The Study of Curriculum System to Cultivate the Thinking of Sustainable Development of Regional Culture
Taking Digital Media Art as an Example

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ABSTRACT
The excellent traditional culture of the region has rich development themes, and the cultivation of design talents needs to pay more attention to the inheritance of local culture with historical significance and value, and to the sustainable development of regional traditional culture. This paper studies the digital media art major of the university where the research team is located, discusses the necessity of training for the development of regional cultural sustainability in the field of design, and studies the training methods of design students' thinking ability on the sustainable development of regional culture, and the data and records of experiments. Re-design the courses in digital media art and further test the design to improve the effectiveness of the sustainable development of regional traditional culture for design students.

Keywords: regional traditional culture, sustainable development, curriculum reform

I. INTRODUCTION

Due to the development of society and economy, the migration of population, the convergence and integration of national culture, leading to the gradual demise of many regional cultural traditions, such as traditional food production techniques, traditional customs and rituals, crafts, traditional patterns and aesthetic expression. In recent years, it has become the consensus of the whole people to explore the local culture with historical significance and value in the region and promote the study of the sustainable development of cultural tradition. The protection and redevelopment of this popular traditional culture, the important reason for the protection and redevelopment of this popular traditional culture is that there are more and more front-line researchers' persistent appeal, and more and more social lying, secondly, it also has the government's policy orientation. The government has issued some policy documents on cultural development, put forward the concept of "cultural soft power" and played a positive guiding role in the research and development of regional culture. [1] These have contributed to the sustainable development of regional culture.

Regional culture has a wealth of development themes, such as regional traditional festivals, customs, crafts, literary classics, etc., are the sustainable development process can draw inspiration material. Ancient cultural resources, if not through the transformation of modernity, do not adopt international expression, they will always only be a tradition, but can not be transformed into a force. [2] This is also the important reason why many traditional cultures have lost the momentum of sustainable development and died out. At the same time, the Government issues series of documents promotes the transformation of regional cultural value sesame into commercial value, so that the regional culture has the inherent motivation for sustainable development.

The research of this project is mainly divided into two steps:

Firstly, the studies on area cultural development and design awareness situation of new university students.

Secondly, study on the teaching and training mode of developing thinking on the sustainable development of regional culture.

II. EXPERIMENTAL PROJECT FOR SUSTAINABLE DEVELOPMENT OF TRADITIONAL CULTURE

A. Participants

The project team selected two regional cultural projects and two freshman teams to participate in the practical research of regional cultural development. The two projects are guided by two teachers with rich teaching guidance experience. The student teams of the two projects are different, but they are selected from freshmen with a design background (age distribution is 18-19 years old). In the follow-up research, there are other teachers who have long been engaged in the teaching of design majors. Before starting the research, permission was sought from the universities. The teachers and students are voluntary, and the common results in the experimental process are licensed to the research team.

At the same time, the freshmen who are not involved in the experimental project in the research of digital media art majors in the university are used as observation samples. After three years of professional study, the group's thinking ability of continuous development of traditional culture will be observed.

B. Project

The first project is about the sustainable development of local languages and cultures in southern Fujian, China. This project mainly studies the Minnan language and culture in Minnan region of China, and carries out sustainable cultural design and development.

The second project is about Chinese herbal medicine culture. Chinese medicine culture has a long history of thousands of years, and its heritage is very rich. [3]and also have a broad public base and are widely used in the folks of southern Fujian. [4]

Both projects are typical sustainable development projects of regional traditional culture. The students will take a three-year project development under the guidance of teachers to observe the growth of students' thinking ability for sustainable development of regional culture.

C. Data

Regarding the sustainable development of local languages and culture in southern Fujian, the phased results of the development are: a research report in the first academic year, a calendar, a doll image design, and a Southern Fujian language learning card; in the second academic year, there is an animation of the Southern Fujianese nursery rhyme "Black Sky" [5], South Fujian language image expression emoji; in the third academic year, there are South Fujian language nursery rhymes animation work "Fishing Song" [6] and creative cultural surroundings.

