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КЫТАЙДАГЫ ИСКУССТВО ЖАНА ДИЗАЙН АДИСТИГИНДЕГИ СТУДЕНТТЕРДИН ВИЗУАЛДЫК САБАТТУУЛУГУ БОЮНЧА ИЗИЛДӨӨ

Аннотация. Көп медиалуулук жана кыймылдуу интернет терең таралган сандык доордо, сүрөттүү маалыматтардын көлөмү экспоненциалдык өсүүдө. Сүрөттүү туюндуруу маалыматтык эффективдүүлүктү жогорулоонун негизги каражатына айланды. Бул изилдөө Кытайдын жогорку окуу жайларынын искусство жана дизайн адистигин окуган студенттерине багытталган. Беш окуу жайдын 815 сурамжылоосу тастыктагандай, студенттер визуалдык сабаттуулуктун үч көйгөйүнө кабылган: түшүнүктүк бутакташуу (85% жетишсиз билимдүүлүк), көрүү жалкоолугунун көбөйүшү (51.5% сүрөттүү эмес маалымат кабылдоого бейимдик), сүрөттүү туюндуруунун бирдейлиги (44.5% гана эскиздөөнү билүү) жана терең сүрөттү түшүнүүнүн начардыгы (жол белгилерин туура эмес түшүнүү 45%). Төмөнкүдөй төрт өлчөмдүү чаралар сунушталат: Жогорку окуу жайлар визуалдык сабаттуулук билим берүүнүн стратегиялык долбоорун бекемдеп, аны мамлекеттик программага киргизүү; визуалдык сабаттуулукту өстүрүүчү аралашма дисциплиналык окуу системасын түзүү; сыйлап өстүргүчү университеттик көркөм маданият чөйрөсүн жаратуу; "окутуу багыттоо-өз алдынча изилдөө" кош механизмин орнотуу. Бул дизайн адистеринин сандык сыноолорго чыдамдуулугун бекемдөө үчүн визуалдык сабаттуулук жөндөмдүүлүгүн жогорулатууга мүмкүнчүлүк берет.

Негизги сөздөр: Искусство жана дизайн адистиги, Студенттер, Визуалдык сабаттуулук, Актуалдуу абал, Эмпирикалык сурамжылоо.

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ИССЛЕДОВАНИЕ УРОВНЯ ВИЗУАЛЬНОЙ ГРАМОТНОСТИ СТУДЕНТОВ ХУДОЖЕСТВЕННО-ДИЗАЙНЕРСКИХ СПЕЦИАЛЬНОСТЕЙ В КИТАЕ

Аннотация. В эпоху глубокой цифровизации с повсеместным распространением мультимедиа и мобильного интернета масштабы визуальной информации растут экспоненциально. Визуализация стала ключевым инструментом повышения эффективности коммуникации. Данное исследование направлено на китайских студентов художественно-дизайнерских специальностей вузов, проанализировав 815 анкет из пяти образовательных учреждений высшего образования. Выявлены три дилеммы визуальной грамотности: концептуальная неопределённость (85% имеют недостаточное понимание), выраженная визуальная инертность (51.5% предпочитают невизуальные каналы информации), ограниченные выразительные возможности (44.5% владеют только скетчингом) и слабая глубинная интерпретация изображений (45% ошибок в расшифровке дорожных знаков). Предлагаются четырёхмерные меры: вузам следует институционализировать стратегическое планирование визуальной грамотности в учебные программы; разработать междисциплинарные образовательные модели, интегрирующие развитие визуальной грамотности; формировать иммерсивные визуально-культурные экосистемы кампуса; внедрить двухканальный механизм развития компетенций "педагогическое наставничество - автономные исследования". Это системно усилит конкурентоспособность визуальной грамотности дизайнеров для преодоления цифровых вызовов.

Ключевые слова: Ключевые слова, Художественно-дизайнерская специальность, Студенты вузов, Визуальная грамотность, Актуальное состояние, Эмпирическое исследование.

