

Innovative Animation Strategies for Visual Communication Design Students' Learning Effectiveness

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ABSTRACT

This research has aimed to analyze the current status and limitations of animation integration in visual communication design curriculum in order to develop innovative animation strategies for visual communication design students. The project has been carried out by means of questionnaires and interviews to sample of students and design teachers from Qiannan University of Science and Technology. The research used qualitative data analysis and statistical methods of quantitative data. The study revealed that constraints in current course of visual communication design learning are from systemic inadequacies, outdated teaching methods, and limited resources. The conclusion on study to provide innovative animation strategies including curriculum integration and objective alignment, innovative teaching, optimization of teaching resources, teacher training and professional development and industry collaboration and experiential learning.

KEYWORDS: Visual communication design, Innovative animation, Creativity and innovation.

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INTRODUCTION

Nowadays, global science popularization of communication is undergoing a paradigm shift from two-dimensional flat formats to multi-dimensional interactive formats. [1] The public's pursuit of visual experiences is increasingly rising, no longer satisfied with the two-dimensional, static forms presented by traditional visual communication design, but instead seeking more impactful, dynamic, interactive, and multi-sensory integrated expressions. It then caused traditional visual communication design methods become inadequate for expectation of the public. Development and innovation for education in visual communication design is therefore inevitable.

Animation is a vivid and intuitive teaching medium. [2] Uniqueness narrative capability, rich motion expression and diverse aesthetic presentations of animation caused it become a widespread application in the field of visual communication design as well as an innovative tool in the education field. The integration of animation techniques into visual communication design education has profoundly impacted the discipline by deeply merging narrative techniques, dynamic expression, and aesthetic concepts. Visual communication design has transcended the limitations of traditional two-dimensional space, evolving toward multidimensionality. It has shifted from static design to dynamic design, and from singular visual perception to multisensory communication encompassing visual, auditory, and tactile elements. [3] In addition, integrated application in various forms such as graphics, sound, and shapes increases sensory engagement in the educational process and significantly expanding the boundaries and possibilities for visual communication design education.

However, although some educators and practitioners well aware the importance of animation in visual communication design education and attempted to integrate it with their teaching process, but the practical still inconsistency and most typical teaching strategies are still outdated and not adequately take characteristics. Teaching and learning still rely on outdated methods without taking advantages of animation as a medium into consideration. The aforesaid caused students in communication design education become lack of techniques which was a consequence from lack of a systematic teaching framework, coherence, logic con, and inconsistency of teaching content which caused students hardly form their complete knowledge system and creative thinking and eventually impacts comprehensive quality development and innovative capability enhancement of students in visual communication design.

LITERATURE REVIEWS

Exploration of Teaching Reform in Visual Communication Design Based on Cultivating Cultural and Creative Talent indicates that with the rapid development of the global cultural and creative industry, China's sector possesses significant potential yet remains constrained by talent shortages. The current teaching model for visual communication design programs struggles to meet the industry's demand for high-caliber, innovative talent, facing issues of insufficient numbers, structural imbalance, and inadequate quality. To address this, the article proposes establishing a "triple-skills" teaching model centered on "art, scholarship,

and technology,” implementing a teacher-student design studio model, and developing a practical curriculum system based on “one principle, two fundamental points, three major modules, and four competency pathways.” These initiatives aim to enhance students' innovation and practical abilities, fulfill the needs of the cultural and creative industries, and drive the sector's sustainable development.]4[

RESEARCH OBJECTIVES

The study aimed to 1(Analyzed the current status and limitations of animation integration in visual communication design curriculum. 2(Develop innovative animation strategies for visual communication design students. The research focused on innovative applications of animation in teaching activities, tools, and technologies, considering learning outcomes, student engagement, and creative thinking as dependent variables.

RESEARCH METHODOLOGY

RESEARCH METHODOLOGY

The data in this research were collected through questionnaires and interviews involving 360 design students)randomly selected(and 10 teachers from the Department of Animation and Visual Communication Design, School of Art, Qiannan University of Science and Technology, Guizhou Province, China. Both qualitative and quantitative methods were employed to comprehensively analyze teaching staff feedback and student responses. Prior to analyzing questionnaire data, all returned questionnaires underwent validity checks to exclude invalid samples characterized by random responses or missing information. Data reliability was assessed using SPSS 17.0 software.

RESEARCH RESULTS

Research Objective1(To analyze the current status and limitations of animation integration in visual communication design curriculum.

Questionnaire Analysis;

Figure1 shows opinion of respondent on problems of teaching in animation courses in visual communication design program. The outcome of survey revealed 52.22% was from insufficient hardware equipment, 52.5% was from lack of relevant systematic textbooks, 42.78% of respondents highlighting on qualification of the university, 32.78% of problems was from limitation of time in class, 29.17% of the problem was from insufficient knowledge of students and 35.56% of problem was from rapid technology iteration of the industry.

