INFLUENCE OF NEW MEDIA TECHNOLOGY ON THE TEACHING QUALITY OF ART STUDENTS IN HIGHER VOCATIONAL COLLEGES

Liwen Liang[1], Smithirak Jantarak[2]

[1,2]*Graduate School, Southeast Asia University, Bangkok, Thailand*
E-mail: S6446B10056@live.sau.ac.th

Abstract

This study analyses the current situation of the application of new media technology in teaching in higher vocational institutions, and analyses its problems, putting forward requirements and countermeasures. The research is conducted through questionnaires, literature, and interview methods. Using constructivism and dialectical unity as the theoretical basis for understanding and structure, the paper elaborates that guided teaching, interactive teaching, and delightful teaching are the approaches often adopted in new media teaching. It is found that students who adopt new media teaching methods are more satisfied with indicators regarding teaching quality, such as teaching resources, theoretical teaching, and practical teaching, indicating that teaching in new media methods can improve teaching quality. It was also suggested that there are problems in new media teaching such as teachers' and students' new media literacy, resources not yet fully utilized, outdated design of teaching contents, and curriculum construction to be improved and that improvements can be made by improving teachers' new media literacy, optimizing new media resources, exploring new media technology, improving teaching methods, innovating nurturing platforms, and strengthening teaching management.

Keywords: new media technology, teaching quality of Art, Higher vocational colleges

Statement of the problems

The 21st century will see the increasing intelligence of modern science and information technology. The creation of art that incorporates science and technology has innovative implications. The current approach to developing new media art has become a trend in contemporary visual art. Artists can use various technological tools, such as computers, mobile phones, the Internet, virtual reality, augmented reality, artificial intelligence and other technological media, to create art and practice innovation. At the same time, the development of new media technology has also had the field of education. The use of new media technology such as computers, electronic interactive whiteboards and projectors is greatly admired as it makes teaching more efficient and convenient. The author believes that in order to prepare students for today's digital age, relevant art and design courses can teach them how to use new media technology to learn about art and design and to create new media artworks. This will help develop students' skills in art and design and the use of media, as well as their creativity and aesthetic skills.

Higher education has its own set of unique characteristics. Due to the academic system, students at the tertiary level have a limited amount of time to study. As a result, specialist courses place more emphasis on practical material than on theoretical material. In teaching design in higher education, it is a challenge to teach students practical cognition through

general methods and how to teach them to gain theoretical knowledge through practical application. The use of new media technology has the potential to significantly enhance teaching and learning, alleviating some of the fundamental challenges of teaching art and design in higher education and increasing students' access to additional learning space and time. On the one hand, it can help students learn how to use new media technology in the art and design classroom, giving a new lease of life to the ordinary art and design classroom; on the other hand, using new media technology in art and design teaching in schools can improve students' appreciation of new media artworks as well as the production of stop-motion animation, computer design, micro-video and micro-filming. On the other hand, integrating new media technology into art and design teaching in schools will not only help to advance the development of art and design education in China's higher education institutions, but also improve the content of the curriculum.

Objectives

New media makes it easier and more accurate for students to receive information with greater relevance and guidance, and we use new media to disseminate information about the aesthetics of art and gain corresponding enhancements. Media communication is time-sensitive, timely and continuous, and it allows the whole process of creation to be presented to students in a multi-faceted way. While transforming traditional resources into digital resources, new media technology is conducive to enhancing the subjective consciousness of contemporary university students and consolidating their positive socio-political thinking and reasonable social cognition on the one hand, and enriching the means and platforms for the artistic quality of university students on the other. As schools are currently in an era where old and new media are intertwined, how to use new media technologies such as the Internet to strengthen the quality of teaching, improve the teaching level of higher education institutions, make them contemporary and dynamic, and better establish moral education is a new issue facing new media technologies in the use of art education work.

And the purpose of this paper is to collate and collect materials related to the use of new media technology in art education in colleges and universities, after experimenting and comparing the characteristic situations of two types of new media new technology and traditional media in the classroom, analyse the current great advantageous features of new media technology on the quality of art education classroom, vigorously expand the scope of new media technology for the construction of colleges and universities, and improve the efficiency of the use of new media technology in colleges and universities.

Hypotheses

Based on the review and summary of relevant theories and previous empirical studies in the literature review, combined with the purpose, research questions, and research structure of this study, the specific hypotheses of this study are summarised as follows.

(1) New media technology-based classroom teaching can enhance classroom atmosphere.
(2) New media technology-based classroom teaching can improve assessment results.
(3) Classroom teaching based on new media technology can improve practical teaching.