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A SURVEY ON THE CURRENT STATUS OF VISUAL LITERACY AMONG CHINESE UNIVERSITY STUDENTS IN ART AND DESIGN

Abstract. In the era of deep digitalization characterized by pervasive multimedia and mobile internet, the scale of visual information has expanded exponentially. Visualization has evolved into a core instrument for enhancing informational efficacy. This study examines Chinese university students majoring in art and design, with empirical evidence from 815 questionnaires across five higher education institutions. Findings reveal three visual literacy predicaments: conceptual ambiguity (85% lack sufficient understanding), pronounced visual inertia (51.5% prefer non-visual information channels), limited representational competence (44.5% master only sketching), and insufficient interpretative depth (45% miscomprehension of traffic signs). Four-dimensional countermeasures are proposed: Higher education institutions should strengthen strategic planning for visual literacy education and

institutionalize it in curricula; develop interdisciplinary pedagogical frameworks integrating visual literacy development; cultivate immersive campus visual cultural ecologies; and implement dual-track capacity-building mechanisms combining "instructional guidance" and "autonomous inquiry." These systematically enhance visual literacy competitiveness among designers to address digital challenges.

Keywords: Art and Design Major, University Students, Visual Literacy, Current Status, Empirical Investigation.

I. Core Dimensions of Visual Literacy

Visual imagery profoundly shapes cognition through memory enhancement and experiential reconstruction. Within the ubiquitous visual information paradigm, visual literacy—defined as the critical comprehension, efficacy evaluation, creative application, and communicative competence regarding visual content—has emerged as a crucial benchmark for contemporary literacy. As pedagogically cultivated Chinese art and design undergraduates, their professional capabilities significantly determine future socioeconomic development trajectories, while their visual literacy proficiency directly correlates with national economic innovation capacity and humanistic education effectiveness [2, p. 61-70; 3, p. 187-189].

II. Research Participants and Methodological Framework

Accounting for cohort heterogeneity, this study implemented stratified random sampling via Wenjuanxing platform, targeting art and design majors from five Chinese higher education institutions (Guangdong Country Garden Polytechnic, Tianjin Renai University College, Xi'an Construction Engineering Technician College, Shaanxi Railway Institute, Lianyungang Technical College). After data cleansing, 815 valid questionnaires were retained (95.9% response rate).

The research instrument comprised 20 closed-ended items structured into four dimensions [6, p. 15-25; 7, p. 45-60]:

Demographics: Gender, age, and related variables

Conceptual Awareness: Depth of understanding regarding the "visual literacy" construct

Cognitive Competence: Visual leisure preferences, typology of image-based news consumption, visual expression skills (e.g., drawing)

Applied Proficiency: Infographic interpretation ability, attentiveness to daily visual inputs, image utilization frequency in digital communication [5, p. 12-20; 10, p. 26-30, 67].

Quantitative analysis was performed using SPSS 26.0.

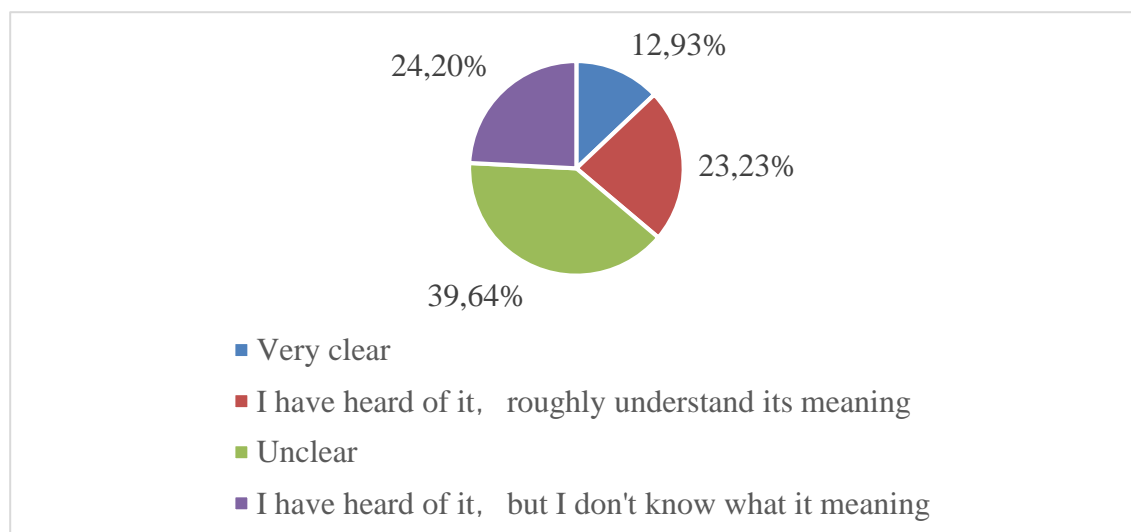


Figure 1. The results of the results of the question and answer question analysis

