

Research and Practice of Online and Offline Hybrid "Golden Course" for the Core Curriculum Group of Art and Design Majors

Lei Zhang^a, Hongman Xie^{b,*}

Zhengzhou University of Light Industry, Zhengzhou, China

^a908343326@qq.com, ^b466938558@qq.com

*Corresponding author

Abstract: This paper takes the art and design major as the object of research and practice and conducts theoretical research and practical exploration of online and offline hybrid teaching. Not only does it conduct research and exploration in multiple dimensions such as teaching content, teaching mode, teaching effect, assessment topics, and evaluation system, but also through the establishment of course clusters, the independence of courses in the core course cluster of the major and the correlation between courses will be researched, and the idea of combining course modules within the core course cluster is proposed, so that the modules are in an orderly relationship with each other and can be freely combined within the scope, integrating the core courses of the major. The core courses are designed to be integrated, upgraded and restructured. This study provides innovative methods and ideas for creating an online and offline hybrid "golden course" for art and design majors.

Keywords: Art and design, Course cluster, Online and offline, "Golden course"

1. Introduction

The rapid development of information technology, it provides a variety of possibilities for teaching methods in universities. In the context of the new crown epidemic and with the support of national policies, online shared courses are developing rapidly. Online courses have great advantages, but purely online courses have many drawbacks, such as flat knowledge content, lack of interactivity, and inability to complete experimental teaching. Traditional offline teaching also faces many problems, such as classes are not lively enough, large classes cannot be taught according to the material, etc. To solve these problems, improve the quality of the course and create a real "golden course", it is necessary to reform the education model. Therefore, various universities have started to explore the practice of online and offline hybrid teaching, To promote the improvement of teaching quality and change in teaching methods. Art and design is a discipline that closely combines theory and practice, and is a combination of art and technology, with strong practicality. Based on the course cluster, this paper expands, enriches, and reshapes the content of professional courses, provides directions for the construction of online and offline hybrid "golden courses" for the professional core course cluster, and researches a set of operable online and offline hybrid teaching mode for the professional core course cluster.

2. The current state of development of hybrid online and offline "Golden Course" construction

2.1. Status of research abroad

Online education has been practiced in the United States since the early 1990s, and it was realized that online teaching could not replace offline teaching [1]. The concept of "E-Learning" was first introduced by education experts in the US in 2000, and blended learning was first introduced to education in the UK and the US in 2008. In 2017, more than 500 graduate schools in South Korea started to implement blended learning [4]. Singapore and Japan also attach great importance to the study of blended teaching methods.

In a study by Dong Shuang [5], it was shown that art and design universities in the UK use a thematic approach to teaching and learning, with research and discussion around a topic through various related fields. Zufeng Wu; Tian Lan; Ruijin Wang; Xiaohua Wu; Qiao Liu [6] and others took a software

engineering course as an example to explore the establishment of They explored the development of a "four-stage iterative" and "dual-element combination" curriculum framework and demonstrated the development of a "golden curriculum" for hybrid teaching through practice. Lan SU; Chun SU[8], pointing out that in the context of information technology in education, the course "Teaching Toy Making" was used as an example to establish the link between online and offline classes. Heilporn Géraldine, Lakhil Sawsen[9] studied the teaching strategies and student engagement strategies of a blended curriculum model. The results revealed three types of engagement strategies: socio-emotional, design, and organizational.

