USING CASE-BASED TEACHING METHOD TO OPTIMIZE GRAPHIC DESIGN MAJOR — CASE STUDY OF NANJING COMMERCIAL COLLEGE

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AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FORTHE MASTER'S DEGREE OF BUSINESS ADMINISTRATION GRADUATE SCHOOL OF BUSINESS
SIAM UNIVERSITY

2023

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This Independent Study has been Approved as a Partial Fulfillment of the Requirement of International Master of Business Administration in International Business Management

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Title: Using Case-Based Teaching Method to Optimize Graphic Design Major —Case Study of Nanjing Commercial College

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3 / 10 / 2023

ABSTRACT

Taking the Graphic Design program at Nanjing Commercial College as the research subject, this study explores the application and practice of case-based teaching in the context of web advertising design courses. The objectives of this study were as follows: 1). To explore the optimization of talent development programs in the field of graphic design through the use of case-based teaching method, 2). To explore case-based teaching can transform traditional teaching methods and enrich instructional techniques, 3). To examine case-based teaching can enhance students' innovative practical abilities.

This research employs teaching experiments and case-based teaching methods, along with a literature review based on constructivist and cognitive learning theories. Drawing from the theoretical research and practical findings of international scholars, the study analyzes the current state of teaching in Nanjing Commercial College's professional courses.

In conclusion, this research reflects, discusses, and provides recommendations based on its findings. Through this study, it was observed that:1. Nanjing Commercial College has embraced personalized teaching through the use of case-based teaching, thereby exploring the optimization of talent development programs in the field of graphic design.2. The application of case-based teaching has led to changes in traditional educational methods, such as the selection of course content, the implementation of case processes, the presentation of specific outcomes, and the effective use of multimedia and experimental approaches, enriching the instructional methods.3. Case-based teaching, by integrating curriculum theory with societal demands, has significantly enhanced students' proactiveness and enthusiasm. It has also strengthened their practical and innovative capabilities, aligning them better with real-world applications.

Keywords: case pedagogy, experimental teaching method, constructivist learning theory.

ACKNOWLEDGEMENT

I would like to express my deepest gratitude to my advisor, for his invaluable guidance, support, and encouragement throughout my independent study. His insightful comments and constructive criticism have significantly improved the quality of my work.

Additionally, I am grateful to Associate Professor Dr. Jomphong Mongkhonvanit, Dean, Graduate School of Business, for his support and encouragement throughout my studies. His dedication to the graduate program and commitment to excellence have inspired me to strive for academic excellence.

Finally, I would like to extend my appreciation to all the faculty members and staff of the Siam University who have contributed to my growth and development as a student. Their unwavering support and encouragement have been a source of inspiration and motivation to me.

Declaration

I,MA SAINAN, hereby certify that the work embodied in this independent study entitled "USING CASE-BASED TEACHING METHOD TO OPTIMIZE GRAPHIC DESIGN MAJOR——CASE STUDY OF NANJING COMMERCIAL COLLEGE" is result of original research and has not been submitted for a higher degree to any other university or institution.

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May 20, 2023

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1. Introduction

1.1 Research Background

Vocational education is an essential component of the national education system and human resource development, bearing the important responsibility of cultivating diverse talents, preserving technical skills, and promoting employment and entrepreneurship. With the development of society, new demands have been placed on the training and education of professional skill talents. In the context of the new era, vocational education carries a significant role, providing skill-oriented talents for economic development and offering employment prospects for students. Given this historical backdrop, vocational education should adhere to the teaching philosophy of serving development and promoting employment, enabling students to quickly enter the workforce, accelerating the formation of a diversified educational framework, respecting students' individual development, nurturing their innovative thinking, and establishing a comprehensive talent evaluation system. This lays a solid foundation for the development of vocational education with Chinese characteristics (Wen, 2020). This paper primarily focuses on the considerations for curriculum development and optimization in the context of modern vocational education, specifically within the field of vocational graphic design.

The field of graphic design has emerged as a new and burgeoning profession in response to market demands, infiltrating various sectors such as photography studios, advertising, web design, interior decoration, and more. Businesses are increasingly emphasizing product marketing, advertising, and brand planning, thereby driving a growing demand for graphic design professionals. However, the current curriculum model for computer graphic design in vocational schools remains outdated, and the students being produced often struggle to meet the needs of the industry. Therefore, vocational schools offering graphic design programs must continuously adjust and improve their program development, teaching content, and methods in line with market demands (Gan, 2016). The primary focus and challenge of teaching in this field lie in expressing the relationships between specific forms as elements contributing to aesthetic effects, thereby imbuing the work with aesthetic meaning. Curriculum development and reform are the key and challenging aspects of vocational education teaching reform, as well as the core for improving teaching quality. The aim of curriculum teaching is to meet the demands of society, with a focus on clarifying relevant concepts and strengthening applied design. The “Network Advertising Design” course should organically integrate software design technology and professional practice, increase the proportion of practical exercises, introduce a diversified teaching assessment system, and thus achieve an organic combination of theory and practice, knowledge transfer, and skills development (Zhu, 2016).

The “Outline of Curriculum Reform in Basic Education” issued by the Ministry of Education also emphasizes, “Strengthening case-based teaching is an important approach to enhance students' practical abilities, promote teaching reform, and facilitate the organic integration of teaching and practice. It is a significant means to promote the reform of talent cultivation models.” Considering the teaching requirements and

existing issues in the “Network Advertising Design” course, it is necessary to restructure the teaching system in terms of curriculum content arrangement, the logical framework of the teaching system, the scheduling of online and offline learning, and the design of the assessment system. This restructuring should aim to explore the creation of purposeful and effective blended learning that motivates students, thus aligning teaching with learning. Through teaching practices, reflections should be made at the school, teacher, and student levels (Guo, 2018). The deficiency in practical skill development is a weak point in education, and the talent development system needs to adapt to practical needs. By tracing the development trajectory of case-based teaching and transformative learning theory, it can be considered that their combination is one possible path to bridge the gap between education and practice (Zhang, 2023).In fact, current teaching in the “Network Advertising Design” course often suffers from a certain degree of disconnect between teaching and learning. There exists a mismatch between the theoretical knowledge imparted by teachers and the level of acceptance by students. Additionally, students' ability to apply what they learn is often lacking; the knowledge and theory acquired in the classroom are not promptly applied in practice, resulting in a disconnect between theory and practice. Therefore, utilizing course content optimization with case-based teaching as the main approach can help align teaching with learning and theory with practice, which is becoming a trend. “Employment-oriented, service-oriented” is the fundamental educational philosophy of vocational education, with the primary mission of training technical and skilled talents that meet the needs of economic development and ensuring employment. Employment has become the direction and goal of vocational education teaching and practice, and the quality of employment is a crucial criterion for evaluating the quality of vocational school education. The development of modern vocational education has led to an increasing emphasis on meeting individual development needs, which means that modern vocational education must cultivate versatile, continuously developing, and practical talents needed by society. To achieve the goal of talent cultivation, vocational schools need to continuously reform and improve every aspect of the talent development process, especially the employment practice aspect, on the path of deepening industry-education integration and school-enterprise cooperation. Traditional teaching models in the Nanjing region need improvement. Currently, traditional teaching in the region is limited to the classroom, and the constraints of time and space result in few teaching methods available to teachers. This often leads to mechanical rote learning, which is not suitable for the psychological needs of modern students. Survey results show that when asked about the best teaching model, 78.79% of teachers and 45.18% of students prefer blended online and offline learning. When asked about the best educational approach, 45.89% of students choose to participate in social and cultural practical activities. Therefore, in terms of teaching models and methods, students tend to prefer blended learning and are more willing to step out of the classroom to participate in real-world social and cultural practices (Li, 2022). Due to the fact that subject courses are knowledge-based, organized according to disciplinary logic, and static, they inevitably create a gap between knowledge learning and real-life application. Under the influence of subject courses, vocational school skill

training also carries a strong subject bias. Subject-based skill training can easily lead to students “learning multiple skills but not excelling in a specific position.” Students learning professional knowledge and training skills in school are essentially in a closed state, isolated from society. Even in internships, students continue to receive educational and social services rather than fully engage in the practical world (Zhang, & Ning, 2022). The unreasonable structure of the curriculum often results in a separation between knowledge and the market. After completing the curriculum, students may possess theoretical knowledge or software operation skills but struggle to connect this knowledge with real-world demands. Teacher-centered teaching models can ensure overall teaching but may not accommodate individualized instruction. This can result in a decline in students' independent thinking and creative design skills, as well as potential resistance to collaborative teamwork. Graduates entering the workforce may lack the ability to adapt to team dynamics, communicate effectively, and coordinate, making them susceptible to market elimination (Qiao, 2018).

1.2 Research Problems

Taking Nanjing Commercial College as an example, for a long time, vocational education has often followed a general education model without highlighting the distinctive features of vocational education. This has led to issues such as a disconnect between subject-based curriculum and real-life application, a gap between skill training and actual job requirements, and a separation between professional courses and societal needs. The application of case-based teaching in graphic design education at vocational schools still faces several obstacles. If these obstacles are not effectively addressed, it not only hinders the effectiveness of case-based teaching but also prevents the improvement of the overall quality of graphic design education at vocational schools.

