

Developing the Academic Administration Guidelines to Enhance Students' Innovation Skills of the Design Department of the Art College Guangxi University, China

Shi Yuxuan¹ and Nithipattara Balsiri²

Received : January 1, 2025; Revised : December 31, 2025; Accepted : December 31, 2025

Abstract

The objectives of this research were 1) to investigate the problems and needs of the academic administration guidelines to enhance students' innovation skills, and 2) to develop the academic administration guidelines to enhance students' innovation. The samples consisted of 284 students and 28 teachers. The research instruments were questionnaires. The statistics were frequency, mean and standard deviation. The research findings indicated that: 1) the problems and needs to improve the students' innovation ability were at a high level, and 2) the academic administration guidelines to enhance students' innovation skills comprised (1) deep integration of design theory and practice, (2) flexible curriculum and personalized development (3) innovative teaching resources and technical support, (4) interdisciplinary cooperation and projects, (5) development and application of assessment mechanisms, (6) teacher-student interaction and feedback mechanisms, (7) practical projects and deepening industry cooperation, (8) overcoming the fear of failure and fostering a culture of Innovation. The academic administration guidelines were applicable to enhance the innovation skills of university students.

Keywords : Academic Administration Guidelines, Students' Innovation Skills, Art College

¹ Student in Major of Educational Administration and Leadership, Faculty of Education, Dhonburi Rajabhat University; e-mail : 526347952@qq.com

² Faculty of Education, Dhonburi Rajabhat University; e-mail : nithipattara.b@dru.ac.th

Introduction

With the rapid development of the times, China has entered the era of innovative economy from the era of the knowledge economy, and the innovation and development of science and technology continue to promote the progress of modern society. The use of design thinking in university education helps to improve students' ability to think independently and solve problems quickly. Many scholars in the world have conducted many studies on design thinking and its related aspects, and many colleges and universities have introduced courses based on the development of design thinking at the university level. (Sun, 2015 : 1) In the process of the development of modern education, students are the main audience and participants in education, and the introduction of courses based on the development of design thinking in the management of university education can effectively stimulate and improve the creative ability of students. Design thinking is a kind of user-based point of view, for the audience's needs and future problems that may be encountered through comprehensive consideration, and ultimately put forward a comprehensive and systematic solution. And put into practice, and then through the practice of continuous testing and revision of the program, and ultimately get as far as possible in line with the expected or fully in line with or even get beyond the expected results. Although China's education model is still improving, in most areas it is still a duckling education model in which teachers take the initiative to teach knowledge and students passively accept it. The reason for this situation is related to China's current examination system. Duckling education was born in relation to test-based education, and the advantage of this education model is that it allows students to master a large amount of knowledge and test-taking skills in a short period of time, and then these key points and skills are used to obtain high scores in the exams and opportunities for further education. This model of education often measures students' abilities and achievements by scores, neglecting the cultivation of students' comprehensive literacy and creative thinking skills. The reason for this situation is related to China's current examination system. Duckling education was born in relation to test-based education, and the advantage of this education model is that it allows students to master a large amount of knowledge and test-taking skills in a short period of time, and then these key points and skills

are used to obtain high scores in the exams and opportunities for further education. This model of education often measures students' abilities and achievements by scores, neglecting the cultivation of students' comprehensive literacy and creative thinking skills. Most of them use conservative teaching methods in teaching, which can no longer to meet the current needs of society for the training of human resources. These teachers tend to base their teaching design on their impressions of the education they have received. They are often based on their impressions of the education they have received, and they are predominantly self-centered in their teaching, leaving no time for students to think independently. The time, but also do not pay attention to the knowledge of the theoretical system of explanation, ignoring the knowledge of the process of occurrence and development, full of indoctrination, and the students who do not know what to do are mostly the same. Most of the students who do not know why are left ear into the right ear out, in the face of the examination can only rely on the rigid set, and temporary Clutching to try to get better grades, in the long run, students' learning interest is low, low efficiency.(Hu, 2023 : 2843-2846) This makes it easy for Chinese students to work and live in the future without being able to transfer what they have learned and apply it to solve real-life problems. Therefore, constructing a guideline for academic management based on the development of design thinking and applying design thinking to education management at the university level will help to improve students' creativity and their ability to solve practical problems in the future, and enable them to adapt to the working life after graduation by utilizing what they have learned in a faster and better way. At the same time, it also meets China's inherent requirements for deepening innovation and reform of education management in colleges and universities, as well as the social demand for innovative talents

Research Objectives

1. To investigate the problems and needs of the academic administration guidelines to enhance students' innovation skills of the design department of the Art College Guangxi University, China.