III. Empirical Findings and Diagnostic Analysis

Cross-analysis of 815 valid samples revealed three critical deficiencies in Chinese art and design undergraduates' visual literacy:

1. Structural Deficits in Conceptual Cognition

Data indicates fragmented conceptual comprehension: only 106 respondents ($\leq 13\%$) demonstrated mastery of visual literacy essence, while 189 (23.23%) possessed superficial understanding and 197 (24.2%) recognized the terminology but lacked substantive knowledge. This evidences systematic institutional failures in propagating visual literacy conceptual frameworks [1; 4].

2. Deficits in Visual Sensitivity and Monolithic Media Preferences

Analysis of Question 4 ("Preferred leisure activities post-exam") revealed that among 815 Chinese art and design undergraduates:

Only 65 respondents (7.98%) chose visually-dominated "television viewing"

37 (4.54%) opted for multimodal "book reading"

373 (45.77%) prioritized non-visual "music listening"

244 (29.94%) selected hybrid-media "internet browsing"

Visually-driven information consumption accounted for $<13\%$ of total choices, whereas non-visual modes exceeded 51.5%. This evidence indicates a prevalent avoidance of visual input within this specialized cohort, demonstrating systematic deficiencies in diversified media utilization – a critical dimension of visual literacy application [2, p. 61-70; 3, p. 187-189].

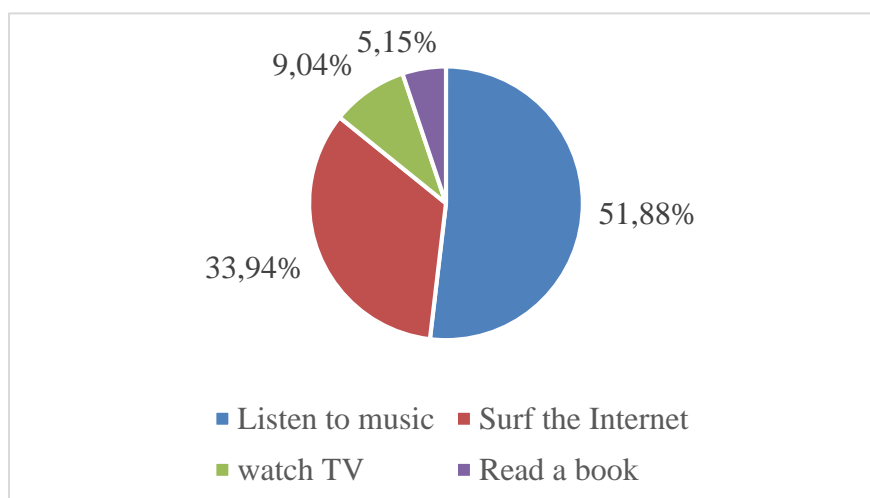


Figure 2 Analysis diagram of the results of the fourth question and answer question

Items 5 and 6 of the questionnaire inquired about the types of news that first capture students' attention on websites and their prior experience with diverse painting techniques (multiple selections allowed), aiming to assess their awareness of daily visual information and versatility in visual expression. Results revealed that while the predominant preference for "text-with-images news format" among undergraduates indicates a positive inclination toward visual content, it simultaneously exposes fundamental deficiencies in visual comprehension (as evidenced in Fig. 3). Concurrently, 44.51% of respondents exclusively selected "drawing" as their primary technique (Fig. 4), collectively demonstrating monotonous representational approaches, inadequate color application skills, and limited proficiency in diverse artistic mediums.