Using Nanjing Commercial College as an example, three primary issues have been identified:1. Outdated Training Objectives: The talent development program's objectives are outdated and place excessive emphasis on moral values, neglecting the importance of personalized development.2. Limited Teaching Methods: The teaching methods are monotonous, lacking in sufficient interactivity, and have limited multimedia resources. Additionally, the graphic design software being used may be outdated.3. Insufficient Innovation and Practical Skills: Students lack the necessary innovation and practical skills. Their initiative is low, and their enthusiasm for pursuing careers in their respective fields is not high.

1.3 Objective of the study

The purpose of this study is grounded in educational learning theories, particularly constructivist and cognitive learning theories. It focuses on conducting a comprehensive, in-depth, specific, and systematic analysis through the study of case-based teaching in vocational education course instruction. The aim is to explore the application, practice, and research of case-based teaching in the context of the Network Advertising Design course. Additionally, considering the characteristics of the era

marked by the development of the internet economy, the study aims to enhance students' practical skills. It examines the importance and necessity of optimizing and integrating the content of the graphic design major's “Network Advertising Design” course and explores the impact of optimization and integration on students' practical skills and innovative thinking abilities. The main research objectives of this paper are as follows:

1.To explore the optimization of talent development programs in the field of graphic design through the use of case-based teaching method.

2.To explore case-based teaching can transform traditional teaching methods and enrich instructional techniques.

3.To examine case-based teaching can enhance students' innovative practical abilities.

1.4 Scop of the study

Secondary vocational education is vocational education that takes place during the high school stage, including some vocational training programs that follow high school. Secondary vocational education is the mainstay of vocational education in mainland China. It is implemented through various types of institutions such as secondary vocational schools (vocational schools), technical schools, vocational high schools, and adult secondary vocational schools (adult vocational schools). The primary target group for enrollment includes graduates from junior high school and individuals with equivalent educational qualifications to junior high school. The typical duration of these programs is three years.

Nanjing Commercial College, with a student population of over 5,000, is a state-owned public vocational school in Jiangsu Province, rated as a four-star vocational school with provincial-level demonstration status, and recognized as a school with a distinctive moral education program. It ranks among the top schools in the city. The school primarily offers five-year higher vocational education and three-year secondary vocational full-time education programs, focusing on modern service industries. Nanjing Commercial College has played a significant role in cultivating over 10,000 highly skilled technical and vocational talents for the economic development of the Nanjing region. The employment rate for graduates has consistently exceeded 99% for three consecutive years, ranking it as the top school in Nanjing. In the specific field of network advertising design, there are 121 students. Each class for the Network Advertising Design course consists of 20 students, with two classes per semester, and the course spans 72 class hours.

This paper's research focus lies in the teaching of graphic design courses, with an emphasis on the application of constructivist and cognitive learning theories. Using Nanjing Commercial College as a case study, the research was conducted from January 2022 to March 2023. During this period, approximately 130 relevant articles were reviewed, comprising 50 articles related to constructivist theory, 20 articles related to cognitive learning theory, and 40 articles related to case-based teaching. Through the collection and organization of relevant literature from both domestic and international sources, a substantial body of literature reviews and theoretical summaries concerning

the optimization of the aforementioned course content has been accumulated. The aim is to explore how case-based teaching aligns with the talent development program for graphic design professionals, enrich teaching methods to guide students in applying their knowledge practically to meet societal needs, and enhance students' creative thinking and their capabilities in innovative graphic design practices.

1.5 Research Significance

From a theoretical perspective, case-based teaching aligns with cognitive principles as it emphasizes the development of students' innovation and problem-solving abilities. It progressively guides students to master relevant knowledge and skills, thereby significantly enhancing teaching effectiveness. The application of teaching experiments not only elevates the quality of teaching but also enables teachers and students to select methods that suit their needs during the teaching process. This approach improves teaching objectives and specificity while allowing students to develop their hands-on and operational skills. Ultimately, it helps students achieve better results in their future endeavors. Case-based teaching is a comprehensive teaching method guided by constructivist theory. It revolves around real teaching cases, where teachers first showcase and analyze the cases. Subsequently, students, under the guidance of the teacher, collaboratively explore and solve the case. This method aims to cultivate students' ability to comprehensively apply their acquired knowledge to address real-world problems (Su, 2022).

From a practical perspective, the guiding principle of “sound theory, diverse practice, emphasis on abilities, and pursuit of innovation” is employed to enhance students' practical and innovative capabilities (Bai & Liu, 2022). The application of case-based teaching in the instructional process can effectively motivate students' enthusiasm for learning and uncover their strengths, creating a conducive classroom atmosphere (He, Zhu, & Li, 2021).In future teaching processes, it is necessary to improve the traditional emphasis on theoretical teaching over practical application. This transition should focus on inspiring and educating students to gradually shift towards making students the central focus of classroom teaching. This transformation aims to nurture students' practical operational skills and provide them with practical experience and support for their future careers in graphic design (Lu, Chen, & Zhai, 2022).

2. Literatures Review

2.1 Case Pedagogy

“Case pedagogy” is a teaching method based on constructivist learning theory. It emphasizes that students' learning activities must be combined with cases to explore problems, guiding and sustaining learners' interest and motivation. It creates a real teaching environment where students engage in authentic tasks, giving them ownership of their learning. Additionally, it underscores the role of teachers in providing support

and guidance during the learning process. This teaching method allows students to continually experience a sense of accomplishment as they work through cases, thereby significantly stimulating their curiosity. It helps them develop the ability to analyze and solve problems, fostering practical skills, hands-on abilities, and self-directed learning capabilities.

In China, since the 1990s, the case-based teaching method has been widely applied across various fields of education, including business management, politics, law, medicine, and more. It has achieved commendable results with significant teaching outcomes. Case-based teaching involves careful planning and selection of typical cases by teachers, encouraging students to analyze, communicate, and discuss. This method fosters deep understanding, consolidation, and improvement of the knowledge learned through active teacher-student interactions. This teaching approach promotes the active role of students, with teachers providing guidance rather than delivering information passively. It not only enhances communication, exchange, and interaction between teachers and students but also motivates students to take the initiative in their learning. Through discussions and dialogues, it maximizes students' innovative awareness and deepens their understanding of the topics they are studying.

The traditional case-based teaching method requires the development of an implementation plan. In the context of the “Graphic Design” course, it begins with case introduction, aesthetic analysis, and analysis of key concepts. The process typically involves information gathering and discussion phases. What sets the “case” apart in case-based teaching is its task-driven approach. In this method, teachers do not rush to teach students new knowledge or provide step-by-step instructions for case operations. Instead, they encourage students to appreciate the case with a specific task goal in mind, to think, compare, and engage in analytical discussions. Compared to traditional teaching methods, case-based teaching significantly enhances student engagement, avoids the dullness often associated with theoretical content, and improves students' self-directed learning abilities. It takes classroom teaching to a new level. The analysis and discussion of cases involve the collective wisdom and efforts of the entire class, fostering a broader range of creative thinking (Tao, 2017). Case teaching a modern instructional approach that differs from traditional teaching methods. In courses like graphic advertising design, case-based teaching plays a crucial role. It can motivate students to actively participate in the classroom, cultivate their proactivity in social engagement, and enhance their understanding and application of theoretical knowledge. Case-based teaching is closely related to practical experiences and is an effective teaching method that greatly improves teaching outcomes.

Case pedagogy teaching is a pedagogical method that centers around the use of case studies. In this approach, students actively engage in the process of analyzing and solving problems by simulating real-world scenarios based on selected and typical design cases. Students are then encouraged to participate in group discussions where they compare their own design concepts and processes with the actual case studies. This process expands students' design thinking and enhances their design capabilities. One of the key advantages of case-based teaching is that it draws its material from the outstanding design works of real design professionals. As a result, it can showcase the

most cutting-edge design methods and techniques in contemporary graphic design to students. Throughout the case-based teaching process, the guiding principle is to bridge theory with practice and link learning with real-world production. It empowers students to take ownership of their design knowledge acquisition and exploration, ultimately nurturing their comprehensive design abilities.

Case pedagogy teaching aligns with human cognitive patterns and places emphasis on nurturing students' creativity and problem-solving abilities. It progressively guides students to acquire the relevant knowledge and skills, significantly enhancing the effectiveness of teaching. Applying case-based teaching in the course of Photoshop Graphic Design is advantageous for developing students' capabilities in problem analysis, problem-solving, and computer-based information processing.

The selection of cases should be both typical and scientifically representative. It's not about the quantity of examples but their quality and typicality. The focus should be on choosing the best cases that serve the purpose of facilitating critical thinking, broadening students' perspectives, and facilitating connections with other concepts. Additionally, the selected cases should have a reasonable level of difficulty to stimulate student engagement and challenge them appropriately. Teachers should adopt a gradual and logical approach, considering specific circumstances, to effectively implement case-based teaching. Through continuous exploration and improvement in practice, teachers can create examples that are suitable for case-based teaching.