2. To develop the academic administration guidelines to enhance students' innovation skills of the design department of the Art College Guangxi University, China.

Research Methods

Population : For the investigation of problems and needs, the population was divided into two groups, namely 1) 980 students, and 2) 28 teachers.

Samples : In this research project the samples were divided into 2 groups; namely, 1) 284 students which estimated with Taro Yamane's formula (Yamane, 1973 : 887) 2) 28 teachers. The respondents were obtained through the stratified random sampling technique.

Area of the study : This research project was use the department of design at Guangxi University, College of Art as a case study. The main reasons for choosing this school as a case study are: 1) Guangxi University is the only university in Guangxi Zhuang Autonomous Region that has been selected as one of the "211 Institutions" and "Double First-class Construction Institutions" in the national program, and it is the strongest university in Guangxi at present and 2) The talent cultivation model of Guangxi University is very representative of Guangxi and even China.

Research Instruments : This paper takes the learning characteristics of design students and the way of school lectures as the research object, and conducts research and analyses by reviewing the existing thesis databases, core journals, literature and summarizing the relevant literature collected to understand and grasp the current status and results of the research. After drawing up the outline of the questionnaire, the content of the questionnaire was analyzed and adjusted, and the survey was finally carried out on two groups of research subjects.

1. For the investigation of problems and needs, questionnaire was employed for the data collection. The questionnaire was divided into two ways: online and offline. Online use of Questionnaire Star APP, offline use of paper questionnaires. The questionnaire was divided 3 sets for different sample groups; Namely : 1) general information; and 2) issues and needs about how colleges and universities can train students to improve their innovation skills. The questionnaire was evaluated by three experts on the consistency index score (IOC score). The

IOC in each question of the questionnaire is 0.67~1.00. To evaluate the reliability of the questionnaire using Cronbach's alpha, the question of the problems set was 0.85 and the question of the needs set was 0.89. (Cronbach, 1951 : 297-334)

2. Qualitative research was used in this study. For the development of the strategic guidelines, a set of questions were used for the focus group discussion. The developed guidelines were evaluated by 3 experts who provided comments, ideas and suggestions on the correctness and suitability of the guidelines. The correctness and suitability of the guidelines were presented in the terms of IOC (Index of Congruence).

Data Collection : In this research project, the researchers themselves collected data and information from the sample group. The samples was informed of the purpose of data collection and made an appointment. The researchers submitted a permit letter in advance to the school director, requesting permission to collect data and information from the sample group of the Design Department of the Art College of Guangxi 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 Likert 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

General information of students

The student sample consisted of 26 males (9.15%) and 258 females (90.84%). The students were predominantly female. Most of the students in the sample group were between the ages of 19 and 20 (59.15%) and between 21 and 25 (32.74%). Of the remaining data, 8

students (2.81%) were under 18 years of age and 15 students (5.28%) were over 26 years of age.

In terms of grade level, juniors had the highest percentage of students at 30.28%, followed by sophomores at 29.57%, then sophomores at 21.47%, then freshmen at 16.19%, and finally graduate students had the lowest percentage at 2.46 percent. In terms of majors, Visual Communication Design has the highest percentage of students at 21.12%, followed by Environmental Design at 19.71%, Public Art Design at 18.3%, Art Design at 16.9%, Product Design at 16.54%, and lastly, other majors at 7.39%.

