International Journal Fine Arts and Creative Innovation
Year 2025
Volume 2, No.1 (January – April)

A CASE STUDY OF SCAFFOLDING INSTRUCTION IN COLLEGE ENGLISH WRITING TEACHING

Yuting Zhou[1] and Asst. Prof. Kasemrat Wiwitkunkasem, Ph.D.[2]
[1]Guizhou Qiannan College of Science and Technology [2]Faculty of Liberal Arts,Shinawatra
E-mail: zhouyy0808@yeah.net; kasemrat.w@siu.ac.th

Abstract

With the development of China's economy and the increasing demand for talents in the design industry, the importance of design education at the undergraduate level for career goals after graduation has become increasingly prominent. This master project objective is to study and analyze the current situation of design education at a case of Guizhou Qiannan College of Science and Technology for proposing the improvement of teaching methods. Through SWOT analysis, questionnaires and interviews, analyze the feedback from students and teachers on the current teaching status and put forward suggestions for optimizing design courses and teaching models from 283 students in the design major by systematic random sampling and 10 design teachers in School of Design at Guizhou Qiannan College of Science and Technology. Content analysis use for qualitative data and descriptive statistical analysis for quantitative data. The research found in 2 terms: 1) Curriculum: the proportion of theory and practice is seriously imbalanced, theoretical course content covers basic concepts and techniques of design, students lack sufficient hands-on opportunities and out of touch with industry development trends. 2) Teaching resources: are underutilized, the professional level of teachers is uneven, and the teaching model lacks diversity which affects the cultivation of design students' talents in creativity, innovation ability, the practical ability and social responsibility. The design education improvement are as follow: reform the curriculum, teaching methods, resource allocation optimization, teacher training, cultivate design talents with innovative ability and social responsibility through school-enterprise cooperation and integration of industry and education

Keywords: Current Situation, Design teaching method, Undergraduate level, China

Introduction

The Current Situation for Improving Teaching Methods in School of Design Education at Guizhou Qiannan College of Science and Technology has background of the study, statement of the problems and concept in solving the problems are as follow:

Modern design education in the west is well-established, while China's design education, starting in the 1980s, has faced challenges due to its foundation in traditional art education. Economic growth in China has increased the demand for design talent, prompting colleges to reform curricula by integrating design-focused approaches. Despite efforts like the "Compulsory Education Art Curriculum Standards" (2011), issues such as outdated teaching methods, inexperienced teachers, and low student engagement remain, hindering progress.

This study aims to address the challenges in design education at Guizhou Qiannan College of Science and Technology by analyzing the current teaching situation, identifying shortcomings, and proposing effective solutions. The goal is to explore how to optimize teaching methods, enhance the quality of education, align it with industry needs, and foster students' innovation and practical skills. This investigation seeks to answer the research question: "What improvements are needed in the teaching methods of design education at undergraduate level in the case of Guizhou Qiannan College of Science and Technology?" So, the research objective is to study the current situation of teaching method in design education

for improving of undergraduate level in the case of Guizhou Qiannan College of Science and Technology.

Materials and Methods

Population and Sample Selection

This study focuses on the current state of design education at Guizhou Qiannan College of Science and Technology. The independent variables are course development, teaching resource utilization, teacher expertise, and existing shortcomings, while the dependent variable is the overall condition of design education. Data will be collected from 283 design students (randomly selected) and 10 teachers using questionnaires and interviews, conducted between August and September 2024. Qualitative, quantitative and SWOT analyses performed to examine teacher feedback and student responses.

Research Instruments and Methodology

The study utilized a structured questionnaire divided into 7 distinct parts, each serving a specific purpose:

Part 1: Background Information

This section gathers basic demographic information about respondents, including their current grade and gender, to understand the composition of the survey sample and provide context for analysis.

Part 2: Learning Motivation ("Why")

Explores students' motivations for studying design and their expectations for learning outcomes. Questions focus on reasons for choosing the major and what they hope to gain, such as skills improvement, creative thinking, or career preparation.