Case pedagogy teaching is not a simple game or mere homework assignment. Therefore, when designing cases, teachers must ensure that they are novel, interesting, well-designed, relevant to real life, and highly practical to capture students' attention. Additionally, teachers should ensure that the teaching cases contain the corresponding theoretical knowledge system, allowing students to continuously refine their theoretical framework through practical participation. Teachers should also formulate questions that encourage students to think critically and explore, thus stimulating students' interest in learning.

The primary goal of teaching is to enable learners to proficiently apply what they have learned in practice, and case-based teaching method fully embodies an efficient teaching model that combines theory and practice. Online advertising has its own advantages, as it can better align with the characteristics of contemporary self-media, allowing brands to reach a wider and more effective audience. Therefore, it demands higher levels of skill proficiency and richer practical experience from students.

2.2 Experimental Teaching Method

In the process of teaching vocational education courses in network advertising design, teachers must aim to help students better grasp design skills, enhance their practical abilities, and deepen their understanding of network advertising knowledge. However, due to the relatively young age of vocational students, they may find it challenging to understand some of the more advanced design theories. Therefore, during the teaching process, teachers should consider incorporating more practical experiments to allow students to intuitively experience the mysteries of design

aesthetics. This approach can make it easier for students to engage in the design of their works.

The teaching experimental method in the network advertising design course combines the characteristics and advantages of both art and natural science disciplines, thus tapping into the effectiveness and depth of artistic learning. By using tasks and problems as a starting point, students can actively acquire new knowledge or validate existing knowledge through observation, experience, and practice, which ultimately enhances their artistic abilities and qualities.

The teaching experimental method, as a novel concept, aims to encourage students to actively explore theoretical knowledge during the experimental process. This article analyzes the application of the teaching experimental method in the network advertising design course with the goal of assisting teachers in implementing the concept of "quality education," thereby enhancing the effectiveness and relevance of teaching while fulfilling stage-specific teaching tasks.

Teaching experimental method refers to a teaching approach where students, under the guidance of a teacher, use specific equipment and materials to induce changes in certain aspects of an experiment's subject, leading to the acquisition of new knowledge or the validation of existing knowledge through the observation of these changes. In the context of classroom teaching, integrating experimental methods in art involves students, under the guidance of a teacher, using various art media materials to initiate changes or innovations in media materials and visual objects. This process allows students to gain new knowledge or validate relevant knowledge through observation, experience, and practical application. Art class experiments are driven by clear objectives and tasks, and they require a significant amount of hands-on practice and active exploration. Unlike scientific experiments, art experiments take on various forms, are relaxed, and enjoyable. The methods and approaches in art experiments prioritize autonomous exploration rather than rigid requirements. The outcomes of art experiments are divergent and focus on the perception, understanding, and creation of visual imagery, aligning with the nature of art education.

Compared to traditional teaching methods, this interdisciplinary integration brings a refreshing update to the inherent teaching strategies of the art discipline, benefiting students in terms of increasing their interest in learning, promoting in-depth learning, and enhancing overall literacy. Firstly, it makes experiments more enjoyable. Conducting experiments in art class provides students with a novel sense of fun. Visual objects rapidly change during the operations, giving students a greater sense of achievement and participation within the limited classroom time. Secondly, it enriches perception. Art experiments utilize a wide range of media materials, and the hands-on operations in the experimental process involve multidimensional comprehensive practices. Students accumulate a wealth of experiences in terms of vision, touch, and other senses. They also develop hands-on practical skills from different perspectives, achieving consistency with the artistic aspect of the discipline. Thirdly, it makes classes more efficient. Experiments come with clear task instructions, facilitating a tight alignment of teaching and learning in art classes. The classroom activities are focused

and compact, with a lively teaching rhythm, making classes more efficient and learning more in-depth.

In summary, the implementation of experimental teaching methods in the Network Advertising Design course not only allows art teachers to explore and develop interesting, scientific, and integrated teaching models but also provides a new approach to interdisciplinary integration within the subject. It also solidifies students' knowledge and skills in art, helping them transition from a state of "theoretical knowledge without practical skills" to a state of "knowledge and action in harmony."

2.3 Constructivist Learning Theory

The Constructivist learning theory, also known as the Structuralist theory, is a cognitive psychology theory that studies the process of human cognitive development. This theory introduces the concept of "schemas," which are the ways individuals cognitively perceive, understand, and think about objective things. In other words, an individual's cognitive development is a process of schema formation and modification. In addition to the concept of schemas, the Constructivist theory proposes three processes of individual cognitive development: assimilation, which is the process of incorporating new knowledge into existing schemas when exposed to new information; accommodation, which involves restructuring cognitive structures when existing schemas cannot assimilate new knowledge; and equilibration, which is the process of transitioning cognitive balance from one state to another through self-regulation mechanisms.

The Constructivist theory is gaining increasing attention in the field of education. This theory posits that learning is an active process where learners construct knowledge themselves. It occurs within a specific context, often a socio-cultural setting, and involves the assistance of others, including teachers and peers. Learners utilize necessary learning resources and acquire knowledge through the process of meaning construction. The theory particularly emphasizes the internal cognitive construction of the learner.

Reconstructing the teaching process according to educational principles. Constructivism posits that learners acquire knowledge within a specific context with the assistance of others, such as through collaboration, communication, and the use of necessary information. The ideal learning environment should encompass four elements: context, collaboration, communication, and meaning construction. In the course "Network Advertising Design," a case-based teaching approach grounded in real-world work processes is employed. All learning tasks are situated within the demands of actual or simulated professional positions. The design and implementation of cases serve to construct the learning context. Completing "real-world" graphic design cases is highly meaningful and challenging for students. Teachers assist in task analysis and provide students with autonomy in problem-solving during the teaching process. The primary role of teachers is to stimulate students' thinking and encourage them to find solutions in various ways. Students gather materials, develop designs, and engage in hands-on problem-solving. This process represents students' self-directed inquiry

learning and collaborative learning through interactions with peers, friends, teachers, and online resources.

The Application Advantages of Constructivist Theory in Vocational Education:

Fosters students' interest in classroom learning: Stimulating students' intrinsic motivation relies on making them interested in vocational courses. In traditional didactic teaching models, students are passive learners and may not experience the joy of inquiry. Applying constructivist theory to curriculum instruction can help change students' subservient roles, making them active participants in vocational education, thus enhancing their learning experiences. Additionally, students can gain a sense of accomplishment as they construct knowledge, thereby boosting their interest in learning.

Facilitates the cultivation of students' mathematical practical skills: Introducing constructivist theory into vocational classrooms can address issues such as limited inquiry activities and skill training in traditional teaching. It enables students to engage in a series of knowledge construction activities, including problem discovery, analysis, and resolution. Through these activities, students can summarize knowledge principles and address real-world problems, thereby enhancing their overall practical skills.

According to the constructivist view of learning, learning is not merely the transmission of knowledge from teachers to students; instead, it is a process in which students, with the assistance of teachers, construct knowledge to build a complete knowledge framework. In this process, students are not passive recipients of information but actively engage in the construction of knowledge. This process cannot be substituted by others. True “knowledge comprehension” requires learners to construct knowledge based on their own experiential background or existing knowledge structures and systems; otherwise, it will become “rote” and “copycat” learning. Guided by this theory, the author has designed and organized the content and teaching process of graphic software instruction according to the constructivist views on knowledge and learning.

2.3.1 Curriculum Design for Internet Advertising

2.3.1.1 Curriculum for Training Professionals in Graphic Design

A talent cultivation program is a guiding document for professional talent development in vocational schools. It serves as an overall design and implementation plan for talent development, providing the fundamental basis for organizing the educational process, conducting educational reforms, and evaluating the quality of education. A talent cultivation program that is logically clear, structurally rigorous, and systematically designed is essential to ensure the success of professional development and curriculum implementation.

The 'Guidance Program for Talent Cultivation in Computer Graphic Design of Vocational Education in Jiangsu Province' is prepared in accordance with the 'Notice from the General Office of the Provincial Government on Further Improving the Quality of Vocational Education' (Su Zheng Ban Fa [2012] No. 194) and the 'Guiding Opinions of the Provincial Department of Education on the Formulation of Talent

Cultivation Programs for Secondary Vocational Education and Five-Year Higher Vocational Education' (Su Jiao Zhi [2012] No. 36).