General information of teachers

In the sample group of teachers, 18 (64.29%) were males and 10 (35.71%) were females. Teachers are predominantly male. Most of the teachers in the sample group were aged between 36 and 40 years (21.41%) and between 41 and 45 years (32.14%). Of the rest of the data, one teacher (3.57%) was between 21 and 25 years old, two teachers (7.14%) were between 26 and 30 years old, five teachers (17.86%) were between 31 and 35 years old, three teachers (10.71%) were between 46 and 50 years old, and two teachers (7.14%) were over 51 years old.

In terms of education, the highest percentage of teachers had a master's degree (60.71%), followed by a doctorate (25%) and a bachelor's degree (14.29%). In terms of years of service, 16 to 20 years was the highest with 25%, followed by 21 to 25 years with 17.86%, then 6 to 10 years and 11.25 years with 14.29%, 1 to 5 years, and 31 to 35 years with 7.14%, and lastly 36 years and above with 3.57%.

Problems of students in the process of teaching practice on the improvement of design innovative skills

According to the data analyzed, students generally gave high ratings to the problems they encountered in the practice of teaching design innovation ($\bar{x} = 4.12$, S.D. = 0.47). Firstly, most of the students indicated that they lacked sufficient guidance in the creative design process to effectively transform their ideas into actual design works ($\bar{x} = 4.46$, S.D. = 0.60). Secondly, many students felt that there was a disconnect between theoretical and practical knowledge of design innovation and that the time pressure of the course prevented them

from learning design innovation skills in depth ($\bar{x} = 4.44$, S.D. = 0.65). In addition, students generally felt that the traditional teaching model of the design program limited their innovative thinking and lacked sufficient feedback and resource support ($\bar{x} = 4.48$, S.D. = 0.63). At the same time, some students mentioned that they had difficulties in finding appropriate resources and tools to support the design innovation process in the course ($\bar{x} = 4.46$, S.D. = 0.62) and were not satisfied with the evaluation mechanism of the course, which they felt could not adequately measure their creativity ($\bar{x} = 2.93$, S.D. = 0.63).

Overall, although students showed high demand for certain aspects of design innovation in the course, they also expressed dissatisfaction with the current course design and resourcing, suggesting that there is still room for improvement in the course to support students' design innovation practices.

Problems encountered by teachers in teaching design innovation enhancement

Based on the data indicates a high level of need for developing academic administration guidelines to support teaching design innovation. The overall need score is 4.24, with a standard deviation of 0.65.

One of the highest needs identified is the lack of opportunities for collaboration with industry experts, which limits the practical nature of the program ($\bar{x} = 4.42$, S.D. = 0.60). Another significant challenge for teachers is the difficulty in assessing students' creativity, as this task is complex and requires better methodologies ($\bar{x} = 4.40$, S.D. = 0.69).

On the lower end, teachers reported that they lacked appropriate interactive teaching resources in their design innovation programs ($\bar{x} = 1.53$, S.D. = 0.63). This data emphasizes the necessity for targeted guidelines that can address these issues, such as improving collaboration with industry, enhancing assessment techniques for creativity, and increasing the availability of interactive teaching resources.

Students' needs and visions in teaching design innovation enhancement practice

Based on the data summarized and analyzed, the students' demand for the enhancement of their design innovation skills in the course was generally high ($\bar{x} = 4.1$, S.D.=0.61).First, students expressed a desire for more hands-on opportunities in the course to enhance their design innovation skills ($\bar{x} = 4.46$, S.D. = 0.61).In addition, many students felt

that the course content should be better integrated with theoretical knowledge and practical exercises, and they would like to have more guidance in the innovative design process ($\bar{x} = 4.46$, S.D. = 0.61). At the same time, there was a high demand for interdisciplinary design innovation support ($\bar{x} = 4.57$, S.D. = 0.60), and students wished that the course would provide richer resources and tools to support the design innovation process ($\bar{x} = 4.49$, S.D. = 0.65). However, some students also indicated some shortcomings in the curriculum. For example, they wanted the course to be less time-pressured to allow for more in-depth study of design innovations, but the mean for this need was relatively low ($\bar{x} = 1.49$, S.D. = 0.69). Overall, students had high expectations for the flexibility and adaptability of the course in teaching innovation design to meet better their personal interests and development needs ($\bar{x} = 4.51$, S.D. = 0.69). This suggests that while the curriculum has some strengths in supporting design innovation, there is room for further improvement in meeting the specific needs of students and providing practical resources.