Part 3: Learning Content and Methods ("What")

Assesses students' satisfaction with course content, teaching methods, and resources. It identifies the relevance and practicality of course materials, preferred learning resources, and effectiveness of teaching styles.

Part 4: Influencing Factors ("Who")

Investigates the key individuals or groups that impact students' learning outcomes, such as teachers, peers, or external mentors, and where students seek feedback for improvement.

Part 5: Learning Places and Resources ("Where")

Examines where students typically study and practice design, their satisfaction with the resources provided by the school, and their reliance on external resources like online courses or off-campus tools.

Part 6: Learning Time and Management ("When")

Focuses on time spent on design learning, perceptions of course scheduling, and challenges in managing time for projects and assignments. It identifies stress levels and time management effectiveness.

Part 7: Overall Satisfaction and Suggestions

The overall feedback on the design courses, including satisfaction levels and areas needing improvement (course content, teaching methods, and resources).

Data analysis and statistical methods

Researcher use questionnaires and interview as research tools to collect data to know the result and understand the views, satisfaction, behaviors and other information of the surveyed groups, so as to provide important data support for research.

Before analyzing the questionnaire data, all returned questionnaires were tested for validity, eliminating invalid ones with random or incomplete answers. The reliability of the data was assessed using SPSS 17.0, with Cronbach's α coefficient as the indicator: values above

0.8 indicate high reliability, 0.7-0.8 good reliability, 0.6-0.7 acceptable reliability, and below 0.6 poor reliability. The calculated reliability coefficient for the data was 0.759, demonstrating good reliability and high data quality, sufficient for further analysis. The results will be presented using bar charts, tables, and pie charts for clarity and deeper insights through SWOT analysis.

Results

The survey at Guizhou Qiannan University of Science and Technology involved 283 participants, consisting of 126 freshmen (44.5%) and 157 sophomores (55.5%), providing a balanced representation of students across two academic years. The gender distribution was nearly equal, with 140 male respondents (49%) and 143 female respondents (51%), ensuring a diverse perspective in the responses. This comprehensive sampling offers valuable insights into the opinions and experiences of students from different demographics and educational stages as in table 1.

Table 1 Overview of the Design Education Questionnaire at Guinan University of Science and Technology, Guizhou Province

Level	Male n (%)	Female n (%)	Total number of students in each grade	%
Freshmen	62	64	126	44.5
Sophomore year	78	79	157	55.5
Total number of genders	140 (49%)	143 (51%)	283	100

The interview were mainly divided into three aspects: the current situation of the design education courses in Guinan Institute of Technology, Guizhou Province, the classroom teaching of design courses, and the views and opinions of front-line teachers on the "University Design" course. 5 front-line teachers interviewed by telephone and face to face with 5 teachers. The 10 teachers generally affirmed the golden stage of university design education and actively cooperated with the interview. Among the 10 teachers, 9 are in master's degree, 1 is a bachelor's degree, reflecting that the professional ability of design education teachers has been significantly improved compared with the past as in table 2.

Table 2 Basic information of 10 design education teachers at Guizhou Qiannan College of Science and Technology

Interview type	Gender	n	Age	Education	Academic position	Teaching experience
Face to face	Male	1	39	Master	Associate Professor	15
		1	61	Bachelor	Associate Professor	40
	Female	1	35	Master	Lecturer	8
		1	34	Master	Lecturer	8
		1	35	Master	Lecturer	9
Telephone	Female	1	35	Master	Lecturer	10
		1	29	Master	Lecturer	4
		1	31	Master	Lecturer	6
		1	30	Master	Lecturer	5
		1	28	Master	Lecturer	5

As in Table 3 and Figure 1, in the feedback on "How satisfied are you with the current design courses?", 37.9% of the students thought the course arrangement was "very satisfied" or "satisfied", while 62.1% of the students thought it was "average" or "very dissatisfied", which was significantly higher than the former.