2.2. Status of domestic research

Since 2003, the Ministry of Education has issued several policies to support the construction of high-quality shared courses, and in 2013, many higher education institutions signed up to the MOOC platform, with Tsinghua University and Nanjing University also joining the online public courses. Through "MOOC", the learning information of universities can be disseminated online, so that the learning resources of universities can be used for diversified and personalized learning in any place and with any device, meeting the needs of personalized and diversified education [10]. 2016, China's universities strengthened the construction of online open courses [11]. In June 2018, Minister Chen Baosheng proposed to turn "water courses" into "golden courses" with more depth, difficulty and challenge. Han Lixia [12] pointed out that a hybrid "golden course" teaching mode of "online before class + online during class + online after class" can be used. In recent years, many universities have reorganized and re-exported their courses according to the actual situation of offline courses and the characteristics of students, providing ideas for creating a "golden course" that integrates online and offline [13]. The concept of dual-line blended teaching was first proposed by Professor Chen Li's team, emphasizing that dual-line blended teaching should provide learners with a blended environment and blended resources, and during the prevention and control of the New Guinea epidemic in 2020, the "suspension of classes and non-stop learning" was proposed, which made dual-line blending highly important. Professor Li Zhengtao of East China Normal University has shown that the highest level of integrated education is the co-existence of two lines[14]. Wu Yan [15] points out that the development of dual-line blending to a certain extent is a blurred demarcation of the hybrid curriculum. Yang Yang [16] and others show that dual-line blending refers to the intermingling of online and offline courses, relying on each other and complementing each other's strengths and weaknesses. Wang Yuefen [17] pointed out that teachers make comprehensive use of various resources and make reasonable use of the advantages of the two teaching methods to achieve a teaching style that tailors teaching to students' needs and promotes their development, emphasizing the main role of teachers in the dual-line integration teaching [18].

To sum up, whether abroad or at home, many scholars have made many explorations on the online and offline hybrid teaching mode, which has played a role in promoting the development of dual-line hybrid teaching. However, the theoretical research on online and offline hybrid teaching of core courses in art and design is still relatively small, and there is a shortage in practice. In the current era, driven by national policies, the continuous development of information technology and the continuous reform of the education model, the construction of online and offline hybrid "golden courses" with professional characteristics in various universities and professional fields will be an inevitable trend in the development of future teaching models.

3. The reform practice of blended teaching in the core course cluster of art and design

3.1. Integration and integration of multiple courses to create a three-dimensional and exquisite classroom

3.1.1. Course Structure Design and Content Reconstruction

At present, most courses in higher education are taught in large classes. Under this teaching method, there is an urgent need to solve the problem of classroom interaction and teaching according to the needs of the students. With the same class size, we can explore teaching methods that are tailored to the needs of the students, combining online and offline teaching, asking open-ended questions after the theoretical knowledge in the online course, and guiding students to think and research in class, so that students enter the classroom with curiosity and questions, participate in the in-class interaction with interest and enthusiasm, and complete their tasks after class with temperature and methods.

The development of the hybrid teaching mode also reveals the outstanding problem of whether the

online and offline teaching contents have effective correlation. By conducting a longitudinal study on the correlation between the online and offline teaching contents of the general art and design course, the similar knowledge points between the courses are sorted out and the original knowledge points and corresponding experiments are better linked. From the teaching of design thinking methods to the guidance of concrete practice, the online and offline courses alternate, with different categories of design methods corresponding to different experimental classes, and in the process of practice, the methods and concepts can still be reviewed with the help of the online courses, promoting each other. This completes the complete, holistic learning process from the inspiration of students' thinking, to the mastery of concepts, and finally to successful practice. The integration and upgrading of the course has not only improved the quality of the course content and the effectiveness of the lectures, but has also solved the current situation where the specialised courses are fragmented from each other and produce students who are not able to integrate and apply what they have learnt, making the course a high level course that meets the national standards for quality courses.

3.1.2. Construction of Professional Core Curriculum Clusters

According to the training objectives of the art and design profession, with the aim of perfecting the knowledge structure and improving students' learning ability, the horizontal correlation between the courses within the core curriculum of the art and design profession is studied, so that the courses are relatively independent and do not exist in isolation, and the core curriculum cluster is built in a relatively free and orderly organisation. The core curriculum will be divided into several modules, which are in an orderly relationship and can be freely combined and cross-learnt within the scope, so as to ultimately achieve the goal of teaching and learning according to different abilities. The core curriculum is divided into a number of modules in an orderly manner and can be freely combined and cross-learnt to achieve the goal of developing different competencies. Not only can this achieve the goal of training people with different abilities in the context of large class sizes, but it can also help students to build a three-dimensional knowledge system through the combination of different sequences and the exercise of the abstract - figurative - abstract thinking process. It also helps students to develop a three-dimensional system of knowledge, understanding and comprehensive application.