Teachers' needs for design innovation enhancement in teaching practice

According to the data, it shows that teachers have a high need for academic management guide development in designing innovative teaching ($\bar{x} = 4.23$, S.D. = 0.45). First, teachers noted that they needed more resources to effectively integrate theory and practice and wanted more interactive instructional resources to support them in their design innovation courses ($\bar{x} = 4.71$, S.D. = 0.41). Second, many teachers indicated that schools should enhance the availability of resources to facilitate interdisciplinary design innovation projects ($\bar{x} = 4.61$, S.D. = 0.53). Additionally, teachers wanted more opportunities to collaborate with industry experts to enhance the hands-on nature of the curriculum, and suggested that schools should update their assessment criteria to better measure student innovation ($\bar{x} = 4.21$, S.D. = 0.51).

These results reflect that teachers need more resource support, better assessment methods, and opportunities for interdisciplinary collaboration in designing innovative instruction.

Developing a teaching management system to enhance design innovative skills, teachers and students' problems and needs for a quality curriculum system for designing innovative education.

In the process of developing a teaching management system to enhance design innovative ability, it can be seen from the results of the questionnaire that both teachers and students show a high level of concern for a high-quality curriculum system for design innovative education, and there is an obvious demand for key issues.

For teachers, the existing design innovation education system is deficient in several aspects, and these deficiencies directly affect the cultivation of students' innovative abilities; firstly, teachers generally believe that the current teaching resources (e.g., equipment, software, interactive teaching tools, etc.) are not rich enough to effectively support the design innovation courses. This not only restricts teachers' ability to impart innovative design skills during lectures but also constrains the development of students' practical abilities. Secondly, teachers reflected that the existing curriculum system is rather rigid, making it difficult to find a balance between academic freedom and curriculum requirements. This rigid curriculum structure restricts teachers' innovative teaching methods and prevents them from giving full play to their creativity and teaching potential. Once again, teachers expressed dissatisfaction with the current assessment mechanism, arguing that the existing assessment criteria made it difficult to accurately measure students' creativity and innovative abilities. They hoped that more diversified and rational assessment mechanisms could be developed to better reflect students' actual abilities in design innovation. Finally, teachers believed that interdisciplinary collaboration was crucial to the development of students' innovative thinking. However, the existing curriculum system and insufficient support of resources make it difficult to implement interdisciplinary collaborative projects successfully, which to a certain extent undermines students' innovative ability in actual projects.

From the students' perspective, there are also some key problems with the existing design and innovation curriculum system, which have a direct impact on their learning interest and the development of their innovative ability; firstly, students generally believe that the resources provided by the university are insufficient to meet their needs in the design and

innovation curriculum, especially in the practical sessions, where the lack of adequate equipment and technical support prevents them from fully participating in the design projects. Secondly, students would like the curriculum system to be more flexible to suit their personal interests and career development needs. The existing curriculum is too rigid to meet the diverse learning needs of students, which limits their innovative potential. Once again, students believe that the design of innovative programs is not well integrated with practical work and lacks opportunities to interact with industry experts. This not only reduces their practical ability but also limits their understanding of cutting-edge developments in the industry. Lastly, students were dissatisfied with the existing assessment criteria, which they felt did not accurately reflect their creativity in design innovation. They hoped that more diverse and rational assessment methods could be adopted to motivate their innovative performance in the program.