Table 3 Feedback on the reasonable overall satisfaction of design courses

Level of design professional courses	n	percentage
Very satisfied	2 people	4.96%
satisfied	98 people	32.94%
commonly	164 people	52.19%
Very dissatisfied	19 people	9.91%

Fig. 1 Overall Satisfaction with Design Professional Courses

As in bar chart Fig. 2, in the survey analysis of which learning resources you most commonly use in designing courses, 57.5% of students reported obtaining relevant learning materials from the teaching provided by the school, 28.3% of students reported obtaining them from the teacher's materials, and 7% and 7.2% of students reported obtaining learning resources from learning websites and libraries. This data also proves the scientific and practical nature of the textbooks, and most students are satisfied with their evaluations.

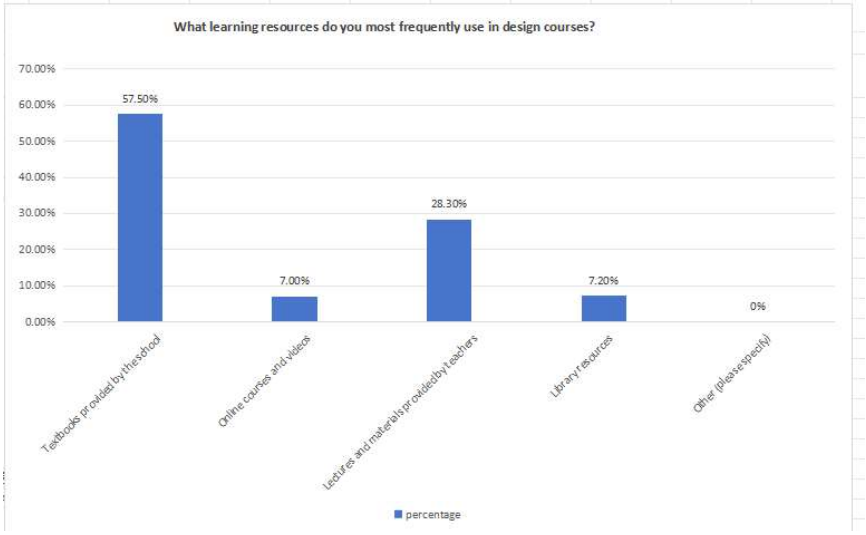

Fig. 2 The learning resources that most frequently use in design courses

What are the views and reasons for the effectiveness of classroom teaching methods in designing courses, as shown in bar chart 4.4? According to the survey analysis, 57.5% of students stated that the effectiveness of teaching methods is somewhat effective for themselves, 28.3% of students stated that it is very effective, and 7% and 7.2% of students stated that it is average or not very good. This data also proves that there are certain problems in the effectiveness of teaching methods, and most students' evaluations are still relatively poor. There is still room for improvement in the effectiveness of teaching for students.

Table 4 The opinion level of the effectiveness of classroom teaching methods

The opinion level	Number of people	percentage
Very effective	80 people	28.3%
Somewhat effective	163 people	57.5%
commonly	20 people	7%
The effect is not very good	20 people	7.2%
Completely in effective	0	0%

As in Table 5, most students get their main feedback from teachers' opinions and suggestions, accounting for 56.5%, of which their own reflection and adjustment, communication and discussion with classmates, online communities and learning platforms account for 18.7%, 10.6% and 10.7% respectively.

Table 5 The main feedback from the study

The main feedback	Number of people	Percentage
Teachers' comments and suggestions	160	56.5%
Own reflection and adjustment	53	18.7%
Communication and discussion with classmates	30	10.6%
Online communities and learning platforms	40	10.7%
Industry works and reference cases	0	0%
Others (please specify)	0	0%

Table 6 The place for studying and practice design courses.

Place for studying	Number of people	Percentage
Classrooms and laboratories in school	250	88.33%
My own home	3	1.0%
Library or study room	25	8.83%
Design studio or shared space	15	1.84%
Others (please specify)	0	0%

As in Table 6, the place for studying and practice design courses researcher found that 88.33% of the students usually study in classrooms and laboratories at school, and 8.83% of the students study in libraries and study rooms.

