Developing the Guidelines of Academic Administration based on Modern Educational Technology to Enhance Art Education in Guizhou Education University, China

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Abstract

The objectives of this research were 1) to investigate problems and needs to improve art education and 2) to develop the academic administration guidelines to enhance art education. The respondents in this research were 286 students and 30 teachers obtained through stratified random sampling at Guizhou Education University. The research instrument employed in this study was a questionnaire. The data analysis employed percentage, mean, and standard deviation. The research findings indicated that 1) problems and needs to improve art education based on modern educational technology in student opinion were at high level (Mean = 3.71 S.D. = 1.36) that consisted of art classroom feels disconnected from reality, art classes that integrate technology, learning and artistic comprehension. Regarding teacher perspectives were at high level (Mean = 3.58 S.D. = 1.34) that consisted of integrating technology into higher education's art classrooms and teacher-student interaction. 2) The academic administration guidelines to improve art education comprised of five units 2.1) applying technology in classroom, 2.2) applying technology in school management, 2.3) applying technology in art curriculum, 2.4) applying technology in painting and creative drawing, and 2.5) promoting teacher-student interaction. The 3 specialists evaluated the

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completeness and correctness of the academic administration guidelines and possessed IOC values from 0.67 to 1.00 meaning that the developed academic administration guidelines were suitable to enhance scholastic achievement of college students.

Keywords : Academic administration, Modern educational technology, Art education

Introduction

Modern educational technology is an approach to education based on computers, networks and other technologies. It uses these new technologies to create, use and manage learning resources to provide a more effective and personalized learning experience. Such technologies may include 1) multimedia teaching: through the use of multimedia equipment such as projectors and electronic whiteboards, teachers can present teaching content to students in the form of images, sound, video, etc. to increase the interest and vividness of learning. 2) Distance education: with the help of the Internet and online learning platforms, colleges and universities can provide distance education courses so that students can study at different times and places. Students can obtain teaching materials, watch teaching videos, participate in online discussions, etc. through the Internet. 3) Virtual Laboratory : the virtual laboratory can simulate the experimental scenes and experimental operations through the computer, so that students can perform experimental operations and observe the results on the computer. This approach not only saves experimental resources, but also provides more learning opportunities and safety of experimental operations. 4) E-Learning resources: universities can collect and organize a large number of learning resources, such as e-textbooks, academic papers, learning courseware, etc., for students to access and use at any time by building e-resource libraries. 5) Social media and online communication : Universities can make use of social media platforms and online communication tools to facilitate interaction and communication between students and teachers. Students can continue their learning and ask questions after class through social media platforms and online discussion forums. 6) Data analytics and personalized learning: with the support of EdTech, HEIs can collect, analyze and make use of data on students' learning behaviors to facilitate personalized learning. Schools can provide appropriate learning resources and support

according to students' learning profile and needs. 7) Teaching management and assessment: HEIs can utilize educational technology for teaching management and assessment. For example, schools can utilize online quizzes and automated grading systems to quickly and accurately assess students' learning achievements and standards. Teachers can also use technologies for teaching reflection and improvement. These technologies can enhance teaching effectiveness and learning experience, promote students' initiative and creative thinking, and help teachers to better implement teaching and assess students' learning outcomes. (Shi, 2005 : 119-120)

