integrating traditional Chinese arts and crafts into visual communication design enriched digital

content's artistic beauty and cultural connotation, allowing students to have more in-depth contact with visual media (Peng, 2023).

In addition, traditional Chinese art's focus on harmony, balance, and simplicity offered students a basic structure for examining and interpreting visual materials in the digital era. The Intimacy of Learning This cultural background fostered holistic visual literacy, and students began thinking beyond the aesthetic to the contextual whole of the visual media. Using traditional cultural elements in digital media preserves cultural heritage and improves students' visual literacy by providing diverse visual references and analytical tools (Zhang et al., 2017).

However, there were still issues in successfully fusing traditional aesthetics with modern digital practices. The authoritarian march of time and the ubiquity of a globalized Western design philosophy have sometimes threatened to eclipse tradition. Hence, educational institutions were required to actively enhance the integration of traditional Chinese aesthetics for digital literacy courses. This approach guaranteed the students' full visual literacy whilst retaining cultural heritage within a contemporary context.

#### *4.7.2. Government Regulations and Educational Policies*

Thus, the development of their visual literacy was strongly shaped by government censorship and content regulations in China. The students were deprived of critically examining different ideas and opinions. A field experiment revealed that students who were exposed to politically sensitive content became more informed about censored events, highlighting how censorship effectively restricts awareness and comprehension of certain social and political issues (Chen & Yang, 2019). Furthermore, curriculum development in East Asian contexts has traditionally emphasized rote learning and ideologically aligned content, rather than critical engagement or media realism. This made it difficult for visual literacy to be integrated meaningfully into pedagogical structures. Consequently, the lack of openness to critique visual media has hindered the progression of visual literacy education (Kwak, 2004; Yang, 2019).

### **4.8. Technological Developments in Social Media**

Artificial intelligence (AI) and machine learning have significantly influenced the way users engage with content on social media platforms. AI-driven algorithms analyze user behavior, preferences, and interactions to curate personalized content, shaping how users consume visual information. Platforms such as Instagram and Pinterest leverage AI to enhance content discovery by recommending posts and accounts based on past engagement patterns, thereby optimizing user experience and increasing content relevance (Essey, 2023).

Beyond AI, augmented reality (AR) and virtual reality (VR) are emerging as transformative tools in social media and digital education. These immersive technologies provide interactive experiences that enable users to engage with content in novel and dynamic ways. AR and VR facilitate virtual field trips, historical reenactments, and interactive simulations, offering learners deeper contextual understanding and enhancing visual literacy (Johnson et al., 2013). Research suggests that AR and VR have the potential to revolutionize education by introducing experiential learning methods that foster engagement and retention.

The integration of AI, AR, VR, and 3D technologies—referred to as AI-Mediated Augmented Interaction (AMAI)—is reshaping how users interact with visual content in both social media and educational contexts. While these advancements open new frontiers for enhanced digital engagement and learning, they also present challenges, including ethical considerations, digital literacy gaps, and accessibility concerns. Addressing these challenges will be crucial in harnessing the full potential of AMAI for the future of social media and education.