As in Table 7, most students, 260 students accounting for 92%, believed that the course teachers had the greatest impact on their help during the learning process, which shows that the school's teaching method is relatively simple.

Table 7 The impact on learning outcomes during the learning process

The impact on learning outcomes during the learning process	Number of people	percentage
Course teacher	260 people	92%
Classmates and friends	3 people	1%
Industry mentors or external experts	10 people	3.5%
Your own efforts and management	10 people	3.5%
member of family	0	0%
Other (please specify)	0	0%

From Table 8, it can be seen that 48.9% of students have independently designed classrooms available for use and frequently use them. The usage frequency of first-year students is slightly higher than that of sophomore students. And 17.1% of students said that although the school has specially designed classrooms, they rarely use them, and one-fifth of sophomore students choose the option of "occasionally using". Additionally, 31.9% of students stated that the school does not provide professional design classrooms for their use.

Table 8 Resource Utilization of Design Education Classrooms in Universities

Grade	Is there a dedicated design classroom?		
	Yes, and often used	Yes, occasionally used	No
First year student	50%	11.9%	35.7%
Sophomore year	47.8%	22.3%	28%
Average proportion	48.9%	17.1%	31.9%

From the comparison between Table 9 and Table 10, it can be observed that design practice is the teaching method that design teachers often teach (43.9%). Correspondingly, students' favorite teaching method is also to engage in related design practice, with a proportion of up to 53%; In addition, although the lecture method accounts for nearly one-third of the teaching format of design teachers, only 5.4% of students like this teaching mode; Although only 20% of students use the teaching method of appreciating and visiting, 34% of students hope to participate in this teaching method.

Overall, there is a deviation between the teaching methods of design teachers and the teaching methods expected by students. Most students are not able to choose the teaching content they expect but rather follow the teacher's arrangements. In terms of teaching content, more students expect to engage in design practice and visits, and are not particularly excited about the teaching rules that occupy one-third of the teaching methods. In terms of teaching content in design practice, most of the teaching content is common paper art, painting, and other methods, and there is a situation of single teaching content and single use of materials.

Table 9 Survey on Student Design Classroom Content

Grade	**Can I choose the content of the design course by myself?**	
	Sure	**May not**
First year student	38.9%	57.1%
Sophomore year	36.9%	63.1%
Average proportion	37.9%	60.1%

Table 10 The main teaching format of students' favorite design course.

Grade	**The main teaching format of students' favorite design course**			
	Teach knowledge	**Appreciate and visit**	**Design Practice**	**Other**
First year student	6.3%	36.5%	49.2%	4%
Sophomore year	4.5%	31.8%	56.7%	4.5%
Average proportion	5.4%	34.2%	53%	4.3%

The Analysis of the Causes of Problems in Design Course Implementation at

Guizhou Qiannan University faces four key issues: limited courses, single teaching content and methods, lack of diverse materials, and underutilized resources. These problems stem from three main causes:

1. Lack of Attention to Art Courses: Design and art education are often undervalued by schools, families, and students. Schools prioritize cultural subjects for graduation and employment rates, sidelining design courses. Families often focus on academic success, neglecting children's creative interests. Students, misled by societal perceptions that design is a "secondary subject," show reduced engagement in classes, viewing them as a break from academic stress.

2. Insufficient Funding: Limited financial resources hinder design education. Schools often allocate funds to engineering rather than art programs, resulting in inadequate teacher recruitment, insufficient professional development opportunities, and outdated classroom resources. Teachers lack institutional support for training, relying on personal efforts with uneven results. Limited resources also restrict practical and creative opportunities for students.

3. The Challenge: The rising demand for innovative design talents and rich local cultural resources in Guizhou provide unique teaching materials and opportunities to inspire students, the limited funding and teaching resources hinder improvement efforts, Societal undervaluation of design education reduces awareness of its career potential and

practical value. These challenges highlight the need for greater investment, support, and recognition of design education's role in fostering creativity and innovation.

The design curriculum at Guizhou Qiannan College heavily emphasizes theory over practice, limiting opportunities for hands-on learning. This imbalance hinders the development of students' comprehensive design skills, as practical application is essential for consolidating theoretical knowledge.