The academic guidelines to enhance students' innovative ability in the Design Department of Guangxi University College of Art

Develop an academic guide to enhance students' innovative ability in the Design Department of Guangxi University College of Art, namely: Unit 1 Guiding ideology for the construction of design innovative ability enhancement in the Design Department of Guangxi University College of Art; Unit 1 The teaching system of innovative ability enhancement in the Design Department of higher education institutions should pay attention to the in-depth integration of theory and practice; Unit 2 The teaching system of innovative ability enhancement in the Design Department of higher education institutions should be flexible in terms of the curricula and support for the students' personalized development Unit 3 The innovative teaching system of design faculty should be innovative in terms of teaching resources and technical support; Unit 4 Encourage interdisciplinary collaboration and projects in the teaching system of design faculty; Unit 5 Develop and apply innovative assessment mechanisms in the teaching system of design faculty; Unit 6 Establish effective teacher-student interactions and feedback mechanisms in the teaching system of design faculty; Unit 7 Strengthen the teaching system of design faculty in the curriculum; Unit 8 Develop and apply innovative assessment mechanisms in the teaching system of design faculty. Unit 7 Enhancing

practical projects and industry collaborations in the curriculum in the design department teaching system; Unit 8 Overcoming and strengthening the fear of failure and the culture of innovation in the teaching system to improve the innovative capacity of design departments in higher education. All eight units were assessed by five experts (one Thai and three Chinese professors) in terms of content correctness and appropriateness and presented with IOC (Index of Coherence) values. After the assessment, the IOC value of all five modules was 1.00, which means that the prepared guidelines for enhancing students' innovative ability in the design department of the College of Arts of Guangxi University is acceptable. It can be used as a systematic guide for university courses to enhance students' innovative ability in order to improve the level of innovative ability of students in the Design Department of Guangxi University and the level of discipline construction in the Design Department.

Research Discussion

Teaching methods and students' needs

According to the results of the questionnaire, combined with the data analysis, firstly, there is a significant gap between the current teaching methods and the actual needs of students. Although some courses try to introduce design thinking and project-driven teaching modes, in general, the combination of theory and practice is insufficient. Students' participation in projects is limited, and it is difficult to cultivate innovative ability through practical operation. Liu (2003, pp. 66-96) found that the lack of practical aspects in course design is one of the main reasons for students' lack of innovative ability. Secondly, students expressed their desire for more practical courses in the questionnaire, but it is difficult for the existing teaching management system to flexibly adjust the curriculum to meet students' needs. (Zhou, 2014 : 3) pointed out that the mismatch between education supply and student demand is a major challenge in the reform of Chinese higher education, and it needs to be solved through institutional innovation.

The management system and innovative education

According to the data from the questionnaire, the rigidity of the teaching management system creates an obstacle to the promotion of innovative education. Teachers are restricted

in the innovation of curriculum and teaching methods, resulting in the inability to update the teaching content in a timely manner, which makes it difficult to adapt to the rapidly changing needs of the design industry. (Guo, 2002 : 16) points out that a flexible management system is a key factor in promoting educational innovation, which can provide teachers with more autonomy and resource support. At the same time, insufficient policy support at the school level is also an important factor that restricts the development of innovative education. (Li, 2019 : 5) study shows that policy-level support and guidance play an important role in the motivation of teachers' innovative teaching and the enhancement of students' innovative abilities.

Research Suggestions

1. The effectiveness and system of the construction of the academic management system of the department of design of the college of arts of Guangxi University for enhancing students' innovation ability need to be further studied so that the academic management system of innovation ability enhancement can better serve the teachers' teaching and students' continuous enhancement of innovation ability.

2. The implementation and promotion of the academic management guidelines for enhancing students' creative ability in the design department of the College of Arts of Guangxi University can effectively cultivate college students' design thinking, truly enhance their creative ability, and help them better adapt to the development of the times and the ever-changing social needs.

3. The discussion of the guide to enhance the innovative ability of students in the design department of Guangxi University's College of Fine Arts is viewed in terms of the strengths of this academic management guide. First of all, this guide has a design of student-centered personalized learning paths, and the design of the guide focuses on flexible curriculum and personalized development, allowing students to choose course content according to their personal interests and career development needs. This student-centered personalized learning pathway can stimulate students' initiative and creativity, which is in line with modern education

concepts, and especially plays a positive role in the cultivation of innovative abilities of design students.