Research Benefit and Significant
Theoretical significance

In the course of contemporary social development, the latest media art forms and artistic methods are constantly being introduced and gradually applied in teaching. This provides an effective impetus for the subsequent development of students and offers them a variety of options for their growth. People's lives have been transformed by new media education, and this has led to improvements and innovations in art teaching in higher education institutions. In art teaching using new media technologies, new forms of art are realised through the use of electronic and optical media as the most basic language, a multidisciplinary cross-fertilisation of art forms, and the latest experimental spirit and artistic creative activity. Art teaching also incorporates various scientific components such as philosophy, sociology and communication. Thanks to new media technologies, the art discipline no longer consists of a single art discipline, but is more capable of encompassing a variety of disciplines. As a result, it is also clear that the teaching of art in higher education institutions is gradually moving towards a multidisciplinary trend. This ensures that teaching in higher education institutions is in line with current trends in social development and meets the diverse aesthetic and artistic needs of post-modern people.

Practical significance

As the application of new media in art and design teaching is becoming more and more complex and extensive, there are now stricter requirements for new media in the teaching of art and design for university students, such as improving the quality of art and design teaching and using new media to improve the impact of art quality. Different research methods are used to analyse and evaluate in detail the practical application of new media in teaching and learning in universities. We will see how the use of new media in the teaching of art and design can improve the quality of teaching and solve problems. We will also get suggestions on how to better use new media in art and design classrooms in higher education institutions, which will contribute to the development of the value of both applications and practical references.

Theory and Literature reviews

Research books		
Author	**Book Title**	**Contents**
Pan.R.F	New Media New Talk	Exploring the inner dynamics of new media development, this book is a positive guide to the application of new media
Li.C.L	Teaching modern curriculum design based on new media technology	This book provides an in-depth discussion of modern curriculum design and application issues under the conditions of new media technologies

Related papers		
Author	Book Title	Contents
Han.F	Study on Quality Assurance of Multimedia Teaching in Higher Education Institutions	Media teaching has advantages that cannot be replaced or achieved by traditional teaching methods. Adopting multimedia means for teaching is an inevitable trend in the reform and development of teaching in today's universities, and an important factor in improving the quality of teaching, and multimedia technology-assisted teaching has promoted the reform and development of China's education.
Wang.X.C	The development path of painting in new media technology in Yunnan Art College	The integration of new media technology into junior high school art teaching will make a unique contribution to the improvement of students' media literacy and art literacy, as well as providing junior high school art teachers with new ideas for teaching and making a positive contribution to the development of junior high school art education.
Lu.C	Research on the Application of New Media Technology in Practical Teaching in Secondary Schools	The effect of using new media technology to support practical teaching and learning is significant in terms of increasing students' motivation and improving their learning outcomes. For the students, it motivates them to learn and improves their academic performance.

Conceptual Framework

The structural framework of this paper is shown in Table
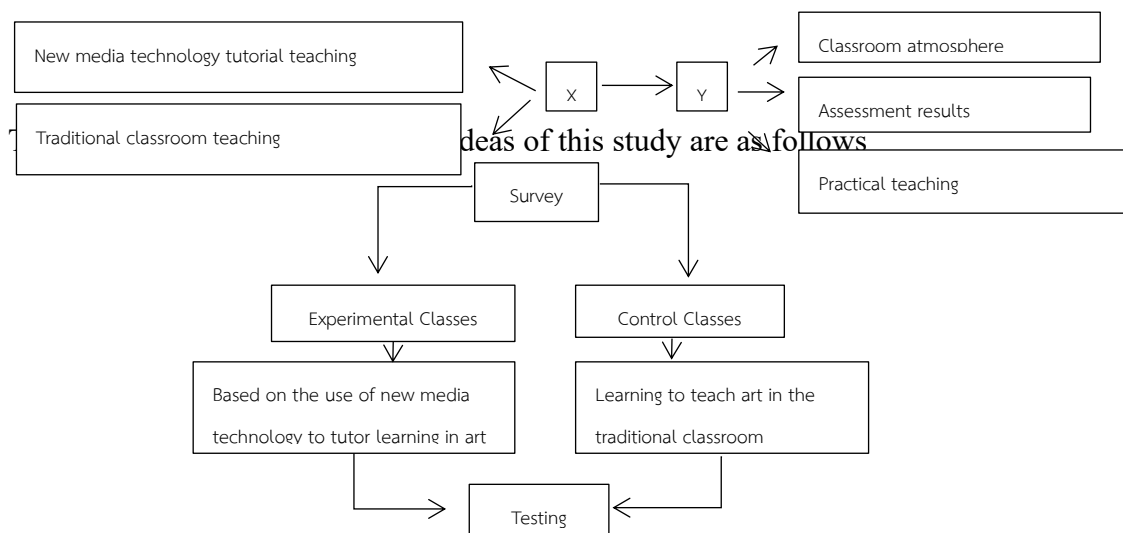
Research result

Comparison of satisfaction with the teaching process The analysis of students' satisfaction with the teaching process is shown in Table 1, and the following dimensions were used to analyze the data of the experimental and control classes respectively.

