

The Paradigm Evolution of Community planning Project-based Courses —Enlightenment from the Rural Revitalization Course in Zhejiang, China

Wenyong Pei^{1,2,*}

¹ *Department of Environmental Design, Siva Detao School of Design, Shanghai Institute of Visual Arts, Shanghai, China*
*Corresponding author. Email: siva_pei@vip.163.com

ABSTRACT

The project-based courses of art and design universities are based on the principle of "serving the society", and the course structure follows the logic of social application needs and serves the society. However, in the face of social propositions in different scopes and contexts, the professional guidance of courses often appears to be solidified, and its systematic theory is relatively weak. Reflected in the curriculum methodology, we have insufficient research on the generality of the curriculum. Conventional curriculum implementation often places too much emphasis on empirical evidence, weakens the systematic thinking of sociology and philosophy, and does not pay enough attention to the cultivation of students' community emotions, social responsibility, and self-constructed knowledge. The sustainability of the curriculum is uncertain. All these situations require the curriculum to complete self-evolution, whether it is a re-understanding and innovation of social resources, or the organizational structure and service functions of the curriculum, thereby forming a new professional application force from the bottom up. This urgent need provides a structural basis for a new paradigm to create a community planning project-based courses.

Through the curriculum practice in different villages of Zhejiang Province, and in the curriculum reform of transforming project system into social experiment, we explore the second order logical thinking of service design and re-introduce the structural paradigm of this kind of curriculum through the integration of historical geography, social public relations and complex philosophy of science.

Keywords: rural revitalization, project-based curriculum, thinking logic (speculation), structural paradigm

1. INTRODUCTION

In recent years, in order to better solve the three rural issues, enhance the added value of agricultural industry and revitalize the countryside, various regions have invested in the construction of "characteristic towns", "whole area tourism" and other town development plans, using refined and innovative agriculture and local cultural activation strategies, Try to integrate the primary and secondary industries in the countryside into the service and consumer industries of the society. Therefore, many design universities have gradually transformed the original independent subject research courses of urban planning and design, environmental art design, landscape design, brand design and other professional directions into project-led, cross-professional practical courses.

2. The basic characteristics of project-based courses

The project-based curriculum is a curriculum content and

structural framework designed for the current specific project needs. It has an obvious problem orientation, and the proposed ideas and methods for solving problems are also clearly targeted. Therefore, the corresponding curriculum knowledge system is oriented and prepared according to the requirements of each project, with cross-professional characteristics, and the specific guiding theories are more in line with the problem structure of the project, and the expression of the results of the curriculum can better reflect the problem-solving performance. At the same time, the teacher team is mostly composed of teachers from different professions and experts from different industries, and complete project courses through temporary courses, studio special research courses, summer camps, etc.

These courses help students face the essence and realistic needs of design in a more flexible and practical way, effectively expand subject boundaries, promote the exchange of professional education and industry, and provide a good supplement to conventional design teaching, and are also very helpful to the university's local service function. However, because of the compliance with the principles of service design, the courses tend to place too much emphasis on empirical research and lack in-depth and systematic thinking about design philosophy.

Moreover, because the projects provided by investors are limited by time, creative direction and other conditions, there is less space for sustainable and deep research. The construction of the curriculum does not have the universality and applicability of the design method, which is not very helpful to the deepening and expansion of the subsequent courses.

While building the curriculum, the teacher team needs to establish a good collaborative communication channel with all parties to the project to handle huge amounts of information. However, because the cross-professional team cannot be stable for a long time, the information reuse rate is low, which will cause a lot of information waste. These situations pose great challenges to the faculty of conventional universities. Students will also lose part of the professional design skills training due to the complex information that needs to be processed in the teaching experience. The limitations of project conditions also make them not have enough time to slowly study the relevant design thinking system.

3. The phenomenon of undesirable differences in project-based courses

The maturity of the project-based curriculum model is not only related to the degree of development of related industries, but also closely related to the professional goals of the university and the ability of teachers to build courses. The difference caused by different variables is very big. We take social service courses on rural revitalization as an example, analyze its typical performance at the moment, and explore the model structure of project-based courses.

