

Research on the Application of Multidisciplinary Penetration Teaching in Sanitary Ware Ceramic Design Course System

Qiong Zhao, Yuanyuan Wang

School of Design Arts, Jingdezhen Ceramic Institute, Jingdezhen, 333403, China

Abstract: The purpose of multidisciplinary infiltration teaching research in sanitary ware ceramic design system is to promote the mutual integration of courses, make the teaching system more systematic and form a cross-progressive relationship. Through theoretical research methods, deeply analyze the research direction of teaching reform, effectively solve the problem of the relationship between related disciplines in sanitary design course, and provide a theoretical basis for the setting and adjustment of disciplines.

Keywords: Sanitary ware ceramic design; Teaching research; Multidisciplinary; Integration

1. Introduction

Different from the traditional sanitary ware ceramic product design, the ceramic design in modern sanitary ware space must conform to the modern people's aesthetic and usage views. Modern sanitary ware ceramic design has risen from abroad and started with the pace of reform and opening up in China. The training of directional designers for sanitary ware ceramic design in China is just beginning. In this paper, research work is carried out on some problems in the actual design work and related professional teachers' design courses.

Sanitary ware ceramic design is a new discipline. In view of the opening of this discipline, the college is committed to cultivating professional talents with generous cultural background and social science knowledge, as well as strong practical ability. The development of sanitary ware ceramic design courses will improve the teaching development of the college's overall structure. It is proposed that the teaching of colleges and universities must adapt to the development of the times, conform to the needs of enterprises and the international education system, and make bold innovations in teaching methods so that students can achieve success in cross-disciplinary and become talents with comprehensive qualities.

2. The Goal and Significance of Multidisciplinary Penetration Teaching Reform in Sanitary Ware Design Teaching System

To develop the new discipline, we should improve the teaching plan, adjust the course ratio and optimize the discipline in continuous improvement, so as to make the

establishment of sanitary ware ceramic design more mature and improve the comprehensive quality of students.

In the past, there has been a clear system in the traditional daily ceramic teaching experience, which can be fully and comprehensively applied in the teaching contents, such as daily ceramic design, ceramic painting, mold design, etc. However, in the teaching of sanitary ware ceramic design, because the research on the educational content of sanitary ware design is still in initial stage, the comprehensive multidisciplinary infiltration teaching has not yet been fully achieved. As a result, students cannot integrate knowledge well in the process of designing in their study.

Sanitary ware ceramic have a long history of development in China and play an active role in people's production and life. In recent years, China's sanitary ware ceramic industry has gradually emerged in various spaces as a "sunrise industry" and achieves great development. In order to obtain greater investment benefit and continuously expand production scale and product quality, many domestic enterprises are also continuously upgrading their technology and design. Although there is such a huge market for sanitary ware ceramic, few colleges or universities in China take sanitary ware ceramic design as a discipline to train graduates, thus lacking systematic research on sanitary ware ceramic design.

The establishment of the course system of sanitary ware ceramic design is particularly urgent. Both the process research of its design method and the discipline research involved in its teaching process are urgently needed in the teaching process. In the process of actual teaching, multidisciplinary comprehensive teaching is taken as the basis of research and practice. First, students need to de-

velop professional skills and theoretical knowledge of sanitary ware ceramic product design. Secondly, the research will be incorporated into the teaching practice to cultivate students' ability to analyze the sanitary ware ceramic market and research the design theory, and to cultivate their ability to apply the knowledge they study comprehensively. Third, on the basis of practice, the correctness of teaching and research should be verified so that students can fully apply the disciplines they take and truly and independently finish complete modern sanitary ware ceramic design.

The application of multidisciplinary infiltration teaching in the teaching of the discipline makes the program method of sanitary ware ceramic design clearer and have more characteristic of the college. Sanitary ware ceramic design is a comprehensive discipline of multidisciplinary cross - application. It is a comprehensive discipline of ceramic art design, environmental art design, industrial design and so on. It involves many aspects in teaching content, if it can be well integrated in course design and teaching.

3. The Basic Ideas and Methods of Multidisciplinary Teaching Reform based on Sanitary Ware Ceramic Design

In the conventional teaching, the teaching of sanitary ware ceramic design under the ceramic design subdivision only makes fine design according to the design characteristics of this discipline. Although students have mastered the design forms and techniques of each course, they cannot better understand the significance of a single course in the teaching system. The teaching reform of series of sanitary ware ceramic design courses is a comprehensive teaching creation of various courses in the actual teaching, and the related courses are treated systematically as a system, which clarify the order of course service, thus forming a combination and progressive relationship in course learning and better cultivating comprehensive design talents.