Regarding the sustainable development of regional herbal culture, the phase results of the development are: the first academic year has a research report, herbal legend story illustrations and its creative cultural surroundings, and the herbal legend story set design; the second academic year has a herbal culture UI design ; In the third academic year, there is a herbal app design.

The following materials are summarized by analyzing the technical means and knowledge capabilities of the students' phased results, as shown in the table.

It can be found from "Table I" that the new technical means and new professional knowledge adopted by the project team's staged results are closely related to the new courses in student learning. As the learning professional knowledge accumulates and the design means gradually enriched, the project team's means of designing works are more diverse, and the comprehensive knowledge display of the works is also richer. It can be found that the improvement of thinking ability for the sustainable development of traditional culture is positively related to the learning of professional knowledge.

TABLE I.   TECHNICAL MEANS, KNOWLEDGE AND ABILITY ANALYSIS AND PARTICIPATING PLATFORMS CORRESPONDING TO THE PHASED RESULTS OF THE PROJECT

Analysis point	Sustainable Development of Local Language and Culture in Southern Fujian						Sustainable Development of Herbal Culture			
	Calendar	Doll	Learning card	"Black Sky"	Emoji	"Fishing Song"	Herbal illustration	Story set	UI Design	APP Design
Technical means	Graphic design software AI	Graphic design software AI	Graphic design software AI, PS	Animation Design Software AN	Graphic design software PS	Graphic design software PS, video production software PR	Graphic design software PS	Graphic design software AI	Animation Design Software AN	Animation design software AN, graphic design software AI
Expertise	Aesthetic law	Aesthetic law, Modeling ability	Aesthetic law, typographic design	Aesthetic rules, modeling ability, animation design, audiovisual language	Aesthetic law, modeling ability, movement law, animation design	Aesthetic law, modeling ability, movement law, audiovisual language, animation design, non-linear editing	Aesthetic law	Aesthetic law, typographic design	Aesthetic law, modeling ability, movement law, animation design	Aesthetic rules, modeling ability, animation design, interaction design
Corresponding Grades	First academic year	First academic year	First academic year	First academic year, Second academic year	First academic year, Second academic year	First academic year, Second academic year, Third academic year	First academic year	First academic year	First academic year, Second academic year	First academic year, Second academic year, Third academic year
Project achievements	School Design Competition			Provincial competition		Provincial competition	School Competition, competition	Design Municipal	Provincial competition, National competition	Provincial competition

At the same time, an interesting phenomenon is that the mentors of both projects encouraged the project team to participate in various design competitions to test the level and value of the results. With the advancement of design projects, the level of the project's participating platforms is on the rise, the project team's motivation for innovation has increased significantly, and the award level for the achievement of identification has continued to improve.

III.   STUDY ON THE SYSTEM OF COURSES

The research team introduces regional traditional cultural development topics into the basic curriculum. These selected basic courses mainly include basic courses in design majors, which are set as basic modeling courses and basic design courses. The series of basic modeling courses mainly include basic courses of drawing such as "Design Sketch", "Design Color" and "Sketch"; the basic series of design courses mainly include "Three Components" and "Comprehensive Materials". The teaching goals of these basic courses require students to learn professional knowledge and techniques on the one hand, and to use design expertise in the subject selection of curriculum creation, and finally hope to realize the design thinking of trainees, combined with color painting Basic techniques to study the use of color in practical design topics to create complete works.

Traditional cultural development projects introduced in different courses need to meet the training requirements of the course. For example, the traditional regional cultural development projects introduced in the "Plane Composition" course requires project development to have graphical characteristics, while the traditional regional cultural development projects introduced in "Design Sketch" have graphical characteristics. At the same time, these courses require traditional culture The development stage results have the commonality of sustainable development, and can be introduced into subsequent courses of software technology in subsequent courses, so that the project is

further developed in a digital manner. The matching of research projects and teaching goals can better promote the clarification and enforceability of teaching goals, and it is also conducive to the realization of the goals of professional courses for the sustainable development of traditional regional culture.