There is a close relationship between technology and art teaching, and technology provides more possibilities and innovative means for art teaching. Firstly, technology makes art teaching more diversified and flexible. Through the use of digital equipment and the Internet, students can obtain a large amount of art materials and resources anytime and anywhere, expanding the channels and ways of art learning (Wang & Li, 2019 : 41) At the same time, the application of multimedia teaching, virtual reality and other technologies can provide students with a more vivid and intuitive learning experience and stimulate their interest in learning. Secondly, technology provides better interactivity and cooperation for art teaching. Through online collaboration platforms and distance learning tools, students can have instant communication and co-operation with other students and teachers, and work together to complete the creation and presentation of art works. This interactive and cooperative approach not only helps students develop their artistic creativity and aesthetic ability, but also cultivates their teamwork and communication skills. Finally, technology provides a better assessment and feedback mechanism for art teaching. Through the use of digital assessment tools and learning management systems, teachers can more accurately assess students' art work and performance and give them timely and targeted feedback and guidance. This helps students' self-knowledge and ability to improve. (Wei, 2016 : 144-145) In conclusion, technology has injected new vigor and possibilities into art teaching, and enhanced the effectiveness and quality of art teaching. However, it is also necessary to focus on the effective use of technology and maintain an understanding and grasp of the essence

of art teaching. Educators need to use technology flexibly in teaching practice to provide an art education environment that is beneficial to the overall development of students. (Pang, Gu, Dong & Wang, 2005 : 28-33)

China's Education Modernization 2035, issued in February 2019 by the State Council of China. (Ministry of Education, 2019 : 27) The plan specifies the implementation path to achieve education modernization, including overall planning, zonal promotion and detailed objectives, and step-by-step promotion. In addition, the General Office of the Ministry of Education also issued opinions on further strengthening the construction of philosophical and social sciences in colleges and universities in the new era, which mentioned the strengthening of educational research in the new era. (Sun, Liu & Li, 2019 : 1-8) With the development of "Internet+Education" and "AI+Education", the state attaches great importance to the informatisation construction of technology, and has issued a series of policies and documents to promote the in-depth integration of technology with the curriculum reform of various disciplines. The "Education Informatization 2.0 Action Plan" has promoted the process of teaching reform in colleges and universities. (Duan, 2019 : 20-22) In short, the application of technology in colleges and universities plays an important role in promoting the teaching effect and enhancing the learning experience. Based on technology, I will enhance art education to enrich teaching resources, provide more learning opportunities, and facilitate school management and assessment of teaching quality.

Nowadays, information technology and computer technology have developed greatly and can be applied and integrated in education. In the classroom, it can be applied in teaching management, development of teaching media, teaching methods, and learners can learn by themselves through technology. Therefore, the administration of educational institutions in terms of teaching administration or academic administration must focus on using various technologies to facilitate learners. Academic administration means the administration of all activities in educational institutions related to the development of teaching and learning quality to achieve the goals with the best results and the most efficiency, including 1) In terms of teaching management, it means creating a learning

management plan, organizing teaching and learning in all learning groups according to the learning reform guidelines, using media and learning resources that are conducive to learning. Research and develop teaching and learning, promote the development of student excellence, help underprivileged students and students with special abilities. 2) In terms of learning process development, it means creating a learning management plan based on the content and learning units, focusing on students, organizing activities for students to develop according to their potential, interests and abilities. Participation, practical training from real experiences, creating networks to exchange knowledge on teaching management, instilling in student morality, ethics, values and desirable characteristics. 3) Development and use of educational technology media means giving importance to and seeing the necessity of using technology media, including various learning networks that exist in the community. To be used in the management and organization of learning activities and to plan the production and testing of media. The educational institution has results resulting from supporting teachers to produce and develop media and innovations. The educational institution has reports on the results of media use. Academic administration that is systematic and consistent with the context of the educational institution can increase the achievement and effectiveness of the educational institution. This study therefore focuses on studying problems and needs to enhance art education and academic administration guidelines to enhance the art education. To apply to art education to achieve higher results in colleges and universities in China

Research Objectives

1. To investigate problems and needs of academic administration based on modern educational technology to enhance art education.

2. To develop the academic administration guidelines to enhance the physical and mental health in vocational school.

Research Methods

Population : The population in this research project was divided into 2 groups, namely 1) 1,000 students to participate in art courses and 2) 30 teachers in teaching modern educational technology for use in art education program.