In the research of the course, we will follow scientific research methods and reasonable research theories, such as adaptability principle, problem principle, openness principle and practicality principle. Through theoretical research methods, the infiltration between various disciplines and sanitary ware design courses are analyzed in depth to explore the contents and attributes of details of each link. At the same time, through the teaching practice research method, the research theory of this paper can be implemented in the course, and the penetration between relevant disciplines will be strengthened.

In the discussion of multidisciplinary infiltration teaching, the three courses of Sanitary Ware Design, Model Making and Display Design for sanitary ware ceramic design are carried out. These three courses are specialized courses in the first semester of junior year, each course

has a four-week period. In the attempt of comprehensive teaching, the design task of a single course is required to be completed, while the three courses are jointly created, applied and finally displayed in space, and a joint exhibition of course completion is also required.

4. The Main Contents of Research on Multidisciplinary Infiltration Teaching Reform

4.1. Overview of the research at home and abroad

Compound talents have strong comprehensive ability and practical ability, cannot only master and use all kinds of professional knowledge in this discipline, but also can understand and master other disciplines related to this discipline, and can effectively integrate all kinds of information to achieve the goal of solving problems, that is, "one specialized and comprehensive" talents. At present, the compound talents needed by the society should have a solid foundation, broad knowledge, strong ability to use knowledge, comprehensive quality and scientific innovation spirit, that is to make students become highly efficient talents with scientific knowledge structure, solid professional foundation and professional subject practice, which requires us to consciously refine and integrate multidisciplinary and teach students comprehensive knowledge in teaching.

4.2. Practice and exploration in this field at home and abroad

China is an ancient ceramic country with a long history, and its ceramic culture is extensive and profound. The real modern sanitary ware ceramic started almost thirty years ago. The domestic sanitary ware ceramic industry has developed rapidly and has experienced rapid development from small to large, and has made great progress in various fields.

Some sanitary ware ceramic industries in Europe and America are representative to some extent. In particular, Italian and Spanish ceramic culture industries have their own unique views on the development direction of sanitary ware ceramic design and have a clear positioning for the cultivation of comprehensive talents. It is proposed that design is a comprehensive combination of concepts, advocating people - oriented, functional, cultural and aesthetic concepts to convey design thinking to the greatest extent.

4.3. The specific implementation content of teaching reform

For the first time in teaching, the series of sanitary ware ceramic design courses have made comprehensive teaching creation for various disciplines, and the related courses need to be treated systematically as a system, which has never been done before. This needs to consider the order of course learning and clarify the order of

course service when making the training plan, so that the course learning can form a combination and progressive relationship. At the same time, it is necessary to coordinate each teacher's teaching plan before the class starts, so as to effectively form the infiltration and interpenetration of the course.

During the course of teaching reform research, many investigations and discussions were carried out among teachers, and the opinions of students majoring in sanitary ware ceramic design were actively listened to. The arrangement of teaching can fully pay attention to the intersection and integration of disciplines so as to form theories and apply them to teaching work.

Teaching reform and research have effectively solved the problem of the relationship between related disciplines in sanitary ware ceramic design and provided a theoretical basis for the setting and adjustment of courses, which cannot only serve the relevant disciplines of the college well, but also provide a model for the newly-opened sanitary ware ceramic design in colleges and universities.

5. The Popularization Value of Multidisciplinary Infiltration Teaching Reform Project

In colleges and universities, related design disciplines, especially the teaching units which have set up the direction of sanitary ware ceramic design, a certain theoretical basis is provided for the course setting and the arrangement of related design courses. It is the first time to cut into other professional courses in ceramic design courses, such as perspective, room design and display design, which have shown their role in teaching. At the same time, these courses better serve the professional direction of sanitary ware ceramic, which is the main content of the research and the node of key reform attempts in prac-

tical teaching, providing good service for the teaching of sanitary ware ceramic design courses in the future.

The direction of setting up sanitary ware ceramic design in domestic design colleges is only the initial stage, so our exploration of this professional direction has become more meaningful and important, which provides theoretical support for developing this discipline of colleges and universities and is very practical and easy to learn from.

6. Conclusion

In the research of the discipline, we have solved the problem of integration of related courses, clarified the order of course service, and formed a combination and progressive relationship between courses, so as to better train comprehensive design talents. However, there are still some related issues to be further studied. In the future research and construction, we will carry out more in-depth and follow-up research according to the professional characteristics of sanitary ware ceramic design, and timely communicate with relevant professional teachers in order to achieve a good cooperative teaching relationship and make the relevant teaching of sanitary ware ceramic more reasonable and coordinated.

References

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