Outdated equipment, software, and limited materials for practical teaching fail to meet the needs of modern design education. Students lack access to current design technologies, restricting their ability to gain relevant skills.

Teachers have few opportunities for training in modern design techniques, preventing them from integrating the latest trends and tools into their instruction. Upgrading teacher expertise, particularly in emerging technologies, is critical to meeting evolving industry demands.

Conclusion

Based on the research objective to study the current state of design education at Guizhou Qiannan College of Science and Technology, the findings are summarized into three key aspects:

1) Current Situation Analysis: The study identified significant issues in curriculum and teaching resources. The curriculum suffers from an imbalance between theory and practice, with insufficient hands-on opportunities and outdated content disconnected from industry trends. Teaching resources, including limited design software, outdated materials, and insufficient equipment, fail to meet modern design education requirements, hindering practical learning and skill development.

2) Views of Students and Teachers: Students express low satisfaction, citing simplistic content and a lack of practical opportunities that limit engagement and career preparation. Teachers acknowledge the importance of design education but highlight inflexible curricula, resource constraints, and insufficient training opportunities as barriers to effective teaching and professional growth.

3) Challenges and Opportunities:

The lack of practical teaching and uneven teacher expertise are major challenges, but these also present opportunities for reform. Adjusting the curriculum, introducing modern tools, and fostering industry partnerships could enhance practical learning and align education with industry demands. The SWOT analysis reveals:

- Strengths: High teaching team expertise and strong student interest.
- Weaknesses: Limited resources, outdated methods, and a lack of innovation.
- Opportunities: Growing industry demand and rich local cultural resources.
- Threats: Societal undervaluation of design education, resource constraints, and competition among colleges.

This analysis highlights the current strengths and areas for improvement, providing a foundation for optimizing teaching methods and resource allocation.

Suggestions

1) Curriculum Reform: To address the unbalanced curriculum, schools should increase practical course content, integrate interdisciplinary subjects (e.g., new media design, marketing), and collaborate with enterprises on real-world projects to enhance students' practical experience.

2) Teaching Methods Enhancement: Interactive methods such as project-driven learning and case analysis should be adopted to develop students' creativity and problem-solving skills.

Teachers should incorporate modern digital design tools like AI-assisted software to improve students' professional competitiveness.

3) Resource Optimization: Schools need to invest in updated teaching equipment and software, provide sufficient hardware and materials, and establish design studios for practice and creativity, ensuring better use of resources and improved practical learning.

4) Teacher Training: Regular professional development should focus on emerging design technologies and innovative teaching methods. Teachers should also participate in industry events and competitions to stay updated on trends and elevate their expertise.

The implementing these measures will improve the curriculum, teaching methods, resources, and faculty, fostering innovative and practical design talents while enhancing students' competitiveness and advancing the college's design education.

References

Cao, T. (2005). Introduction to Art and Design. Shanghai: Shanghai People's Publishing House.

Cao, X. (2011, April). The "Prototype" significance of Bauhaus design education: A study on the forms of Bauhaus design education. Journal of Nanjing Academy of Arts (Fine Arts and Design Edition).

Deng, N. (2015). Research on the Cultivation of Design Consciousness in Primary and Secondary School Art Basic Education. Master's thesis. Hunan University of Technology.

Expert Working Committee on Basic Education Curriculum Textbooks of the Ministry of Education. (2012). Interpretation of the Compulsory Education Art Curriculum Standards (2011 Edition). Beijing: Beijing Normal University Press.

Guan, H. (2006). Research on the Design and Teaching Content of Art Textbooks for Primary and Secondary Schools in China (Master's thesis). East China Normal University.

Ji, Q. (2013, June). Flexible and diverse design education models in the UK: A case study of Kingston University. Art and Design (Theory).

Kurokawa, M. (2014). Rhetorical Design. Shijiazhuang: Hebei Fine Arts Publishing House.

Li, C. (2012). Research on the Isomorphism of Matisse's Painting Language and Contemporary Design Visual Form (Master's thesis). Qiqihar University.