Samples : The samples were divided into 2 groups, namely, 1) 286 students (Yamane, 1973 : 788), 2) 30 teachers were teaching art education program. The samples were derived from Taro Yamane formula (Yamane, 1973 : 788). The respondents were collected through the stratified random sampling technique in Guizhou Education University. The main reasons I selected this school as the case study are : 1) the researcher have been working in this school for ten years, therefore, the researcher in concern about the quality of education of the university and 2) It was be helpful to get permission from the director of the university to collect data and information from people in university.

Research Instruments : Questionnaires : In this research project, a questionnaire was employed for the data collection. The questionnaire was divided into 2 sets; namely, 1) students set and 2) teachers set. The questionnaire was divided into 2 parts sections, 1) general information, 2) problems and needs of academic administration based on modern educational technology to enhance art education, for student set 20 questions and for teacher set 20 questions. Cronbach's alpha coefficient values were 0.983 and 0.985 respectively. For this part the questionnaire was evaluated for the Index of Congruence scores (IOC scores) by the three specialists. Each question in the questionnaire evaluated with the range of IOC 0.67 to 1.00 was employed meeting for this research. A set of questions for the online interview. The construct a guideline was evaluated by the three specialists (one Modern educational technology and two Art education), and the three specialists were invited for three focus group discussion meeting, the results were presented in terms of IOC (Index of Congruence).

Data Collection : the researcher collected the data and information from the sample groups. The samples were informed the purposes of the data collection, made an appointment. The researcher submitted a letter of permission to the school director in

advance to ask a permission to collect the data and information from the samples group at Guizhou Education University.

Data Analysis : For the investigation of problems and needs, the data and information collected were analyzed, interpreted and then presented in terms of frequency count, percentage, mean, standard deviation (S.D.). The Five Point Rating Scale were used to evaluate the level or degree of the respondents' needs and problems. For the rating reference of the five-point rating scale were: mean range 4.51 – 5.00 were highest level, 3.51 – 4.50 were high level, 2.51 – 3.50 were moderate level, 1.51 – 2.50 were low level, and 1.00 – 1.50 were lowest level. (Srisa-ard, 2002 : 103) For the correctness and improvement of the guidelines, the ideas, suggestions and comments of the 5 specialists obtained from the 3 focus group discussion meetings, were analyzed and then used to correct and improve the contents of the guidelines.
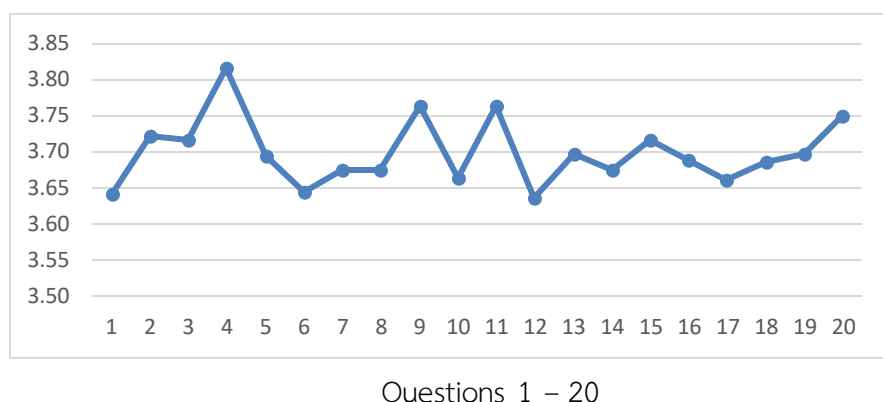
Research Results

1. Needs and problems of modern educational technology and fine arts into higher education

Both students and teachers recognize the potential benefits of modern educational technology in art education. Students hope to increase their interest and engagement in learning through the integration of modern educational technology, while teachers aim to enhance teaching effectiveness and interaction through technology. However, the current art course design and teaching methods have not fully utilized modern educational technology, resulting in poor teaching outcomes and low student satisfaction. The problems and needs to improve art education based on modern educational technology in student opinion were at high level (Mean = 3.71 S.D. = 1.36). Regarding teacher perspectives were at high level (Mean = 3.58 S.D. = 1.34).