Table 1: Satisfaction ratio of survey respondents with the teaching process n (%)

Category		Compare to class（n=54）	Experimental Classes（n=55）	X²/t	P
Satisfaction with teaching Resources (points)		3.20±0.44	3.41±0.47	2.407	0.018
Teaching vehicles	Satisfied	35（64.81）	45（81.82）	4.034	0.045
	dissatisfied	19（35.19）	10（18.18）		
Satisfaction of theory teachers (points)		4.16±0.48	4.18±0.45	0.224	0.823
Satisfaction of practical teachers (points)		4.22±0.45	4.29±0.41	0.849	0.398
Satisfaction with attendance (points)		3.48±0.35	3.62±0.31	2.212	0.029
Satisfaction with the appraisal (points)		3.29±0.51	3.48±0.39	2.187	0.031
Classroom atmosphere satisfaction	Satisfied	30（55.56）	41（74.55）	4.327	0.038
	Dissatisfied	24（44.44）	14（25.45）		

Comparison of satisfaction with the quality of teaching

The analysis of students' satisfaction with the quality of teaching is shown in Table 2, and the data from the experimental and control classes were analysed in the following dimensions.

Table2: Comparison of satisfaction with teaching quality n (%)

Category		Compare to class（n=54）	Experimental Classes（n=55）	X²/t	P
Satisfied with theoretical teaching (score)		3.88±0.41	4.19±0.51	3.494	0.001
Satisfaction with knowledge	Satisfied	39（72.22）	43（78.18）	0.519	0.471
	dissatisfied	15（27.78）	12（21.82）		
Satisfaction with competencies and job readiness (points)		3.29±0.37	3.44±0.29	2.358	0.020
Satisfaction with practical teaching (points)		3.34±0.35	3.52±0.34	2.724	0.008
Satisfaction with skills possessed	Satisfied	26（42.59）	38（69.09）	4.930	0.026
	dissatisfied	28（51.85）	17（30.91）		

Discussion and Conclusion

(1) At the end of the experiment, classroom instruction in the experimental class had a significant effect on improving classroom climate compared to classroom instruction in the control class.

(2) At the end of the experiment, classroom teaching in the experimental class had an improved effect on students' assessment scores compared to that in the control class.

(3) The use of new media teaching can contribute to the quality of teaching and learning in art and design. Students learn about various knowledge of design through the use of new media, with learning materials in practice, so new media technology can have a great impact on the quality of art and design teaching.

References

Wang, G. G. (2021). Research on the quality management path of practical teaching in higher education institutions under the perspective of total quality management. China: Vocational Education Forum

Wu, X. X. (2018). New Media:The Engine, Lever and Ontology of Cultural and Artistic Innovation. Journal of Southwest University for Nationalities (Humanities and Social Sciences Edition), 39, 157-160.

Hou, Y., & Liao, X. Z. (2013). The warning of world education hegemony on China's education development in the age of online media. Modern Communication Journal of China Communication Journal of China Media University), 35, 125-129.

Pan, R. F. (2014). New Media New Talk. China Radio and Television University Press, 58, 131-147.

He, R. D., & Zhang, D. G. (2018). Reflections on building a new media teaching platform for electronic organ in colleges and universities in the new era. Contemporary Music, 132, 43-62.

Li, C. L. (2015). Teaching modern course design based on new media technology. Liaoning Publishing House, 280, 98-110.

Han, F. (2017). Study on Quality Assurance of Multimedia Teaching in Higher Education Institutions. Chongqing University, 146, 36-87.

Yuan, Y. (2017). A study on the strategy of teaching knowledge in the new media era. Published Master's thesis, Southwest University, China.

Pan, M. (2018). A study on the impact of using new media technology on the quality of swimming teaching for university students in Harbin - A case study of Heilongjiang University. Published Master's thesis, Tianjin Institute of Physical Education, China.

Pan, M. (2022). A Study on the Application of New Media Technology in Middle School Art Teaching - A Case Study of Nanjing Y Middle School. Published Master's thesis, Nanning Normal University, China.