This program fully embodies the curriculum reform concept of building a modular professional curriculum system based on abilities, with vocational practice as the mainline and project-based courses as the core. It highlights the following points:
1. Actively aligning with economic and social development needs: Based on the requirements of economic and social development and vocational competencies, this program determines the goals of professional training, curriculum design, and teaching content. It promotes the alignment of the profession with industry, curriculum content with vocational standards, teaching processes with production processes, academic certificates with vocational qualifications, and vocational education with lifelong learning.2. Serving the comprehensive development of students: Respecting students' characteristics, developing their potential, strengthening their comprehensive qualities, and fostering key competencies. This approach promotes students' comprehensive development in terms of morality, intellect, physique, aesthetics, and caters to their developmental needs at different stages, laying a solid foundation for lifelong development.3. Emphasizing the linkage between secondary and higher vocational education curricula: Coordinating the arrangement of general foundational courses, theoretical courses, and practical courses. Scientifically sequencing course content and carefully selecting course materials, while enhancing the alignment with subsequent higher vocational education courses.4. Maintaining an organic integration of theory and practice: Emphasizing the integration of learning and doing, unifying knowledge and action. Adhering to the principle of “learning by doing” and strengthening the integration of theoretical and practical courses. It involves project-based teaching, scenario-based teaching, thematic teaching, and workplace teaching to enhance students' practical skills and vocational competencies.

The training in the field of graphic design is in line with the requirements of China's socialist modernization construction. It aims for the comprehensive development of morality, intellect, physique, and aesthetics, emphasizing good professional ethics and vocational qualities. Graduates of this program are expected to possess the essential knowledge and skills required for various professional positions in computer graphic design. They should be capable of working in areas such as graphic advertising design, visual identity (VI) design, packaging design, computer typesetting, commercial photography, digital photo post-processing, and more. Furthermore, they should have a foundation for career development and a lifelong learning ability, making them highly qualified workers and technical professionals capable of performing frontline work in production, service, and management.

2.3.1.2 The course of Internet Advertising Design

The course “Internet Advertising Design and Production” is a comprehensive interdisciplinary subject that emerges from the combination of various disciplines. It is offered in many vocational schools and has a wide professional scope, strong interdisciplinary nature, and a diverse student audience. However, the teaching mode is

not yet mature. The teaching methods and focus of instruction vary significantly among different institutions, majors, and instructors (Jia, 2020).

"Internet Advertising Design" is a course that requires both strong theoretical and practical aspects. Therefore, it cannot be fully understood simply by studying textbooks for a few days or months. On the contrary, teaching this course requires a certain level of media literacy, relevant foundational knowledge, and particularly practical work experience. Currently, there are not many specific requirements for teachers who are responsible for teaching the "Internet Advertising Design" course. In the teaching process, teachers generally rely on theoretical knowledge from textbooks, while aspects related to practical work in the field of online media are rarely covered (Cheng, 2021).

The curriculum serves as a vehicle for achieving talent development objectives. In the broad sense, the concept of a curriculum refers to the overall learning activities of students under the guidance of school teachers. In the narrow sense, the concept of a curriculum refers to the teaching content, objectives, and process plans developed by the school in accordance with the training objectives. It includes the teaching objectives and content within the curriculum. Therefore, curriculum objectives not only specify talent development objectives but also serve as teaching standards for individual courses (Huang, 2003).

Curriculum design refers to the organization format and structure of a specific course. It can be discussed from the following two aspects.

1. The content of the curriculum should keep pace with the times and be adjusted as needed to meet societal demands. As a teacher, the key consideration is what content to deliver in each class. How should this content be organized, and in what sequence should it be presented? During the lecture, how should the introduction of new material be structured, and how should interactions with students take place throughout the explanation? When and where should specific case studies be integrated, and finally, how can the lesson be summarized using comprehensive examples? In practice, there are two crucial aspects to consider during instruction: the sequence of content and the selection of case studies. Unlike subjects such as mathematics or physics, where content must be presented in a specific order, in graphic design courses, several modules are interrelated but not necessarily sequential. Therefore, it is common to find variations in the order of module explanations in different textbooks. This emphasizes the importance for teachers to carefully consider the actual circumstances of their students and arrange the sequence of module explanations accordingly. In the teaching process, it is also essential to strategically organize the content within each class to facilitate easier comprehension for students.

2. Design of Teaching Methods

The application of the "case teaching method" is beneficial in several ways: it empowers students as active participants, fosters their innovative spirit, and encourages the development of their individuality and potential. When teaching, instructors should shift their perspective, placing students at the center and aligning their teaching with societal demands. Particularly in the context of graphic design, the emphasis should be on mastering technical skills to enhance students' hands-on abilities. By presenting carefully selected case studies and integrating key concepts into these cases, students

can gain a practical understanding of fundamental principles from their hands-on experiences (Guo, 2015).

The design approach for course teaching cases is primarily derived from the textbook but does not rely solely on it. Instead, it combines real-world scenarios and students' interests, closely aligning with specific knowledge points when creating cases. This approach encourages students to think, analyze, and discuss from a practical perspective (Jing, 2009).

Currently, vocational colleges' courses in network advertising design commonly face issues such as a lack of support from new media tools, disconnect with societal demands, and not aligning with students' learning characteristics. This leads to a gap between students' relevant professional skills and the needs of the job market. To ensure effective talent cultivation, reforms are required in areas such as the selection of teaching content, instructional design, and teaching methods (Sun, 2018).

Curriculum development and reform are the focal points and challenges of vocational education teaching reform, as well as the core for improving teaching quality. The goal of curriculum instruction is to align with societal demands, with a focus on clarifying relevant concepts and strengthening applied design. In the “Network Advertising Design” course, the aim is to achieve the organic integration of software design technology and professional practical content, increase the proportion of practical exercises, introduce a diverse teaching evaluation system, and thereby realize the organic combination of theory and practice, knowledge transmission, and skill development (Zhu, 2016).

2.3.1.3 Curriculum Configuration at Nanjing Commercial College

Current Status of Teaching in the Network Advertising Design Course at Nanjing Commercial College:

At our school, the curriculum for training graphic design professionals is aimed at producing marketing and planning-oriented talents. However, there is an excessive emphasis on the post-production aspects of online advertising in the “Network Advertising Design” course. Similarly, when aiming to cultivate expressive design talents, the course evaluation places too much emphasis on rote memorization of theory. In this context, the students produced do not align well with the intended professional focus. It appears that the curriculum is offered for the sake of offering it, without effectively serving the professional orientation. Furthermore, the school lacks qualified teaching staff in this field.

The network advertising design course is a comprehensive and multidisciplinary program that encompasses fields such as advertising marketing, art design, software knowledge, psychology, and more. However, due to the relatively short time dedicated to the study of this emerging subject, the course structure is often not well-organized. Typically, the network advertising design course is scheduled for 48 class hours or even fewer. In the prerequisite courses, aside from image post-processing and vector graphics design, students generally do not study other software-related knowledge. With limited teaching time, students tend to focus most of their efforts on learning graphic design software. This can transform a course that should emphasize creative

design into one that predominantly teaches software skills, which may compromise the overall teaching quality.

In traditional classroom teaching, a single class often consists of explanations of several different topics, making it challenging for students to maintain their concentration over the course of a 40-minute class. Additionally, traditional classrooms often lack sufficient time for hands-on practical experience, which typically requires guidance from expert instructors. However, traditional teaching is often constrained by limited class time, making it difficult for students to complete practical projects under the direct supervision of their teachers. This limitation can hinder students from effectively connecting the theoretical knowledge they acquire in the classroom with practical applications, ultimately compromising the overall effectiveness of teaching.

In the teaching process, many times, a teacher-centered lecture-style teaching model is still being implemented. The teaching mainly emphasizes fundamental theoretical concepts such as graphics, colors, text, layout, etc. However, there is limited explanation regarding the characteristics and forms of online advertising, and there is minimal focus on design thinking based on empathy. This teaching approach, which is more theory-oriented, may keep students in a superficial and theoretical state when learning a course like online advertising design, which combines both artistic and technical aspects. It may hinder students from deep and critical thinking and prevent them from truly engaging in the practical work of online advertising design.

Teachers struggle with lesson preparation and classroom instruction, while students feel that the teachers are sticking strictly to the textbook, making it difficult to achieve effective classroom outcomes. Due to limitations in resources and other factors, classes can only be conducted in regular multimedia classrooms. Present-day regular multimedia classrooms generally do not have internet access. While this limitation can help students concentrate better on listening, it also hampers teachers from providing more interactive explanations of the subject matter, thereby affecting students' information acquisition (Du, 2015).

2.3.2 Lesson plan design

Modern educational perspectives emphasize that the one who acquires knowledge is the subject of the classroom. Putting students' development at the forefront is the core concept of the new curriculum standards. It is student-centered, focusing on each student's growth and nurturing their individuality. Students are the masters of their learning, and ultimately, the quality of teaching needs to be reflected through the students. Therefore, when designing lesson plans, teachers must prioritize students, consider their individual needs, and accommodate differences based on their actual situations.