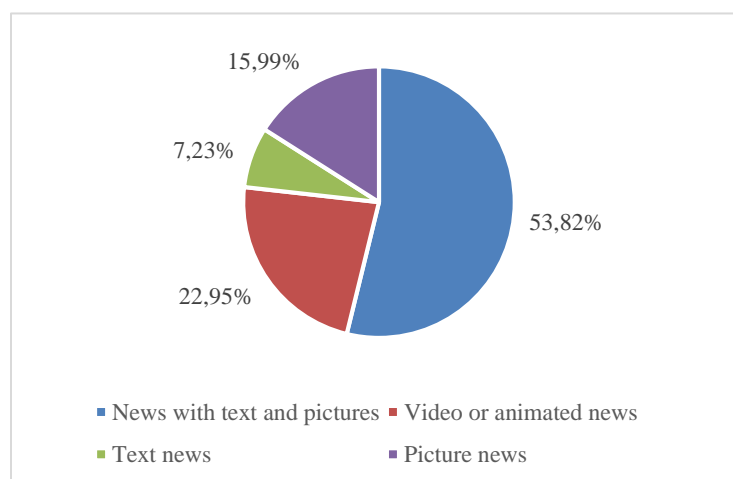


Figure 3. Fifth Questions and Answers Analysis Chart

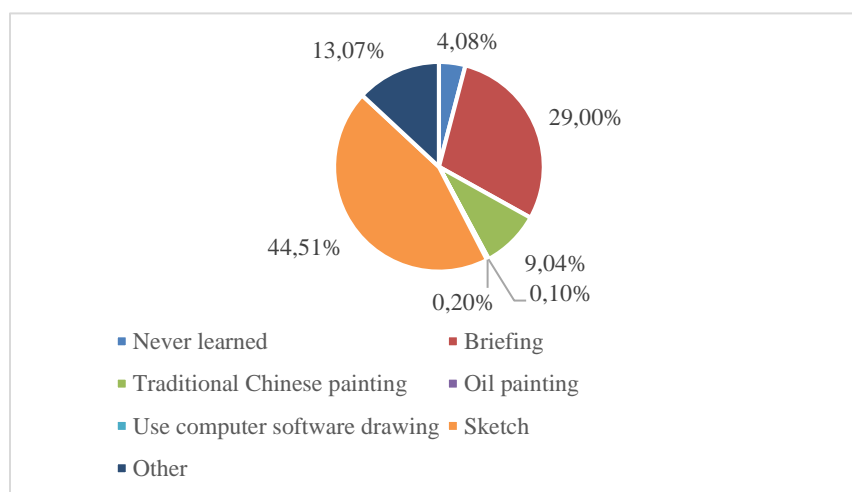


Figure 4. The analysis diagram of the results of the sixth question and answer questions

3. Selective Proficiency in Instructional Graphics versus Deficits in Critical Visual Analysis

Questions 7-10 specifically assessed applied dimensions of visual literacy. As delineated in Question 7 data: $\geq 73.5\%$ of Chinese art and design undergraduates effectively utilized textbook infographics for knowledge comprehension (Figure 5), with 42.1% attesting to their "substantial efficacy" in enhancing cognitive processing. This evidences the cohort's fundamental competence in decoding instructional visual materials. However, when analyzing complex visual content (e.g., commercial advertisements, news imagery in Q8-Q10), merely $\leq 28.3\%$ demonstrated critical deconstruction abilities, revealing a systemic deficit in critical visual analysis competencies—constituting a structural deficiency in core visual literacy capacities.