Li, K. (2013). Research on the Current Situation and Countermeasures of Art and Design Education in Junior High Schools in Nanyang City (Master's thesis). Henan Normal University.

Li, L. (2004). On the History of Chinese Design Art. Tianjin: Tianjin People's Publishing House.

Li, W. (2009, May). Independent learning and practical innovation: Exploration of design education at Hamburg Academy of Fine Arts in Germany. Journal of Nanjing Academy of Fine Arts (Art and Design Edition).

Li, Y. (2000). Outline of the History of Ancient Chinese Art Education. Doctoral dissertation. China Academy of Art.

Liang, G. (2008). On the Cultivation of Design Consciousness in Basic Art Education (Master's thesis). Capital Normal University.

Ling, J. (2012). Introduction to Art and Design. Beijing: Peking University Press.

Liu, F. (2012). Research on the Current Situation and Countermeasures of "Design Application" Teaching in Junior High School Art Curriculum (Master's thesis). Xinjiang Normal University.

Liu, J. (2015, December). Experience and discussion on Japanese design and design education. Decoration.

Ministry of Education of the People's Republic of China. (2011). Compulsory Education Art Curriculum Standards.
Moholi Nagi. (2006). From Materials to Architecture [G]. Bauhaus: Masters and Students (Q. Zhu & H. Li, Eds.; J. Chen & X. Li, Trans.). Beijing: Art and Design Magazine.
Morris, W. (2018). William Morris: The Art and Craft House. Zhejiang People's Fine Arts Publishing House.
Schiller. (2016). Art Education Letters. Beijing: Social Sciences Literature Press.
Shen, Y. (2015). Teaching Research on the Learning Field of "Design Application" in Primary and Secondary School Art Curriculum (Master's thesis). East China Normal University.
Sun, N., & Lin, D. (2009, December). Inspiration from design art education in American universities. Zhejiang Arts and Crafts.
Tanaka, Y. (2009). The Awakening of Design (E. Zhu, Ed. & Trans.). Guangxi: Guangxi Normal University Press.
Wang, S. (1995). World Modern Design History. Shenzhen: New Century Press. (2002). World Modern Design History. Beijing: China Youth Press.
Wang, Y. (2013). History of Chinese Art Education. Hefei: Hefei University of Technology Press.
Wu, J. (2008). Comparative Study on Teaching Characteristics in Industrial Design Education between China and Germany (Master's thesis). Wuhan University of Technology.
Xi, W. (2008). Research on Art and Design Education in Domestic Ordinary Middle Schools (Doctoral dissertation). Capital Normal University.
Xiao, W. (2007). Research on the Relationship between Yunnan Ethnic Folk Crafts and Modern Industrial Design (Master's thesis). Kunming University of Science and Technology.
Xu, J., & Jin, D. (2014). Reflections on Heritage and Renewal of Chinese Design Education. Jinan: Shandong Fine Arts Publishing House.
Ying, A. (2006). How to Take Good Design and Application Courses. Chongqing: Southwest Normal University Press.
Yin, D. (2013). Introduction to Design. Beijing: People's Fine Arts Publishing House.
Yin, S. (2001). Interpretation of Full-time Compulsory Education Art Curriculum Standards (Experimental Draft). Beijing: Beijing Normal University Press.
Yin, X., Chinatangkul, P. & Chaisirithanya, T. (2023). The future professional development for young teachers in fine art academies (Master's thesis): A case study of China and Thailand. Professional Development in Education, 6(2), 200-220.
Yin, Y. (2010). Research on Junior High School Design Education - Taking Industrial Design Education as an Example (Master's thesis). Shanghai Normal University.
Yuan, Y., & Abe, Y. (2010). Why Design (E. Zhu, Trans.). Shandong People's Publishing House.
Zhang, H. (2009, December). What did Bauhaus leave for America? What did America leave for the world? Decoration.
Zhu, G. (2012). Zhu Guangqian Talks about Beauty. Shanghai: East China Normal University Press.