For students, many art courses still use traditional teaching methods that lack the application of modern educational technology. This makes the course content appear monotonous and boring, failing to attract students' interest. The course structure is often unreasonable, with content arrangements lacking systematicity and coherence, making it

difficult for students to form a comprehensive knowledge system and affecting their learning outcomes. For some students unfamiliar with technology, adapting to modern educational technology may require time and effort, which can negatively impact their learning outcomes. Students hope that modern educational technology, such as multimedia presentations and virtual reality, can make art courses more vivid and interesting. Such technology can help students understand abstract art concepts more easily, thereby increasing their interest in learning. Modern educational technology also provides more interactive tools, such as online discussions and real-time feedback, which can increase students' classroom participation and make them more actively engaged in the learning process. (Mean = 3.64 – 3.81 S.D. = 1.28 – 1.72).
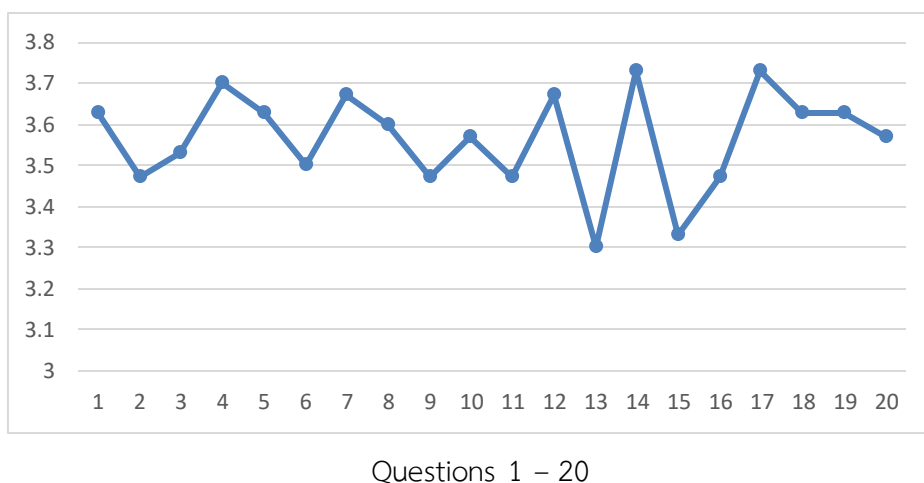
Mean

Questions 1 – 20

Figure 1 Mean of questions 1 – 20 for students on needs and problems of modern educational technology and fine arts in higher education

For teachers, traditional teaching methods lack interactivity, resulting in limited teacher-student interaction and low student participation in the classroom. This makes it difficult for students to fully utilize their initiative and creativity. Teachers face challenges in integrating modern educational technology due to the complexity of technological operations and the increased difficulty in classroom management. Some teachers are

unfamiliar with modern educational technology and lack relevant training, making it difficult to effectively apply these technologies in actual teaching. Teachers hope that modern educational technology can make teaching content more vivid and concrete, thereby improving teaching effectiveness. For example, using multimedia tools, teachers can present richer visual materials to help students better understand and grasp course content. Teachers believe that modern educational technology can provide more interaction opportunities, promoting interaction between teachers and students. Through technological means, teachers can better guide students to participate in classroom discussions and activities, thereby enhancing teaching outcomes. (Mean = 3.47 – 3.70 S.D. = 1.33 – 1.53).