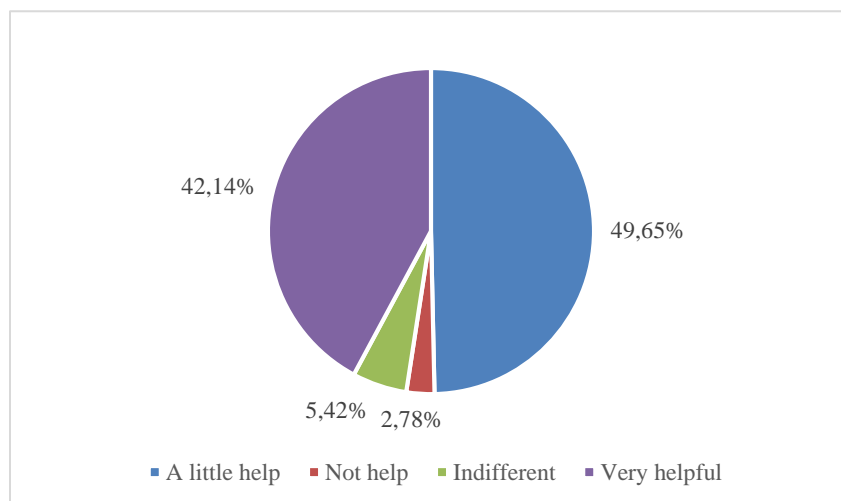


Figure 5 Seventh question and answer results analysis diagram

Concurrently, data from Questions 8-9 indicates superficial visual engagement among Chinese art and design undergraduates, with 78.3% reporting frequent exposure to image-based content. However, assessment of complex visual interpretation (Questions 10-18) reveals critical deficiencies:

Only 31.6% demonstrated contextual understanding of visual narratives

Symbolic comprehension tests (Q12: "Identify this traffic sign's meaning") showed merely 55.27% accuracy ("Embankment Road")

44.73% committed semantic errors (28.1% misidentified as "Mountainous Road"; 16.63% provided conceptually invalid responses)

This evidences a significant gap ($p < 0.05$) in applied visual literacy competencies, necessitating pedagogical interventions for this specialized cohort.

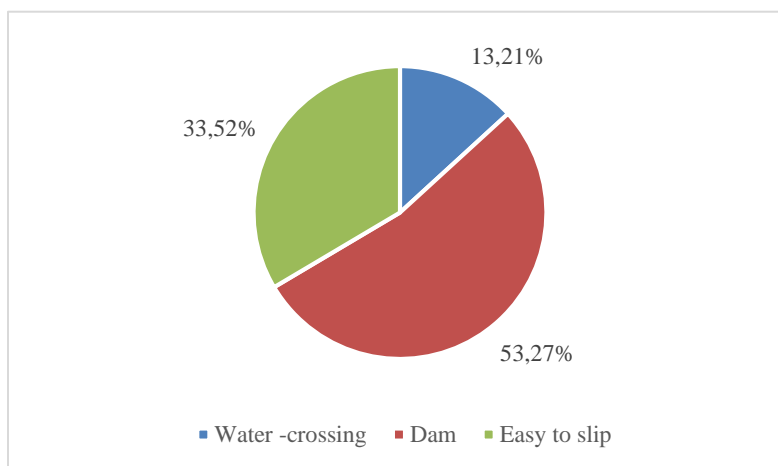


Figure 6 Analysis diagram of the results of the twelfth question and answer questions

4. Insufficient Prioritization of Visual Literacy by Institutions and Learners

Questions 19-20 assessed Chinese art and design undergraduates' commitment to visual literacy development. Key findings reveal:

94.7% expressed willingness to cultivate visual literacy competencies (Q19)

Yet 59.81% preferred passive institutional approaches ("university-designed visual literacy courses") [5, p. 12-20; 6, p. 15-25].

While 58.28% opted for self-directed extracurricular learning (Q20)

This paradoxical preference demonstrates:

Systemic undervaluation of visual literacy in curricular frameworks

Learner dependency on structured pedagogy despite autonomous learning capacity

Consequently, structured visual literacy cultivation remains essential for this cohort's professional competency development.