Next, the research team sorted out the logical relationship between various types of professional courses. It is necessary to consider that different series of courses can continuously cultivate the development ability of traditional regional culture, make the connection between courses more harmonious, and maintain consistency in the goals of students' creative thinking training. After introducing a course on traditional cultural development topics in the pre-courses, it is necessary to choose the appropriate follow-up courses so that the topic can be further designed and developed. This stage of the curriculum includes a part of the design technology curriculum and professional knowledge theory. Basic design technology courses, such as graphic design, image processing, video editing, and animation production; professional courses include "Animation Production Basics", "Storyt Board", "Script Writing", and "Virtual Reality". The teaching objectives of these follow-up courses require students to learn professional knowledge and techniques on the one hand, and to conduct in-depth design of regional cultural development topics at the basic course stage in the course creation topic, design direction and course learning. The direction is related to further improve students' creative thinking and ability.

IV. EXAMINATION THE RESULT OF COURSES SYSTEM

The research team chose the course "Design Color" as a test course.

The requirements in the course "Design Colors" are:

- Master the use and expression of color in design;

- In the comprehensive topic selection, two topic-oriented color creation topics with experimental nature are given. One is "Colors in Southern Fujian Culture" and the other is "Marine Environmental Protection" as the color design topic [7].

In the first course, works of the topic "Colors in Southern Fujian Culture" were selected. 43 students participated in the assignment of this topic. Students were required to submit preliminary manuscripts in the course. Various manuscripts covered all aspects of the regional culture of Southern Fujian, which fully mobilized the students' innovative motivation. After completing this stage of study, the subsequent course selected is "Vector Design", which requires students to

scan or redraw the work into electronic manuscripts, and conduct in-depth detailed processing of electronic manuscripts to make them more sustainable. Some trainees will The special creative achievements of "Colors in Southern Fujian Culture" are developed into electronic works such as themed cards and posters. These works need to be brought to the comprehensive class to continue the design, such as choosing the direction of interaction to design and plan the rules of the card game. Create product design direction to design the mascots and other peripheral products with the same theme, or choose the direction of animation and film and television to interpret its core settings, thereby enriching the design expression of this topic and effectively promoting the sustainability of regional traditional culture development.

In the second phase of course "Color Design", choose the "marine environmental protection" as the theme requires students to complete work related to the creation, which is computer design contest in Fujian Province in the same year, in the current curriculum, 36 students have got involved, with expertise in the design of color into the theme of creation, the completion of the works are to participate in the competition, 5 works won awards. We can see that the impetus of design professional learning through participating in competition cannot be ignored.

V. CONCLUSION

The purpose of this research is to promote the more efficient development of traditional regional culture, retain the value of regional culture, and achieve sustainable development. However, research projects also have practical difficulties. First, the experimental research cycle is long. The duration of thinking training for each period of students ranges from two to four years; and the period of starting professional courses and the setting of the teaching goals of each course are periodic (for each session of students, the study lasts three to four years), and the thinking training mode is practiced in the first students. If there is any improvement and correction, it needs to be practiced again in the second students; second, each individual student has the unique personality and the learning atmosphere of each period of students are not the same. It takes long-term research to find solutions with broad applicability and enforceability. The study did not take into account the individual circumstances of students involved in two regional cultural sustainable development projects. Therefore, their personal learning ability, attitude, and other factors may affect the experimental results. If you want to consider the impact of these factors on the experiment, you need to establish another dimension, and have sufficient experimental data for analysis. Third, the topic selection of the course only considers the results of several experimental topic selections, and does not

consider the differences between the experimental data caused by different types of traditional regional cultural development topic selection. In the future, the project team plans to enrich experimental topics for the continuous development of traditional regional culture in a variety of subjects, and analyzes the improvement of students' creative thinking in different projects in order to make our data more objective and accurate.

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