Lesson plans are a comprehensive reflection of a teacher's educational philosophy, teaching wisdom, teaching experience, teaching personality, and teaching art. They play a positive role in standardizing teachers' classroom instruction and reducing randomness in the teaching process. In vocational education, many specialized courses lack reference materials, leading professional teachers to mimic the patterns of general

education courses, resulting in lesson plans with overall structures that are quite similar. This approach does not align well with the development of vocational education. In some cases, a minority of teachers resort to copying old lesson plans to cope with teaching inspections. Therefore, lesson plans for vocational courses must be meticulously designed, taking into account various factors such as the unique characteristics of the profession, the actual circumstances of the students in the class, market demand for the profession, and the standards for technical talent set by social development (Zhang, 2019)

In vocational education, the primary goal is to “cultivate students with specialized skills who can meet market demands.” Therefore, the design of excellent lesson plans for vocational courses should adhere to a student-centered approach. It should utilize a combination of theory and practical application, focus on the needs of local economic development, and the development of school-based curriculum. It should stay closely aligned with market trends, promote innovation, actively explore the scientific, innovative, flexible, and practical aspects of lesson plans, all with the aim of achieving the best teaching outcomes.

While vocational school students may not differ significantly in terms of intellectual capabilities from general high school students, some students may lack interest in learning, determination to overcome challenges, and have a relatively less solid academic foundation. Therefore, when designing lesson plans, teachers need to consider not only the students' knowledge and skills foundation but also provide time and space for students to engage in the learning process and methods. This includes recognizing the unique role of students' knowledge accumulation and experiences in teaching resources. Furthermore, the development and cultivation of students' emotions, attitudes, and values should not be neglected (Xu, & Wang, 2018).

According to Babanski, to achieve optimal teaching, it is essential to achieve the best possible synergy between teaching and learning during the teaching process. He stated, “Only through the active interaction between teachers and students can a teaching process be realized as a complete phenomenon.” To reach this level, when teachers design their lesson plans, they should consider students' learning psychology and consciously regulate the teaching process accordingly. Based on the students' actual situations, they should strive to stimulate students' interest, turning the hardship of learning into joyful learning, and making students active participants in the teaching activities. This approach transforms teaching into a joint quest for knowledge by both teachers and students.

In practice, it has been proven that professional teaching differs from general teaching and possesses distinct specialized characteristics. Teachers interact with individual, thinking students, each with varying levels of understanding due to differences in their cognitive abilities. Therefore, to create an effective lesson plan, teachers must first gain a deep understanding of students' professional backgrounds and individual differences, allowing for flexibility and adaptability in the lesson plan. Even when covering the same teaching content, different teachers will find unique aspects in

their lesson plans due to variations in students' situations and classroom experiences, whether in different grades or different classes within the same grade.

In summary, when designing lesson plans for professional courses, teachers should thoroughly understand students' learning intentions, discern their learning emotions, and diagnose their learning obstacles. This approach leads to the creation of lesson plans that genuinely focus on students, promote their comprehensive development, and facilitate their transition from passive learners to active practitioners. Moreover, teachers should pay attention to students' individual differences, ensuring that every student has the opportunity to develop themselves and showcase their talents in their preferred areas of expertise (Meng, 2015).

The network advertising design course places a high demand on practical skills, often making theoretical knowledge appear dry and uninteresting to students. The use of case-based teaching methods in lesson plan design can help address this shortcoming. Selecting real-life cases that resonate with students can stimulate their interest in learning and allow them to explore the joy of acquiring knowledge through cases (Xiang, 2016).

The design and selection of cases are crucial steps in lesson plan design. Before teaching, teachers should be thoroughly familiar with the content they will be covering. They need to design representative cases based on the teaching plan, time allocation, teaching requirements, and objectives, considering the focus and difficulty of each chapter. Therefore, case design should adhere to the following standard requirements:

1. Cases should be typical, concrete, and representative, effectively incorporating and applying the course knowledge.

2. Case design should strike a balance in terms of difficulty. Cases should be chosen or designed to suit students' knowledge backgrounds, offering a moderate level of difficulty. This should be accompanied by exercises that encourage extrapolation and application of knowledge, enhancing students' engagement, proactiveness, and confidence.

3. Cases should cover as many important knowledge points within the chapter as possible. While the extent of knowledge point coverage may vary, comprehensive experiments that integrate knowledge across chapters are generally beneficial in improving students' ability to apply knowledge and achieving knowledge integration goals.

For instance, when explaining the application of layers, including layer blending modes, layer styles, creating fills and adjusting layers, layer compositing, overlay layers, and smart object layers, using the award-winning creative work “Taste of China,” which is a graphic design poster for the first high-end food documentary series “A Bite of China 2”released in China, can capture students' attention and ignite their interest.

This creative poster, titled “Chinese Flavor,” uses food ingredients to create a fresh and elegant “traditional ink painting” scene, showcasing cultural characteristics related to rituals and fun. By employing a real-world case study in teaching, the transfer of theoretical knowledge on software application skills, such as mastering and using layer blending modes, becomes more engaging for students. Teaching shifts from the

traditional “teacher lectures, students learn” model to one where students are motivated and eager to learn on their own, resulting in significantly improved teaching outcomes.

After designing the lesson plan with case studies, the next phase is the implementation of these cases.

Firstly, the teacher utilizes modern multimedia teaching methods to explain new knowledge to students. Through operational demonstrations, the teacher helps students gain an initial understanding of new concepts and how to use commands. Then, the teacher takes these concepts and, through different small examples, illustrates the practical application of these knowledge points and commands. Students are encouraged to participate and practice hands-on.

Secondly, the actual implementation of the case becomes much easier. The teacher needs to gauge how well students have grasped the new knowledge points. If necessary, the teacher should emphasize the operational methods of the new knowledge and help students become proficient in its use. Finally, after the case is completed, the teacher addresses common issues and summarizes the methods used. This fosters mutual learning and inspiration among students.

Lesson plan design places students at the center and guides them from simple to complex, from shallow to deep, gradually achieving the teaching objectives. This learning process effectively cultivates students' abilities to analyze and solve problems.

3. Research Methodology

3.1 Literature Review Method

A literature search using keywords “teaching experiments” and “case teaching method” was conducted, resulting in a total of 130 relevant articles. Among these, 40 articles were specifically related to case teaching. The collected literature materials were categorized and studied. Additionally, relevant materials on case teaching were accessed at the library. Through a thorough review and analysis of the relevant literature, the feasibility of this research was assessed. Suitable research methods were chosen, and a research framework was established to lay a solid theoretical foundation for this thesis.

3.2 Teaching Experiment Method

This thesis compares the learning outcomes in the field of graphic design between case-based teaching and traditional teaching methods. Multiple indicators such as students' theoretical knowledge, professional technical skills, learning interests, learning enthusiasm, and parental satisfaction with the teaching outcomes are examined to evaluate the learning effectiveness of students when they engage in case-based learning.

3.2.1 Experimental Class Situation

The experimental class consisted of 20 students from Graphic Design Class 1 who utilized a combination of case-based teaching materials and traditional classroom

instruction. The control class, Graphic Design Class 2, included 20 students who received regular traditional classroom instruction. The results were generated through a 10-week teaching experiment, with 2 class hours per week, and the analysis of the differences between the two groups. The experiment took place from September 5, 2022, to November 18, 2022.

3.2.2 Experimental Control

To ensure the rigor of the experiment and control throughout the process, the course was taught by the same teacher from start to finish. Apart from using different teaching methods for the experimental and control classes during the experimental teaching process, all other factors affecting teaching were kept the same, ensuring the scientific rigor of the experiment. The experimental class employed a teaching model that combined case-based teaching with traditional instruction, while the control class followed a traditional teaching model. The class sizes, curriculum design, and class hours were identical for both classes.

3.2.3 Selection and Application of Case Teaching Content

The teacher selects and creates case content based on the class's teaching materials. The selection of case teaching content is done considering various aspects such as teaching progress, course content, and classroom setup. The teacher processes and prepares the content, including images and text, and applies the thematic case teaching content to the classroom at different times. Therefore, the teacher should rigorously ensure the relevance and appropriateness of the teaching content to ensure effective classroom teaching.

3.2.4 Experimental Content

The teaching experiment focuses on the theme of “JD Campus Pavilion.” Students create works that are rich in graphics and text. Through various online marketing platforms such as Taobao stores, WeChat public accounts, Pinduoduo, and online live streaming, they present promotional information using product promotion images, videos, and other engaging methods to attract user clicks and purchases, allowing them to gain further insights into products or stores. For example, based on a year's timeline, students create portfolios for ten major themes, including “E-commerce Supporting Agriculture,” “Beauty Spring Festival,” “Skills Challenge,” “Children's Day Promotion,” “Back-to-School Rally,” “Double Eleven Shopping Spree,” “Chinese New Year Mobilization,” “New Year Shopping Festival,” “Skin Whitening and Sunscreen Festival,” and “618 Mid-Year Promotion,” as the main teaching content. The difficulty level of these teaching contents is adaptable to the requirements of the graphic design class.

3.2.5 Classroom Practical Operation Arrangement

Each class session lasts for 90 minutes, and the classroom arrangement is as follows: preparation activities for 20 minutes, basic content explanation for 50 minutes (with the teacher delivering lectures for 30 minutes, traditional classroom discussions and exercises organized by the teacher for 20 minutes, while the experimental class will

incorporate corresponding case teaching materials during the teacher's lectures and training sessions), a 10-minute break, and a 10-minute concluding session.