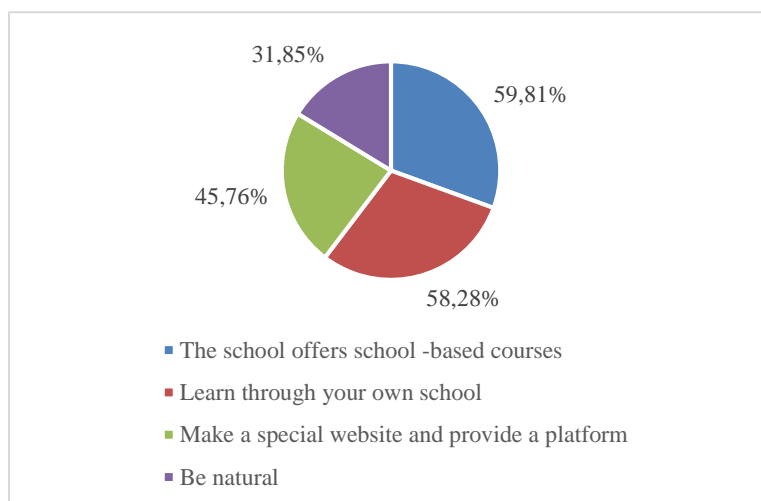


Figure 7 The result analysis diagram of the result of the 20th question and answer questions

IV. Innovative Cultivation Framework for Visual Literacy in Chinese Art & Design Undergraduates

Amidst the digital-visual paradigm, visual literacy (VL) constitutes a core disciplinary competency for higher arts education. Building on empirical findings, we propose a quadripartite framework:

1. Institutional Commitment: Strategic Leadership in VL Education

Universities must elevate VL's strategic status to accreditation metrics. Embracing transdisciplinary precedents from visionaries like Zhang Heng (Han Dynasty) and Zu Chongzhi (Southern Dynasties), enact VL Education Whitepapers through:

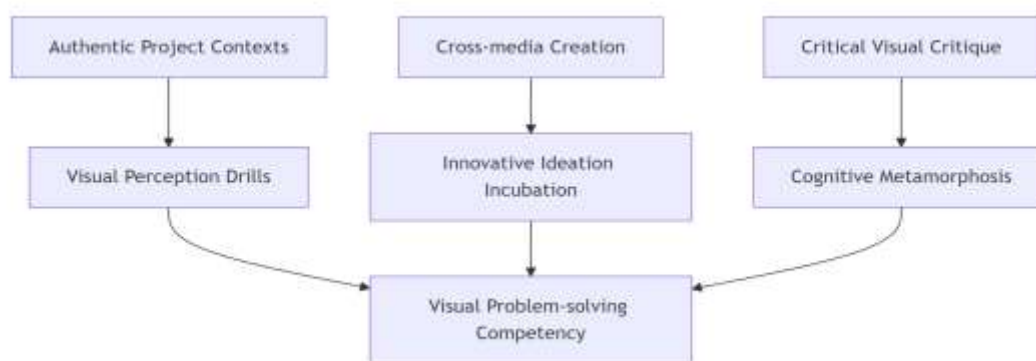
Curating specialized visual culture collections [7, p. 50-55];

Establishing inter-institutional VL academic consortiums [3, p. 187-189];

Deploying academican-led cognitive visual studies courses [10, p. 28].

2. Pedagogical Reformation: Immersive VL Development Matrix

Transcending didactic instruction via Scenario-Innovation-Reflection Trilogy [6, p. 20-25]:



1. Visual Ecosystem Cultivation

Reconfiguring campuses as VL laboratories:

Physical Layer: Transform wayfinding into dynamic data visualization installations [9, p. 112];

Cultural Layer: Convert student clubs into visual innovation hubs (e.g., AR Campus Narrative Project) [2, p. 65];

Systemic Layer: Implement VL competency certification systems [5, p. 12-20].

Self-Directed Learning Paradigm

Dual-track autonomous development framework:

Competency Axis	Cultivation Pathway
Lifelong Learning	→ Personal VL Knowledge Mapping
Creative Impact	→ Iterative Platform Publishing
Metacognition	→ Learning Strategy Algorithms

Conclusion

As an emerging metacognitive competency, visual literacy (VL) serves as a transdisciplinary enabler, fostering multidimensional development for Chinese art and design undergraduates and driving effective curricular integration in higher education. Its cultivation constitutes an indispensable component of holistic education, generating profound pedagogical impacts. While current implementation faces challenges due to limited pedagogical expertise, institutions and learners can leverage campus cultural ecosystems, student community initiatives, and self-directed learning to advance VL competencies. The transformative educational value of systematically embedding visual literacy within art and design education remains incalculably significant [2, p. 61-70; 3, p. 187-189; 6, p. 15-25].

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