Current teaching practices and result of data suggests cross issues on multiple dimensions, including courses, textbooks, facilities, and teaching methods are required for improvements and enhance teaching quality. In terms of the designing course, the problem was from proportion inconsistency of studying courses in animation design including the irrelevant subjects. Relevant textbooks issues have outdated contents, insufficient integration of theory and practice, unreasonable difficulty levels, monotonous formats and insufficient hardware. Limitation of time for leaning by the faculty, insufficient knowledge basis of student and rapidly development of technology are added to problems of teaching and learning.

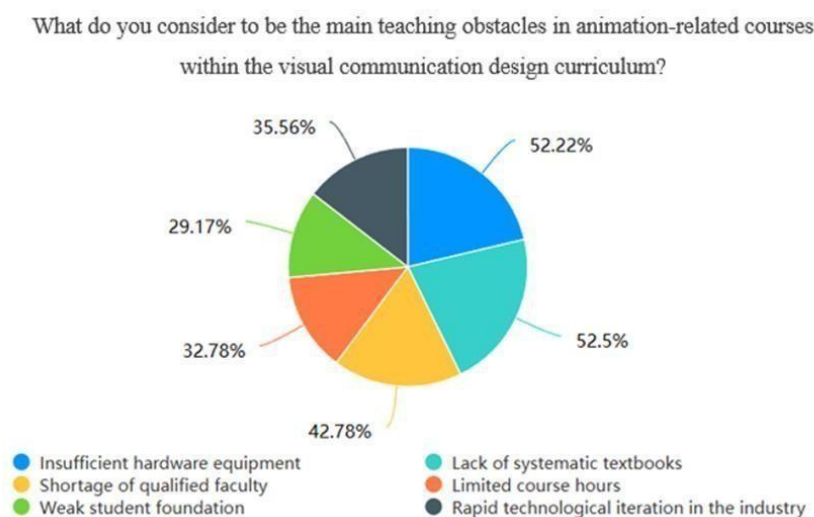


Figure 1 The main obstacle to teaching in animation-related courses
Interview Analysis;

Table 1. Summary of Interview Results on Animation Integration in Teaching

Research Aspect	Key Interview Findings)Summary(	Concluding Insights
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1. Teachers' perceptions of animation and its role in teaching	Most teachers recognized animation as a crucial component of the visual communication design industry. It enhances brand memorability, improves user experience through motion interaction, and serves as a cross-platform storytelling medium. Teaching should shift from static visual expression toward dynamic logical construction, emphasizing motion control, narrative rhythm, and multisensory coordination.	Animation should be integrated as a core skill in design curricula, and teaching strategies should focus on developing students' abilities in motion logic and multisensory design.
2. Implementation process of integrating animation into teaching	Course design follows the principles of motion and narrative logic, introducing tools such as After Effects, Cinema 4D, and Unity progressively. Teachers highlighted the need for continuous self-learning to keep content up-to-date and the adoption of flexible systems, such as cross-grade credit courses, to address knowledge gaps.	A tiered curriculum and cross-level learning system should be developed, along with continuous professional development for teachers to maintain curriculum relevance.
3. Teaching effectiveness and evaluation	Students showed high enthusiasm in animation projects but faced challenges in creativity, teamwork, and technical proficiency. Some projects achieved awards and real-world application. Teachers emphasized the need for appropriate evaluation weighting to reflect animation's importance without adding excessive pressure.	Assessment systems should align with course objectives and focus on enhancing creativity, collaboration, and technical tool competence.

Note. Data were derived from semi-structured interviews with design instructors regarding animation integration in visual communication design courses.

Research Objective 2(To develop innovative animation strategies for visual communication design students.

The findings from this research lead to comprehensive guidelines for developing innovative animation teaching strategies in visual communication design education. The recommendations can be summarized as follows:

Curriculum Integration and Objective Alignment:

Clear and tiered teaching objectives should be defined and systematically integrated into the curriculum. Guided by constructivist learning theory, objectives should progress from basic cognitive understanding to advanced innovation and reflective practice. Animation should function as a cross-disciplinary tool within visual communication design courses—such as brand dynamic design, interactive interface design, and multimedia storytelling—ensuring that design thinking and animation techniques develop cohesively.]5[

Innovative Teaching Content and Methods:

The curriculum should include content related to dynamic expression, narrative construction, and interactive logic, connecting them to modules such as brand design, information architecture, and user experience. Innovative methods—such as project-based learning, case analysis, and collaborative learning—should be employed. Integrating professional tools (e.g., Adobe After Effects, Cinema 4D, Unity) and emerging technologies (AI-generated animation, real-time rendering) helps students acquire both technical mastery and creative adaptability.]6[,]7[

Optimization of Teaching Resources and Facilities:

Ensuring quality learning requires schools to provide industry-standard materials, software, and facilities. This includes high-performance computers, motion capture systems, and online platforms with tutorials and updated resources. Regular updates to animation software and digital tools guarantee students' exposure to current industry practices.