Secondly, the guide proposes a combination of interdisciplinary cooperation and practice. The guide emphasizes interdisciplinary cooperation and participation in practical projects, combining knowledge and skills from different fields, which helps to broaden students' design horizons and enhance their innovative ability through practical operation. This integration of design education with other disciplines can help students develop innovative thinking in the context of multiculturalism and complex issues.

Again, the guide proposes a diversified assessment mechanism. In response to the limitations of traditional assessment methods, the guide proposes a process-based assessment and a multi-dimensional evaluation system, covering project presentations, peer reviews and creative records, to comprehensively assess students' creativity and innovative ability. This not only motivates students to be bold and innovative in the learning process, but also provides teachers with more flexible assessment tools to meet the special needs of design education.

Finally, the guide emphasizes the provision of advanced resource support and industry collaboration opportunities for the design curriculum through collaboration between schools and the community. This enrichment of resources and deepening of industry co-operation can help students to apply theories in real-world environments and enhance their practical and innovative skills.

However, this academic management guide still has the following shortcomings. Firstly, the issue of resource input and sustainability. Although the guide emphasizes the richness of teaching resources and technical support, the large-scale resource input may face the issue of sustainability in practice. Whether schools can provide sufficient resource support in the long run and how to achieve optimal use of resources within a limited budget are issues that need to be further considered in the guide.

Secondly, it is about the balance between curriculum flexibility and standardization. While personalized learning pathways are a major innovation, they may also pose certain challenges. A balance needs to be found between curriculum flexibility and academic standardization to avoid students lacking the necessary basic design knowledge as a result of

over-personalized curriculum choices, which may affect their future careers. Again, for the operability of interdisciplinary collaboration, Although interdisciplinary collaboration provides students with a wider range of learning opportunities, in practice, there may be difficulties in effectively coordinating the teaching content, timetable, and assessment criteria between different disciplines. In particular, when interdisciplinary programs involving different faculties are involved, it is a major challenge to ensure the progress and quality of students' learning.

Finally, while the guidelines place high demands on teachers to be innovative in their teaching, there is still a potential shortfall in ensuring that teachers receive adequate training and support for these new types of teaching tasks. The lack of systematic teacher training and resource support may undermine the implementation of teaching effectiveness on the ground.

Overall, the guide is highly innovative in enhancing the innovative ability of design students in art colleges, especially in the areas of personalised learning pathways, diversified assessment mechanisms, and the integration of interdisciplinary collaboration and practice, which demonstrate forward-thinking. However, the guide still needs to be further optimized in terms of the sustainability of resources, the balance between curriculum flexibility and standardization, the practicality of interdisciplinary collaboration, and teacher training. These challenges need to be emphasized and addressed in the future implementation process to ensure the effectiveness and operability of the guidelines.

References

- Cronbach, L. J. (1951). "Coefficient Alpha and the Internal Structure of Tests." **Psychometrika**. 16(3) : 297–334.
- Guo, P. (2002). "A Brief Introduction to Innovative Education in the New Era." **China Adult Education**. p16.
- Krejcie, R.V., & D.W. Morgan. (1970). "Determining Sample Size for Research Activities." **Educational and Psychological Measurement**. 30(3) : 607–610.
- Li, H. (2019). "Research on the innovation of power mechanisms for improving the teaching innovation ability of young teachers." **China Vocational and Technical Education** (29) : 5.

- Srisa-ard, B. (2002). **Basic Research**. Bangkok : Suveeriyasarn.
- Sun, J. S., Wu, Y. H., & Ren, Y. Q. (2015). **Innovations in 3D printing education: maker spaces, innovation labs and steam. modern distance education research.**
- Yamane, T. (1973). **Statistics: An introductory Analysis**. 2nd ed. New York : Harper & Row, Publishers, Incorporated.
- Zhou, L. (2014). "Reflections on Talent Cultivation Program Based on Selective Courses and Curriculum Modules-Taking the Case of Building Engineering Construction Specialty." **Vocational Education**. (20) : 3.