3.2.6 Experimental and Control Class Teaching Content

Both the experimental class and the control class primarily focused on learning about composite content. The specific teaching content is shown in the table below.

Week	Experimental Graphic Design Class 1	Comparison Graphic Design Class 2
the first week	E-commerce Supporting Agricultural Activities: Tonglu is a county under the jurisdiction of Hangzhou, located only 80 kilometers away from the city center. It is the economically strongest county in the western Zhejiang region and is renowned in China for being a hub for logistics and pen manufacturing. Tonglu's unique geographical advantage has provided excellent support for the development of e-commerce. In October 2014, Alibaba's first rural e-commerce pilot program was launched in Tonglu, creating a favorable industry atmosphere for the development of e-commerce in the region.	Explaining the practice of using the history brush and color replacement tool, and presenting classroom requirements.
the second week	Beauty Spring Festival: A cosmetics company plans to continue expanding in the domestic market over the next 5 years, creating its own Japanese beauty brand for the domestic market and selling it independently. They aim to expand their operations by entering large shopping malls and opening offline stores. The future plan includes opening Japanese beauty retail stores in all major cities.	Explain the basic elements of the Fill Tool and create a variety of colorful image effects by using the Brush Tool, producing filling effects.
the third week	Skills Challenge Section": The graphic design majors showcased their creative talents through paper plate color painting with the theme "A Hundred Flowers in Full Bloom" and hand-drawn artworks with the theme "Standing Firm in the Face of 'Epidemic' and Starting an 'Artistic' Action."	Provide explanations and practice for using various photo editing tools, reviewing previously learned content, and distinguishing between them.
the fourth week	Children's Day Grand Promotion: Celebrate Children's Day on June 1st! Various departments of a company in Garden International have planned themed activities to give the participating children a surprise, happiness, and an unforgettable memory, making it a Children's Day in 2022 that they will cherish for a lifetime.	The teacher explains the basic steps of image editing tools and provides instructions and demonstrations for practicing combinations.
the fifth week	The start of the school year marks the beginning of a new semester of learning and life. The opening ceremony aims to enhance the sense of responsibility and mission among teachers and students, clarify the students' goals for the new semester, create a strong back-to-school atmosphere, and provide a good start to the new academic term.	Conduct explanations, demonstrations, and practice sessions to learn how to use image manipulation tools for moving, copying, and deleting images to create graphic effects.

The sixth week	As a traditional daily goods store, we need to seize the concept of the "Double 11 Shopping Carnival" and launch a "Double 11 Peak Promotion" in mid-November when the temperature drops. In terms of the intensity of the event, marketing methods, and on-site experiences, we should differentiate ourselves from e-commerce, highlighting our unique features and providing customers with a highly enticing shopping carnival experience.	Summarizing and reviewing the previously learned content through teacher explanations, and organizing students to practice.
The seventh week	Chinese New Year Mobilization: The Spring Festival is a nationwide holiday and marks the beginning of the year. It is a joyful, festive, and grand occasion in people's hearts. During the festival, families reunite, go shopping in malls, exchange gifts with friends and relatives, and various brands compete to boost sales through promotions. Love welcomes the new year with open doors and generous gifts.	The main focus of the study is to use different drawing tools to create various shapes, explain and learn how to combine content, and organize students for practice.
The eighth week	Spring Festival Shopping Festival: Leveraging the traffic and high sales peaks during the Spring Festival shopping season, catering to the rigid demands of users during the Spring Festival period, helping categories and brands improve and gain new users, enhancing cross-category penetration and user acquisition, and expanding the marketing scenarios of member marketing activities.	The main focus is on learning to use various tools for drawing selections, explaining and teaching the combination of content, and organizing students for practice.
The ninth week	Whitening and Sunscreen Festival: As the weather gradually gets hotter, sun protection and skincare become a top priority. We are introducing the Summer Sunscreen Festival to help you stay cool all summer. Through this event, we aim to promote cosmetics, increase daily sales, and boost overall store sales.	The main focus will be on adjusting the color and hue of images, along with explaining and practicing the composition of content.
The ten week	Before the arrival of the 618 mid-year shopping festival on Taobao, many stores begin promoting extensively ahead of time, creating a significant buzz with promotional activities and information for the store's celebration event. This aims to generate a vibrant atmosphere for the store's celebration activities and make a deeper impression on a broader audience, ensuring that more people are aware of the "618" event.	Practice is conducted on the learning content to master the use of several commonly used blending modes.

4. Finding

Currently, with the rapid development of the modern economy, the advertising industry plays a crucial role in economic and social development. Information technology has made significant contributions to economic growth. In China, the total scale of the internet marketing market has exceeded one trillion yuan, reaching 1.0457 trillion yuan. Such a massive market size supports a vast demand for professionals in the field of network advertising design. In the aforementioned research, through an extensive literature review, the following issues have been identified in the talent cultivation program of Nanjing Commercial College: outdated training objectives, excessive emphasis on morality, lack of emphasis on individualized development; limited teaching methods, insufficient teaching interactivity, limited use of multimedia in teaching, outdated graphic design software; insufficient innovation and practical skills, lack of student initiative, and low enthusiasm for employment in the field of their majors, among other instances.

The following findings have been made in this article:

4.1 Improving the Talent Development Program Curriculum System

4.1.1 Construction of the "Teaching and Doing" Curriculum System

The curriculum system is at the core of talent cultivation programs. "Teaching and Doing in Unity" curriculum system construction refers to the systematic design of courses with a focus on developing students' vocational abilities, taking into account specific talent demands from the industry. In essence, it means designing a curriculum system based on the vocational competency needs of the industry, creating a set of courses that align with different vocational competency requirements. Therefore, in this particular field, teachers tailor the curriculum to the school's unique circumstances and consider the specific computer graphic design talent demands in the Nanjing market. They flexibly apply the "Teaching and Doing in Unity" theory and design a three-element curriculum system centered around "Art Fundamentals, Solid Skills, and Creative Design." This system features clear course modules, well-defined module tasks, and is easy to implement, leading to effective teaching outcomes. Specialized skill courses are offered, such as Hand-drawn POP Advertising, Corporate Identity Design, Flash Animation Production, Television Advertising Production, Vector Software (CorelDraw), Web Design, Decorative Pattern Design, Illustration Design, and more. There are also skill expansion and certification preparation courses available, like Graphic Designer (CorelDraw) Training and Certification. These courses are designed to meet individual student development needs while aligning with the school's distinctive educational characteristics.

The curriculum design is based on scientific principles, aligned with actual production processes, and closely tied to job requirements. This ensures that the curriculum goes beyond merely replicating and reproducing explicit theoretical knowledge from a static subject system. Instead, it focuses more on nurturing students'

vocational skills and qualifications within specialized learning environments constructed for this purpose.

4.1.2 Research and Design of "Teaching and Doing" Teaching Content

The reasonableness of teaching content determines the feasibility probability of a talent training program. The research and design of teaching content based on the "teaching-doing integration" model focus on effectively integrating the knowledge and skills imparted by the instructor with the learning process, rather than setting them in opposition. Additionally, this research aims to determine the specific goals achieved through the teaching content and how they contribute to teaching and learning.

The teaching content should be aligned with the talent training program's objectives. In the context of the "teaching-doing integration" model, teaching content should ultimately meet the demands of the industry by effectively integrating teaching and practical application. For example, in the field of computer graphic design, traditional single-subject teaching focused on software applications, resulting in limited effectiveness as students could only use the software without practical application in real-life scenarios. To address this issue, the curriculum is being restructured to incorporate interdisciplinary approaches and reorganize teaching content based on "work tasks." For instance, a course like "Front-end Web Design" would comprehensively cover the application of software such as Dreamweaver, Photoshop, and CSS. Another example is "Layout Design," which involves the use of multiple software programs like Illustrator and InDesign. This restructuring of teaching content aims to provide students with practical skills and knowledge directly applicable to their future careers and enhance their professional adaptability.

4.1.3 Implementation of the "Teaching and Doing" Teaching Process

The teaching process, built upon the curriculum framework and the research and design of teaching content mentioned earlier, involves the practical implementation of the teaching plan. Given the unique characteristics of the computer graphic design major, multiple rounds of teaching practice and research have led to the development of a specific teaching process. This process emphasizes aligning classroom teaching with real design tasks, resulting in a tailored teaching flow. The alignment between the teaching flow and actual design workflows effectively helps students become familiar with industry-specific task processes while completing their studies. This, in turn, guides their future professional activities and lays a solid foundation for a comprehensive understanding of the work process. In the classroom, students learn by doing, and teachers instruct through practical activities. Continuous reflection by both teachers and students is integral to the entire "teaching by doing" approach, emphasizing the critical aspect of learning while actively engaged in work.