Mean

Questions 1 – 20

Figure 2 Mean of questions 1 – 20 for teachers on needs and problems of modern educational technology and fine arts in higher education

2. The academic administration guidelines

The guidelines of academic administration including five units, namely: 1) Teachers' Understanding of the Use of Technology in the Classroom; 2) Teachers' Learning to Use Technology in the Classroom; 3) Teachers Applying Technology to Showcase Art Courses and Curriculum; 4) Cultivating Students' Use of Technology for Learning and Drawing Creation; and

5) Interaction in Art Classrooms Enhanced by Technology. All the five units evaluated by the five specialists in terms of correctness and suitability of academic administration guidelines. To ensure that the development approaches are appropriate for application at the classroom and university levels. Evaluators are teachers and administrators whose duties are to examine all development approaches. The contents and presented in terms of IOC (Index of Congruence) values. All five units were evaluated and possessed the IOC values is 0.67-1.00 meaning of modern educational technology and fine arts into higher education teaching unit guidelines and Integration of modern educational technology and fine arts into higher education teaching guidance of Guizhou Education University.
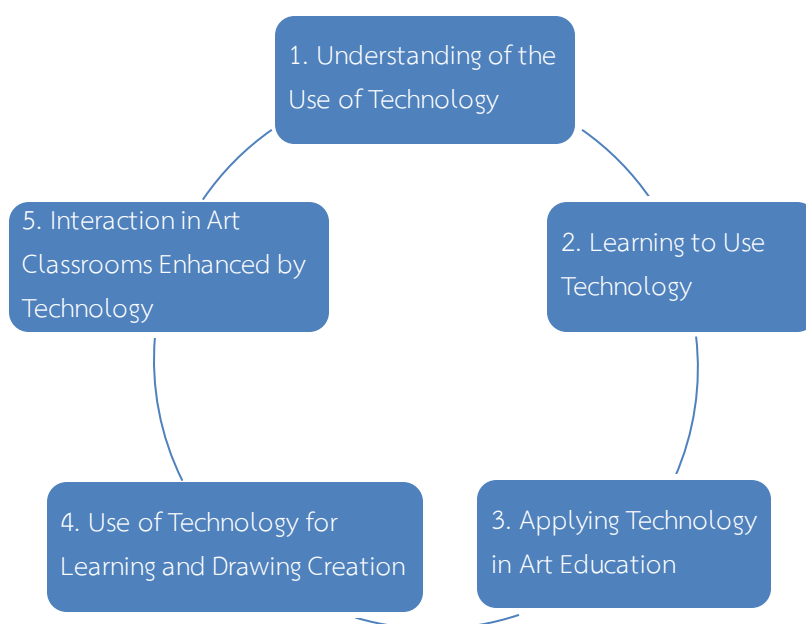
Figure 3 The guidelines of academic administration

Research Discussion

1. Teaching art classes incorporating modern educational technology for higher education students of teachers at Guizhou Education University

The study of the problems and necessity in integrating modern technology into art education teaching found that they are at a high level. The attitudes and effects of integrating

modern educational technology into art courses, students showed that students' interest and perceived importance of the course were at a high level, indicating that there were issues with students' interest and importance in the course. This finding is consistent with the research results of Xie & Zhou (2021 : 95-97), who stated that the rapid development of new technologies, represented by information technology, has already covered various fields of human life. New technologies such as cloud computing, mobile technology, and virtual reality technology, as new teaching methods, are applied to the field of education, breaking the original educational time and space constraints and enhancing people's learning enthusiasm and initiative.

Amwiine & Nnenna (2024 : 5-7) concluded that the integration of technology into art education offers exciting opportunities to enhance teaching and learning. However, there remains a disconnect between art projects and technology within classrooms. The ways learners can actively engage with digital technology, using it as a tool, domain of investigation, and a means for critical reflection. It provides a historical overview of art education, highlighting traditional practices and the evolving role of technology. Case studies illustrate the integration of digital tools in art education. The concludes with an analysis of the benefits and challenges of merging technology with traditional practices, emphasizing the importance of balancing technological innovation with foundational art education principles. Integrating technology in the artmaking process and in art education at large brings about challenges that address our traditional orientation as art educators, such as skill, media, and intention, as but a few examples. Benefits can be derived after thoughtful engagement in and through time for reflection that examines art, students, and impact. The use of technology cannot negate the traditional artmaking practices, media exploration, thoughtful reflection, application of tools and techniques, understanding of visual culture, reflection, recognition of intention, and more.