3.2. Theme-based experimental course design with a two-way approach to guidance and coaching

In the reform of the teaching of art and design courses, a theme-based course design is introduced, i.e. a topic is set and students are required to conduct research and experiments around this topic, in the form of one research topic, which comprehensively includes and links the contents of several core courses in art and design. Students will be guided to take a global view of design trends, concepts and hot spots at home and abroad, for example, clothing design through "one-piece", "zero waste", "recyclable" and so on. In the course of tutorial exercises and experiments, common problems will be identified, and the main points of experimental operations will be demonstrated and explained in a timely manner. The students will also be able to see the same problems in the experiments. This method increases students' interest in learning, broadens their horizons on the basis of their knowledge, and enables them to develop their research skills on a subject. Each topic unfolds vertically, encompassing several core professional courses, and the horizontal intersection of each topic creates a complementary knowledge. In terms of teaching, a two-way parallel between guidance and tutorials is also achieved.

3.3. Alternating between online and offline lectures, with layers of progression leaving no doubt

Under the traditional teaching mode, both online and offline teaching have certain limitations, and education and teaching encounter many pain points such as the classroom is not lively, the curriculum framework is not three-dimensional, the learning content does not have breadth and depth, the teaching method is single, and it is difficult for teachers and students to interact in large class sizes. Build a three-dimensional blended teaching model. It can effectively alleviate the sticking points and make teaching better achieve its purpose.

For example, the theory of integrated design methods is taught online, while offline training is provided through corresponding experimental tutorials, to maximise the possibilities of transformation between design concepts and physical objects, to integrate a variety of design techniques, and to apply and integrate the disciplines, so that online and offline are not two completely separate parts, nor are they simply juxtaposed, but are inextricably complementary. Module, module between online and offline content throughout the interweaving, without leaving doubts in an orderly and in-depth, timely digestion and absorption. Solve the pure theory class has been instilled, students receive too much information but

can not digest and practice in time, seem to listen to understand but can not find the problem, resulting in the lack of ability to realize their own design ideas; pure method of teaching is often too boring, the arrangement of the content has a strong restrictive, can not stimulate students' creative thinking ability, practice after the impression is not deep enough, not able to integrate the content learned, class motivation The content is often too limited and does not stimulate students to think creatively. The alternate online and offline teaching is not only a change in teaching methods and platforms, but also an effective reform to enhance the quality of the curriculum and optimise the effectiveness of the students' classes, which can truly achieve a cascade of knowledge and leave no doubt.

3.4. Setting heights in theoretical sessions and digging deeper in experimental sessions

The theoretical lectures are conducted in a modular format from different aspects of research and creative design methods, while theoretical research from similar international institutions is brought into the classroom. At the same time, we use experiments to consolidate and deepen what we have learnt, visualise theories, dig deeper into the subject and explore more effective experimental methods, so that students can finally produce research results with academic depth.

In the past, I have always felt that students have a narrow reading range, and although they have a good grasp of the relevant areas of knowledge, they have a single and unimaginative knowledge framework, a superficial, flat and undepth grasp of theoretical knowledge, and a lack of thinking about their own area of expertise. In the past, teachers also shared some good books and recommended students to read them in class, but the effect was not good, few students actually read them and read them completely, and even if a few students finished reading them, they lacked the ability to stimulate independent thinking. Therefore, in the teaching reform practice in the theory class part of the common reading a book, students are required to use the class time to complete the designated chapter reading and annotate, and in the discussion time to answer questions and share their feelings after reading. For example, in the 'Creative Design Thinking' course, students read 'Lai Shengchuan's Creativity' together; at the same time, students are required to watch a film for each chapter, and discuss it after class. learning and as a supplement to knowledge, urging and guiding students to think. In this way the classroom is made truly three-dimensional, changing the once flat and monolithic classroom and making the theoretical course more enriched and three-dimensional.