3.1 Self-righteous type

The tutors design project-based courses based on their own research interests in social issues and research needs. The connotation and extension of the course are grasped, and it is relatively random in terms of social needs and the professional system goals of the course. This kind of course is mostly implemented in conventional professional courses, using fake questions and fake methods. The implementation of the course is not difficult, the content to be completed is relatively one-sided, and the presentation of the results of the course is relatively free. Because the interpretation of real social needs is too thin, it is easy to cause project-based courses to talk to themselves and entertain themselves; students often fall into blind design arrogance and present optimistic self-satisfaction because of one-sided interpretation of the design context and reducing the difficulty of processing design information; or they feel that the design is boring and thin because of the lack of social responsibility and local emotion in the course, And then hit the students' design creativity.

3.2 Ignorance and fearless type

The instructor lacks professional experience in social services and is prone to misjudgment of the existing project background, base conditions and potential needs. The content and framework of the project-based curriculum set by the instructor, real questions and fakes, are expected to meet the professional requirements and curriculum goals, but also to meet the needs of actual projects. Therefore, the form and process of the course have the characteristics of a project-based course, and the presentation of the results will also achieve the course setting. However, the course results cannot pass the application evaluation and result conversion. Such training will cause deviations in the professional curriculum structure, and will also cause students to form a wrong understanding of the status quo of social development and curriculum design, which will cause them to be unable to think clearly and effectively transform the design when facing real needs in the future, and then produce the idea that school design education is useless.

3.3 Application uniqueness

This is one of the most common performance types of project-based courses. Design universities do not lack suitable and well-qualified project requirements, but due to factors such as school management, project location, organizational structure, task characteristics, and completion time, there are not many real projects to choose from. The direction that schools choose to project will generally focus more on social, geographic, or commercial effects, while ignoring the transformational ability of the project organization and the matching of project tasks and teaching capabilities. The whole process of setting up project-based curriculum from the implementation of school educational administration to specific teacher team is very fast, and there is not enough time for information sharing and feasibility demonstration of the project. Therefore, the curriculum is easily driven by the pursuit of social effects, commercial effects and other goals. No matter what form of process is adopted; it can easily become a low-cost operation method for commercial projects. It completely deviates from the social service significance of education and the goal of teaching itself. Let students question their own design value and design meaning, and thus lack the motivation for design.

3.4 Unsystematic and unsustainable

This is a typical performance of another project-based curriculum. In order to better emphasize its own recognition between schools and internationally, the design university will be keen to organize or participate in some inter-school project cooperation. The topics are basically real projects or competition projects that are

derived from social hot spots. The guidance team is composed of tutors, international experts, and industry experts from different institutions. The location, time, content, and implementation methods of the courses are temporarily determined. Course results are often presented through joint exhibitions and design texts. Such courses often appear once or twice due to the limitations of the course conditions. Therefore, the course objectives and framework cannot be established in a long-term and stable manner. The course content also lacks sustainable motivation, and the subsequent derivation and discipline expansion of the course are out of the question. Because students are recruited temporarily, they cannot cultivate the local emotional and responsibility needs of the project site in the short term. At the same time, the curriculum is a supplementary curriculum in the design and application of education, and it cannot be a regular professional curriculum and long-term construction.

4. Practical statement of project-based courses for rural revitalization

SSCPS (Soul Soil Community Planning Studio) of the Shanghai Academy of Visual Arts started the practice of the project-based curriculum for rural revitalization in Zhejiang Province in 2009. The whole process continues to the present, involving northern Zhejiang, eastern Zhejiang, and Zhejiang. There are 8 villages with different geographical features, development history, and industrial structure in the south. According to the practical goals and structure, the course is divided into three stages.

4.1. The preliminary construction stage of the rural construction project system course, 2008-2012.

At this stage, the courses are based on Wenzhou Yazhuang (Southern Zhejiang), Anji Meixi (Northern Zhejiang), Huangyan (Southeast Zhejiang), etc., through the living forms of villages such as mountain pits, wild tea mountains, and ecological orange gardens. The basic curriculum goals and design logic are drawn up, and the preliminary curriculum structure and teaching methods are formed. The course is 4 credits, including 72 school hours and 144 extracurricular practical hours. The subject has developed from a real subject hypothetical performance method to a real subject performance method. The mentor team is composed of teacher Pei Wenying, majoring in environmental art at the school, and a team of teachers from Shanghai Jiao Tong University and Huafan University in Taiwan. The students are mainly senior students majoring in environmental art design from Shanghai Institute of Visual Arts.