Schools should introduce more technologies, such as virtual reality and interactive software, to make course content more vivid and engaging, and strengthen the connection between the course and real life. Meanwhile, schools should provide regular technical

training and personalized guidance to help teachers improve their ability to apply technologies, ensuring that the application of these technologies can genuinely enhance teaching effectiveness.

2. Guidelines of Academic Administration based on Modern Educational Technology to Enhance Art Education for the students and teachers at Guizhou Education University

The academic administration guidelines in this study concentrate to enhance teachers' basic understanding of technology and its classroom application potential, to improve teachers' practical skills in effectively integrating modern educational technology, to use modern technology to optimize the presentation of art curriculum content, to facilitate art learning and creation by students through technology, and to increase interactivity and engagement in art classes for both teachers and students. These efforts are reflected in five main areas: combining theory with practice, enhancing teacher skills, utilizing modern educational technology in teaching, enabling students to engage in art learning and creation using modern technology, and boosting classroom interactivity and participation.

Muzyka (2024 : 1,418) concluded that explorers of all creative industries have come to a consensus that there can be only one way out of this situation. As a result, there is the restructuring and renewal of the entire machine of the educational process in the development of new educational concepts, areas of improvement, updating of existing aspects, as well as non-traditional forms of education. When presenting art to students, its solution needs to organize teachers in such a way that the artistic and educational process includes and shapes the creative personality that influences their formation. The main idea behind the success of the teaching activity of art teachers is to exercise caution when evaluating children's artistic and creative activities. At the same time, this process is intelligently controlled, the main aspects of the successful creation of the world of spirituality in a child and his practical and visual skills are: many ways to formulate and solve artistic and creative tasks; art training in the country. In the process of creating visual images, to stimulate

the independence of primary school students in the choice of artistic materials and methods of expression, the desire of teachers to teach creativity and improve the educational process.

The use of technology tools in teaching involves creating multimedia lesson plans, conducting interactive teaching activities, and setting up digital platforms for displaying artwork. Practical teaching objectives are achieved through simulated teaching, project-based learning, interactive teaching, and virtual reality teaching. The following recommendations are proposed : 1) Teachers need to develop the capability to use modern educational technology for teaching. 2) Teachers should use modern educational technology to optimize teaching methods and content presentation. 3) Cultivate students' ability for self-directed learning and innovation. Schools and teachers should offer modern educational technology training and encourage students to showcase their artwork and creative achievements.

The integration of art with modern educational technology brings endless possibilities for art creation and education. Art educators need to actively explore and experiment with incorporating modern technology into art creation and education, creating new art forms and experiences. Modern educational technology presents new opportunities and challenges for art education, raising the bar for students at Guizhou University of Education. To better adapt to the times and find suitable development paths in the future, they must continuously enhance their professional skills, technological abilities, innovation capabilities, learning abilities, and communication skills. The implementation of the guidelines aims to create a more dynamic, efficient, and engaging art education environment, fostering the joint growth and development of the school, teachers, and students, injecting new vitality into the development of art education at Guizhou University of Education, and ultimately advancing the university to become a regionally distinctive, first-class applied comprehensive university.

Research Suggestions

1. Additional efforts to evaluate the effectiveness of guidelines designed for integrating modern educational technology in art education at Guizhou Education University should be promoted.

2. Users of the guidelines on integrating modern educational technology in art education at Guizhou Education University need to undergo pre-implementation training for its successful adoption.

3. Studying longitudinal studies on learning outcomes after guideline implementation and interdisciplinary collaboration for further development (e.g., educational technologists, and curriculum designers.

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