In summary, the implementation of "school-enterprise cooperation, integration of theory and practice, and teaching-doing integration" underscores the importance of learning by doing, teaching through practical activities, and reinforcing learning through action. This approach is essential for cultivating computer graphic design professionals who meet the demands of the modern era and the industry. It promotes

innovative thinking and fosters versatile talents. The curriculum, from foundational courses to core design courses and comprehensive design practice, follows a project-centered innovation design education model. The primary focus is on nurturing students' creative thinking, teaching innovative methods, creating conducive creative contexts, and structuring teaching around project topics. This approach encourages students to adopt creative roles, ignites their passion for creativity, and enhances their creative abilities.

4.2 Enhancing Teaching Quality by Incorporating Case Teaching Method

4.2.1 Implementing Case-Based Practice for Mutual Learning in Teachings

Practice is the best teacher, and competitions serve as the best method for assessing teaching. By using competitions as a catalyst for learning, students' practical abilities are further enhanced, and the effectiveness of case-based teaching can be rigorously examined. Through ongoing participation in competitions, teachers can experiment and evaluate the outcomes of teaching reforms, continuously improving their teaching methods and approaches with the goal of mutual growth in teaching. The students in the Graphic Design program at Nanjing Commercial College participated in the Jiangsu Provincial Cultural and Artistic Skills Competition and achieved first, second, and third-place awards. These competitions not only boosted students' confidence but also enhanced their sense of self-identity. Participating in competitions revealed that allocating more time to case analysis and interactive discussions in classroom teaching, with a primary focus on analysis and discussion and case production and demonstration as supplementary elements, can yield better teaching results. This teaching approach completely avoids the traditional model of spoon-feeding direct explanations of tool applications. With the rapid advancements in electronic products, the ubiquity of digital cameras, and the high-resolution capabilities of smartphones, homework assignments now revolve around current social issues. Students are encouraged to pick up their smartphones and cameras to capture the beauty of nature and everyday life. Through platforms like QQ groups and WeChat groups, students' work is promptly uploaded and tracked for analysis, providing them with ample room for reflection. Furthermore, we actively participate in various graphic design competitions in the community during the teaching process. Students are encouraged to form teams and participate in these competitions, fostering learning through competition. This approach allows students to learn while doing and do while learning.

Most graphic design students have little or no background in drawing. To ensure that students can absorb the latest trends and cutting-edge design creativity and color coordination relevant to the industry, expand their creative horizons, nurture their creative inspiration, and enhance their awareness of design, the teaching process deliberately avoids delivering dry and dull theoretical knowledge directly. Instead, it selects current and relevant design works as case studies for analysis, discussion, and the consolidation of key concepts. This approach sparks students' strong interest in learning and helps them understand graphic design knowledge in a more vivid and intuitive way. “Stimulating students' learning interest through real-world examples” is the first stage of case-based teaching. Before class, thorough lesson preparation

involves carefully selecting cases that are visually simple, representative, and suitable for the students' existing cognitive level. Ideally, these cases should facilitate the transition to the explanation of new knowledge in the next stage. An outstanding graphic design work is not just about technical skills. While using software like Photoshop may be straightforward, creating great designs requires a critical component: creativity and design concepts. To enhance students' competitiveness in the job market, they need to cultivate their own design styles. In the teaching process, it is essential to reduce personal analysis and allocate more time and space to students. Teachers should play an inspiring role, encouraging students to appreciate the cases and, based on their own life experiences and aesthetics, participate in discussions about the features and innovations of the cases. Students should be guided to express their views and interpretations of the cases in the classroom. In today's society, which values individuality and diverse information, students are constantly exposed to external stimuli through the internet and various media. Their imagination and innovative abilities are strong, so the goal is to guide contemporary students to present their own viewpoints and provide evidence for them, rather than imposing one's own ideas on them directly. Students should be encouraged to use their existing knowledge of graphic design and life experiences to propose creative solutions and interpretations of the cases. Years of classroom teaching have shown that the adjusted case-based teaching method not only broadens students' thinking but also benefits teachers who engage in lively discussions. This approach deepens teachers' understanding of issues and significantly contributes to the improvement of teaching methods. Students' grasp and absorption of the knowledge and tools taught in class are very good.

4.2.2 Maximizing the Role of Case Pedagogy Teaching

1. Layered Teaching Approach. In the teaching process, it's beneficial to adopt a layered teaching approach. Case-based teaching, centered around students, can be progressively structured from simple to complex, from case analysis to decomposition, and from the whole to the details. This enhances students' comprehension and mastery of the subject matter. In practical teaching, there may be cases where course designs or special effects in case studies are perfect but require high levels of technical skill. Some students may find this challenging and may not be motivated to learn. To address this, during the initial stages of the course, you can break down successful cases, explain them step by step, and create checklists to emphasize key and difficult points. When necessary, you can even break free from the limitations of the textbook's chapters, decompose cases, create gradient effect diagrams, and gradually increase complexity. This way, students can follow step-by-step operations, receive step-by-step explanations, and meet the educational requirements of the course.2. Emphasis on Practicality. The advantage of case-based teaching lies in its convenience for creating interesting and efficient classroom settings that connect with real-life situations, helping students learn more effectively and thus enhancing teaching effectiveness. For example, before the Chinese New Year when there is typically heavy snowfall, encourage students to create a series of pictures that reflect the changing seasons throughout the year: spring, summer, autumn, and winter, culminating with winter snow. Combine

these pictures with snowscape photos taken by students themselves to create a perfect graphic design artwork. This visually demonstrates the use of software, settings, techniques, and their corresponding effects. After completing the artwork, students can share it with friends and family through social media apps, which increases their interest and strengthens their memory of the design and production process. This lays a solid foundation for practical operations. Students can combine current hot topics with textbook exercise resources and extensive online resources for independent creative design. The resources provided by the library, including materials and finished products, can be used for post-class practice, self-study, and internship reinforcement.3. Strong Emphasis on Practical Application. When selecting case studies for classroom teaching, try to choose ones that align with students' future career paths to ensure that they can apply what they learn effectively during their transition into the workforce. Many vocational school graduates majoring in graphic design often find employment in Taobao shop design, where they use images, templates, and other decorations to enhance the appearance of online stores and improve marketing efficiency. Therefore, the use of case-based teaching in the curriculum should emphasize its practicality, enabling students to independently complete relevant art design work. The chosen teaching cases should align with students' future career directions to ensure a smooth transition into their professional roles.

4.3 Using Case Pedagogy Teaching to Enhance Student Innovation Skills

4.3.1 Putting Students at the Center to Reflect the Differentiation of Teaching Plans

The teaching of the course on web advertising design targets students majoring in computer science, and the majority of these students lack a background in fine arts. The overall level of the students varies, with some having a strong sense of color and good color coordination skills. Through the practice and explanation of several typical teaching cases, the teacher can gradually cultivate the students' color adjustment ability and color coordination skills. This allows students to flexibly apply the knowledge they acquire in this course to their professional field. In the case of teaching drawing with tools such as pens, selecting 3 to 5 typical company logos for students to repeatedly think about and practice can achieve the teaching goal of “learning by doing” and “practice makes perfect.” After the course, 90% of the students in the class possessed creative abilities.

The application of case-based teaching methods in lesson planning can effectively stimulate students' enthusiasm for learning. It can also uncover students' strengths and create a positive classroom teaching atmosphere. During the teaching process, inspiring and educating students becomes the primary goal, with students as the main focus of classroom teaching. This approach aims to cultivate students' practical skills and provide them with practical experience and assistance for future careers in graphic design. Experience has shown that professional teaching differs from general teaching due to its distinct specialization. Teachers must deeply understand students' professional backgrounds and individual differences, allowing for flexibility and adaptability in lesson planning. When designing lesson plans, it's essential to consider

students' learning intentions, monitor their emotional responses to learning, and diagnose any learning obstacles they may encounter. By doing so, teachers can create lesson plans that genuinely cater to students' needs, transitioning them from passive learners to active participants. Furthermore, it's crucial to recognize and accommodate students' individual differences, ensuring that each student has the opportunity to develop and showcase their talents in their preferred professional field.

4.3.2 Aligning with Market Demands to Showcase the Innovativeness of Teaching Plans

Entering the 21st century, vocational education in China has been rapidly developing, and the government has placed increasing emphasis on its growth. The development of vocational education is a crucial means to drive economic development, promote employment, and alleviate the labor supply-demand imbalance. Adapting to market demand entails ensuring that the curriculum aligns with market needs, introducing the latest operational technologies, implementing the integration of theory and practice, and fostering cooperation between educational institutions and industry partners. Designing teaching plans that align with market development is also a vital step in nurturing students' innovation capabilities. Deepening the effective results of educational reforms in the classroom is essential for keeping education in step with the pace of societal development and for producing qualified professionals who can adapt to changing market dynamics and the demands of economic transformation and upgrading. Practical experience has shown that the design of teaching plans for professional courses is a critical component of instructional resource development and curriculum design. It serves as the foundation for delivering high-quality professional courses, with the quality of teaching plans being dependent on the chosen textbooks and the understanding of students' needs. During the design process of teaching plans, it is important to emphasize equality between teachers and students, mutual learning, student-centered instruction, and the cultivation of professional skills. Creating diverse teaching contexts, focusing on students' hands-on experiences, and genuinely guiding students to transform knowledge into practical abilities are crucial aspects of effective teaching plan design. In summary, the design of teaching plans for vocational courses is an ongoing process that deserves continuous exploration and innovation. The goal should not be to create lengthy documents but to produce materials that are practical, usable, and innovative. The emphasis should not be on uniformity but on ensuring that students find the materials appealing and relevant to the developments of our times. Striving for new styles, tastes, and creative approaches in every teaching plan is the aspiration.