Table 1: Summary of the Key Components of Social Media—Art Education

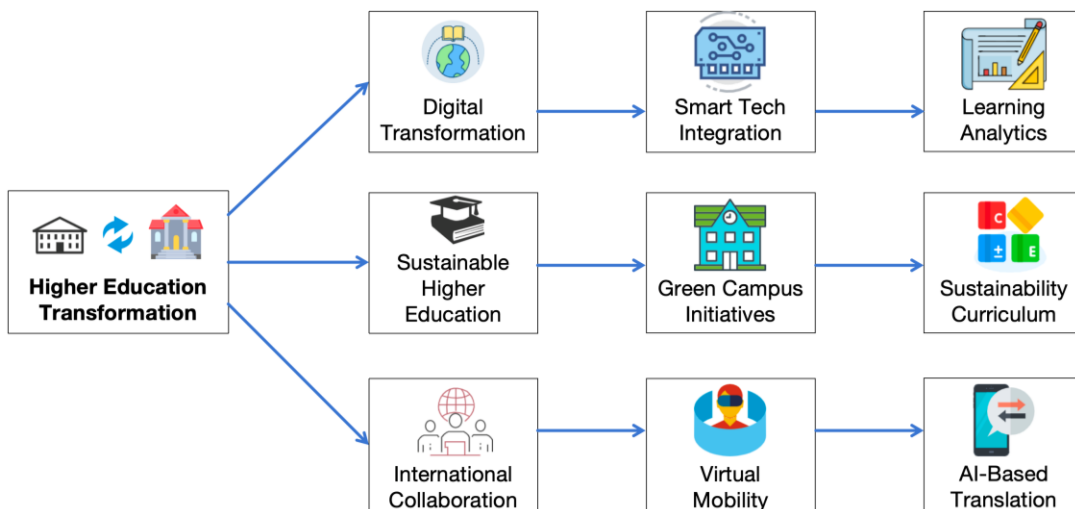
Key Pillars	Main Initiatives
Digital Transformation	Smart technologies, blended learning, learning analytics
Sustainable Higher Education	Green campus initiatives, sustainability curriculum
Internationalization	Virtual mobility, multilingual digital content
Industry Collaboration	Start-up incubation, corporate research partnerships
Policy & Governance	National policy alignment, quality assurance, funding

### 4.9. Implications for Higher Education in China

#### 4.9.1. Integrating Visual Literacy into University Curricula

In China, integrating visual literacy into university curricula involves devising strategies to assist students in acquiring visual analysis skills, and interdisciplinary is considered a crucial part of this process. Students gained a multifaceted perspective on visual communication by crossing disciplines like art, design, media studies, and technology. Another study(head to the reference below) about the first-year design curriculums in Chinese universities indicated that the visual literacy of students from different disciplines was largely different and suggested that interdisciplinary approaches improve visual analytics cognitive skills (Zhang et al., 2023). Figure 1 illustrates the process flow of higher education transformation.

Figure 1: Flowchart Representation of the Framework



#### 4.9.2. Challenges and Barriers

This blind spot and the lack of faculty development were challenges to implementing visual literacy in higher-educated curricula in China. Teachers: Teachers had a limited ability to teach students how to be visually literate because they were unfamiliar with terms, concepts, or techniques for teaching visual literacy skills. An example of this type of professional development was the absence of coverage of visual literacy in professional learning on visual resources, which was one of the contributing factors for educators not feeling ready to implement visual resources into their teaching practice (Zhou & Wang, 2024). As a result, purposeful professional development platforms are needed to create pathways to ensure educators possess the skills necessary to succeed on this frontier. Providing tailored training programs would enhance educator knowledge and, in turn, elevate service delivery via visual literacy, thereby adding value to students' learning journeys.

#### 4.9.3. Future Research Directions

Overall, the effects of social media use on visual literacy amongst Chinese college students from a long-term perspective deserve more empirical exploration. Although recent studies stressed the immediate impact of social media on cognitive processing and visual activity, little was known of its lasting impact on critical visual analysis and interpretive abilities. A systematic review highlighted the increasing importance of social media literacy while pointing out the gaps in understanding how prolonged exposure impacted visual literacy competencies, including information evaluation and critical thinking (Scolari & Fraticelli, 2022). Additionally, there was an increasing shift in visual content consumption, which included the prevalence of augmented reality and algorithm-driven feeds, highlighting the need for longitudinal studies to understand the implications of these changes on students' visual literacy (Statton Thompson, 2022).

Furthermore, more research is needed on the cognitive impacts of continuous visual media consumption in the long run, such as the possible emergence of attention defects or superficial information processes. This knowledge also plays an important role in establishing the means to educate individuals regarding visual literacy in a digital era.

### 5. Conclusion

The finding emphasized social media's impact on Chinese college students' visual literacy. The key findings suggest that social media platforms facilitated increased creativity and access to diverse visual content but simultaneously played a role in superficial engagement and misinformation challenges. The prevalence of social media changed how students process visuals, and they needed to think critically. The cumulative result of such endless exposure to digital images and visuals was, unsurprisingly, shown to impact not only attention spans but also ways of processing visual information. As steps to use this within the control of technology, (a) educators should integrate visual literacy into their curricula; (b) policymakers, through legislation, should support media literacy initiatives; and (c) researchers should continue exploring the long-term effects of digital media on learning.

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