In terms of experimentation, it is not a mechanistic way of learning, to make students actually experience the process of transformation from concept to practice. Simply completing the teaching on production methods is not the ultimate goal, but to make students understand theoretical knowledge in depth and find methods, innovations and problems in experimentation, before forming a new theoretical-style summary. The aim is to raise the level of awareness, to explore the depth of knowledge, to broaden the breadth of knowledge and to create an all-round three-dimensional classroom. And through innovative methods such as theme-based research and shared reading, to enrich the classroom format and multi-faceted theoretical knowledge, so that theoretical teaching raises the height but does not lack multi-faceted experimentation, tapping the depth of knowledge but eliminating boring indoctrination. The three-dimensional classroom is created from multiple angles and levels.

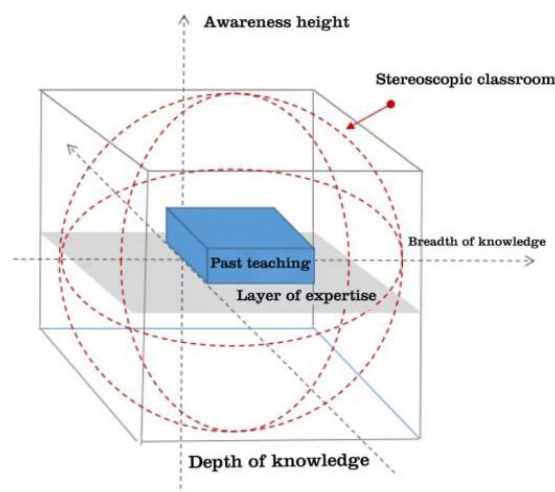


Figure 1: 3D classroom model

3.5. Classroom management as a guarantee to build a platform for learning and communication

Changing the traditional way of taking the final coursework as the assessment standard, the course assessment is divided into two parts, online and offline, according to the proportion of credit hours, online courses are given marks based on the completion rate, the total score is 30% of the grade; offline courses are given marks based on the students' practice in professional classrooms and laboratories, accounting for 70% of the total grade. The offline experimental part of the course grade is marked by two or three teachers according to the experimental situation, and the average grade is the final grade of the experimental part. A "mini-punching program" is used as a reference for the usual grades in the assignment submission and critique sessions. Through the learning platform, students are able to ask questions before the class so that they can study effectively, communicate and interact with each other at any time during the course, share their assignments on the platform, view other students' work and teacher comments at any time, so that they can monitor and learn from each other, and revitalise the online course so that students can participate in the completion of the class. Once students are motivated, the online course not only serves as an important part of the professional core course, but also enables the construction of an online learning and communication platform to share offline experimental cases and results, and to realise the sharing and mutual appreciation of learning outcomes.

4. Summary

This paper mainly focuses on the problems and shortcomings of traditional art and design teaching, and studies the teaching mode of online and offline hybrid "Golden Course". The course content and format are closely linked, and the course content and format are closely linked. The content and format of the course are closely linked, interlinked and mutually reinforcing, so as to achieve the aim of a high-quality course and efficient teaching. The programme is designed to optimise the training of high quality applied talents who are able to adapt to the needs of global sustainable development and cultural diversity, who have a national cultural stance and an international perspective, who are humanistic and socially responsible, who have a solid grasp of professional theory and multidisciplinary knowledge, and who are capable of interdisciplinary collaborative innovation and entrepreneurship. However, in the case of art and design, the core curriculum is consistent, with similarities in theoretical teaching, inspiration, practical processes, design evaluation, error correction and other aspects of training. The research findings of this paper can provide feasible solutions and ideas for the reform of online and offline hybrid "golden courses" in other disciplines under the art discipline.

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