5. Conclusion and Recommendations

5.1 Conclusion

The average scores for the experimental class and the control class in the student skills challenge were 77.9 and 72.4, respectively. Compared to before the experiment, both groups of students showed an improvement in their theoretical scores. When comparing the two groups of students' skill challenge scores, students in Experimental Graphic Design Class 1 generally performed better than students in Control Graphic Design Class 2.

No.	Class	Name	Total Score	No.	Class	Name	Total Score
1	Graphic 1	Miss Chen	87	1	Graphic 2	Miss Ye	79
2	Graphic 1	Miss Deng	76	2	Graphic 2	Miss Zhang	77
3	Graphic 1	Miss Guo	67	3	Graphic 2	Miss Zhu	68
4	Graphic 1	Miss Han	88	4	Graphic 2	Miss Sun	83
5	Graphic 1	Miss Hang	89	5	Graphic 2	Miss Shen	78
6	Graphic 1	Miss Liu	64	6	Graphic 2	Miss Wu	81
7	Graphic 1	Miss Liu	74	7	Graphic 2	Miss Dong	72
8	Graphic 1	Miss Ren	74	8	Graphic 2	Miss Hua	74
9	Graphic 1	Miss Su	63	9	Graphic 2	Miss Ma	61
10	Graphic 1	Miss Wan	69	10	Graphic 2	Miss Zhang	70
11	Graphic 1	Mr. Zhao	76	11	Graphic 2	Mr. Zhu	84
12	Graphic 1	Mr. Zhao	63	12	Graphic 2	Mr. Teng	68
13	Graphic 1	Mr. Zhong	77	13	Graphic 2	Mr. Cao	60
14	Graphic 1	Mr. Jiang	60	14	Graphic 2	Mr. Chen	65
15	Graphic 1	Mr. Li	72	15	Graphic 2	Mr. Chen	86
16	Graphic 1	Mr. Liang	68	16	Graphic 2	Mr. Liu	81
17	Graphic 1	Mr. Lin	66	17	Graphic 2	Mr. Xu	53
18	Graphic 1	Mr. Wang	62	18	Graphic 2	Mr. Zhang	77
19	Graphic 1	Mr. Wang	71	19	Graphic 2	Mr. Zhou	61
20	Graphic 1	Mr. Wu	72	20	Graphic 2	Mr. Zhu	63

Nanjing Commercial College has successfully optimized its graphic design program by employing pedagogical methods such as applied teaching experiments and case-based teaching. This has led to an improvement in students' overall qualities and thinking abilities. Competitiveness and adaptability are key factors for students' career development. Therefore, it is recommended to widely incorporate case-based teaching methods into vocational education courses to accommodate students' learning styles and promote their holistic development.

“Encouraging innovation, strengthening practice, and enhancing fundamentals” is the direction for the development of the web advertising design course in the graphic design major. In the new era, innovation is fundamental, and talent is crucial. The optimization and integration of course content must align with the trends of the times.

It is essential to find suitable teaching models and methods for vocational students, allowing them to develop their communication skills, organizational skills, planning abilities, and creativity. This will enable students to gain comprehensive practical skills and become innovative designers who meet the demands of the era, achieving all-around development.

5.2 Study instructions

Practice has proven that case-based teaching is an effective approach to bridge theory with practice, stimulate students' creative thinking, and enhance their problem-solving abilities. It represents an achievement of modern educational reform and practice. When applied in the teaching of web advertising design courses, case-based teaching makes the instructional process concrete and practical, preventing it from becoming hollow. Students are easily drawn to the practical issues presented in the case studies, which, in turn, further boosts their motivation and initiative to learn. This approach nurtures students' abilities to solve real-world problems and fosters their capacity for innovative thinking, laying a solid foundation for their future employment and careers.

5.3 Recommendations

Due to the limited scope of this research, there is still significant room for further investigation in this area. Furthermore, this paper primarily provides recommendations based on the example of Nanjing Commercial College, which has its own limitations. For instance: language barriers in graphic design software; an improvement in imitation skills but insufficient innovation skills; and a lack of test-taking skills. By integrating course theory with societal demands through the use of case-based teaching methods, this research has greatly enhanced students' initiative and motivation, as well as their practical and applied abilities.

5.3.1 Combining Case Pedagogy Teaching with Other Teaching Methods

Case Pedagogy teaching is a service to achieve teaching objectives, and teaching in network advertising design courses must be based on a solid theoretical foundation. Only when students have a thorough understanding of fundamental concepts, basic tools, and command usage related to network advertising design can case discussions and analyses be conducted effectively, leading to practical teaching outcomes. Traditional lecture-based teaching has its unique advantages in disseminating and updating theoretical knowledge comprehensively and systematically. However, in lectures, it is important to ensure that theoretical content is concise and that students are encouraged to be proactive and self-aware in their learning, enhancing their problem analysis and solving skills.

Practice is a concentrated reflection of innovation and self-learning abilities and is the best way to train self-learning and innovative capabilities. Emphasis should be placed on practical components in the curriculum. In experimental classes during

teaching, students are required to complete the production of typical design cases taught by the teacher. Additionally, they are tasked with creating their own graphic design work reflecting specific contexts. Teachers evaluate students' performance based on the quality of their submitted work in graphic design experiments, motivating students to become more proactive in their learning. Through completing assignments, students not only nurture their creative abilities but also become more proficient in using various tools and buttons that may not have been covered in-depth during limited classroom hours. This greatly enhances their self-learning capabilities, transforming passive learning into active learning, ultimately achieving the goals of teaching.

5.3.2 Promoting In-Depth Research on Case Application Issues

Case Pedagogy teaching revolves entirely around conducting teaching activities centered on specific cases, with theoretical principles subservient to the needs of the cases. Cases hold a central position in case-based teaching, and the selection of cases should emphasize their typicity, innovativeness, and timeliness. When choosing cases for case-based teaching, it is essential to stay closely aligned with the developments of the times, selecting cases that represent the cutting-edge standards of the industry and serve as successful models at the forefront of industry progress. Therefore, it is necessary to continually supplement and improve the case materials used in the curriculum. In case-based teaching, authenticity and situational relevance of cases are emphasized. Cases should not be fabricated but must be drawn from real-life work experiences. Case reproduction should encompass not only the practical work requirements but also the environmental context in which the problems were originally addressed, aiming to simulate all aspects of the case as accurately as possible.

In conclusion, case pedagogy teaching is highly suitable for the characteristics and requirements of network advertising design education. There is still ample room for exploration in the organization of specific teaching content, and numerous practical issues need to be addressed in the implementation of the teaching process. With the continuous rapid growth of network advertising and the emergence of new technologies and formats, the application of case-based teaching in network advertising design courses will remain an open and evolving topic, deserving of ongoing in-depth research by relevant instructors.

5.3.3 Establishing a Network Advertising Design Studio

The network advertising studio adopts a system where dedicated mentors are responsible for the studio's activities. The studio is composed of several students and may not be organized according to administrative class divisions. Typically, there are three to four senior students and one to two junior students in the studio. Mentors are responsible for guiding the studio's projects and coordinating progress. During practical teaching activities, students can either collaborate on projects based on the requirements provided by the mentor or independently develop project plans related to the course content, which are then submitted to the mentor for review. This approach serves several purposes. Firstly, it fosters students' teamwork and innovation skills. Secondly,

it addresses existing issues in traditional teaching methods by allowing junior students to gain early exposure to the theory and practical aspects of network advertising case production. Additionally, it provides opportunities for mentors and students to establish collaborative relationships with internet companies.

With the changing times and technological advancements, educational and teaching models need continuous innovation and development. The comprehensive use of various educational and teaching methods can better align with the needs of the era and technological advancements, promote educational effectiveness, and achieve the goal of mutual learning in teaching. The concept of “mass entrepreneurship and innovation” has not only become a crucial driving force for economic and social development but also continually propels the evolution of talent development models in vocational education. To better adapt to market demands, the arrangement of teaching processes should be oriented towards practical goals, integrating knowledge systems, curriculum frameworks, and fostering qualities and skills. This approach helps students adapt more effectively to the development and impact of the digital era's commodity economy and ensures that courses are well-suited to the rapid progress of modern science and technology. Ultimately, it prepares society to nurture a greater number of highly skilled professionals.

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