Teacher Training and Professional Development:

The overall proficiency level of the teaching staff is relatively low,]6[making it crucial to continuously provide training for teachers on animation technology and industry trends. Educators should be encouraged to participate in professional seminars, conferences, and collaborative projects, strengthening their ability to connect theory with practice and enhance teaching quality.

Assessment and Feedback Enhancement:

The evaluation process should be multidimensional—assessing creative innovation, technical execution, and alignment with design objectives. Both process and product-based assessments are recommended, emphasizing not only final outcomes but also students' progress and problem-solving abilities throughout project development.]8[

6. Industry Collaboration and Experiential Learning: Strengthening school–enterprise partnerships enhance students' real-world experience and professional competitiveness. Establishing internship bases and inviting industry experts to share insights can bridge academic knowledge with professional application, fostering employability and creative confidence.]9[

Table 2. Innovative Teaching Strategy Dimensions for Animation Integration in Visual Communication Design

Teaching Strategy Dimension	Specific Content	Implementation Method	Examples / Explanations
Teaching objectives and curriculum integration	Set stratified teaching goals to ensure targeted improvement	From basic cognition to technological application to innovative integration	Lower grades: Integration of animation basics and static design principles; Senior grades: Cross media applications
	Animation is integrated into core courses as an interdisciplinary tool	Promote animation technology, design thinking, and basic visual communication courses simultaneously	Courses such as brand dynamic design, interactive interface design, and multimedia narrative
	Take the core goal of visual communication design as the anchor point	Use animation's dynamic expression, narrative logic, and technical tools to achieve goals	In the Brand Dynamic Design course, the dynamic evolution of brand logos is presented through animation technology
Innovation in teaching content and methods	Covering dynamic and narrative logic, technical tools, and cross-media integration	Introduce mainstream software and emerging technologies e.g., After Effects, AI-generated animation(	Animation is structured into "dynamic expression", "interactive logic", and "narrative construction"
	Adopt project-driven, case based, and collaborative learning	Students gain skills via real projects and teamwork	In the Brand Dynamic Design course, students create dynamic logos and analyze brand strategies
Optimization of teaching resources and facilities	Develop or introduce animated teaching materials aligned with industry standards	Create an online resource platform for tutorials, materials, and software updates	—
Teacher training and support enhancement	Provide regular animation tech and industry trend training	Encourage participation in conferences and projects to enhance teaching abilities	—
Improve evaluation and feedback mechanism	Focus on final work quality and project process performance	Adjust teaching content and methods based on feedback and outcomes	Assess creativity, technical skills, and alignment with goals; provide regular feedback
Promote school-enterprise cooperation and industry alignment	Collaborate with enterprises to create internship bases	Run joint projects with real design and production experience	—
	Invite industry experts as visiting professors or mentors	Provide students with professional guidance and career advice	—

Note. Innovative Teaching Strategy Dimensions for Animation Integration in Visual Communication Design ; Researcher

DISCUSSION AND CONCLUSION

Outcome of the research reveals the followings:

Over 94% of students' attitudes support the integration of animation into teaching and learning. They recognize the irreplaceable value of animation in visual communication design.

In terms of limitation analysis, the curriculum structure still lacks systematicity and consistency. The content organization is not logical. Animation studies are often conducted as independent modules and cannot be integrated with other design courses.

Lack of resources and teaching tools for animation creates a disconnect between what students learn and market needs.

Many teachers lack real-world experience in animation production and a deep understanding of the modern industry, limiting their teaching to theoretical concepts without any practical guidance.

The evaluation system focuses primarily on animation production techniques and visual quality, while not emphasizing unique creativity or conveying design intent, resulting in works lacking in prominence and emotional impact.

The Relationship Between Student Interest and Learning Outcomes

Students' high interest in animation is a key driver of learning effectiveness. Research indicates that when students are deeply interested in the subject matter, they are more willing to invest time and effort into in-depth learning and practical application. Innovative animation strategies introduce new technologies and methods, providing students with richer and more diverse learning experiences, thereby further stimulating their interest and enhancing learning outcomes. [10], [11]

In conclusion, the development of innovative animation strategies for visual communication design should emphasize an integrated curriculum, experiential and technology-driven teaching methods, adequate learning resources, continuous faculty development, comprehensive assessment systems, and active industry collaboration. Collectively, these elements form a sustainable framework for improving animation pedagogy and nurturing creative, skilled, and industry ready visual communication designers. [12], [13]

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