Each course starts at the beginning of September and lasts for 9 weeks. However, the basic setting of the village project docking and content will be completed two months in advance. The field surveys of about a week will trigger

the observation and analysis of the students, and propose the design direction and content, and then return to school to start a design course for about eight weeks. The goal of the course is to start from observing the spatial style of the village, experiencing the residential characteristics, and digging out the need for village activation, to cultivate students' awareness of community construction, self-discovery and construct a personalized system design framework. The core of the course lies in the common needs between different villagers, the reflection of public behavior in the space, and the expression experience of these social rights, production relations, cultural representatives and other content in the village space. Therefore, the content of the design works is basically based on three parts: the understanding and re-introduction of the village space, the behavioral experience design, and the visual identity design of the village, focusing on the re-introduction and re-design of the village space language and space spirit.

The course transitioned from the traditional way of thinking of space planning and design to the thinking mode of focusing on public needs under the guidance of postmodern geography (historical geography) theory and focusing on comprehensive design of space experience, and gradually has its own unique system. But also because the instructor team did not pay enough attention to the government's social development strategies and objective social needs. They only started from the spatial experience of the villagers' public activities, which led to the lack of logic and comprehensiveness in the content design of the courses. The design schemes presented by teachers and students were relatively thin. The results can hardly be transformed into executable projects. This also makes the instructor lack of effective evaluation on the cultivation of students' local emotion and design responsibility.

4.2. The exploratory stage of the rural construction project-based curriculum, 2013-2015.

Based on the accumulation of previous courses, we hope to further stabilize this type of project-based courses with the theme of rural construction. Therefore, the courses choose villages with basically the same historical background and value context, and allow a longer time for us to slowly adjust the experiment. After a long period of investigation and discussion, the project base is located in a typical city in the coastal area of central Zhejiang: Taizhou. Because Taizhou, Zhejiang, is geographically surrounded by mountains and seas, it has comprehensive landform types and rich layers, but with different characteristics. In history, because of its geographical distance from the political center, the social resources and official cultural influences obtained are less, and the folk customs appear to be free and powerful. In economic, due to the strong development of fishery and marine transportation in neighboring Ningbo Zhoushan, Wenzhou, Fujian, the distribution of local enterprises is mostly small

and scattered, with active private capital circulation, flexible transformation and iteration, but lack of innovative capabilities and flat markets. In the social structure, Taizhou peoples have experienced multiple migrations and mixed settlements for different reasons in a hundred years, resulting in different expressions of folklore in different villages. Various factors make the project context more specific, and the resulting design levels are more diverse.

Among them, the three settlements of Wuyantou, an ancient historical village of mountain dwelling on the post road type, Xuanmen Bay, an ecological farm of beach wetland type, and Dongsha, a fishing and tourism community of reclaimed peninsula type, have become our project bases for exploring the curriculum system method. In addition to strengthening cooperation between international institutions, SSCPS also invited industry experts to build a curriculum framework and reorganize the logical context; the student team is composed of undergraduates and postgraduates majoring in architecture and art design from the Shanghai Institute of Visual Arts and Huafan University in Taiwan. The broad team combination provides many possibilities for the design of the course. Starting from the government's needs for village development, we link different participants, and through various dialogue methods such as observation, experience, archiving, and understanding, we allow tutors and students to design and create in different directions of attention, correct the content structure of the course, and gradually It focuses on the construction planning that emphasizes the production and life of the village, the structural design of the development power of the village, the improvement design of public space, the design of village charm activities (including the restoration of the village's internal public activities and the design of external narrative tourism activities), the spatial application of visual identity and Surrounding cultural and creative sections.

In the communication between students and local governments, villagers, tourists, etc., we gradually clarified the boundaries of project needs and curriculum capabilities, and also realized the logical construction of topic information. The studios shifted from the traditional perspective of spatial planning to spatial sociology, interpreting and sorting out complex village information with relevant knowledge of public administration and historical geography, re-establishing complex systems of life, production, culture, landscape, and technology, and clarify the weight relationship and timeliness of each factor. On the whole, the course relies on the instructors' logical thinking on village development strategies and the creative divergence of students. The information of teachers and students is interactive and concrete in the process of observation and experience, brainstorming, strategy discussion, creative demonstration, project description, and design deepening. The results at this stage are more reasonable than the previous ones, and basically reach the curriculum goals. Students' works are basically required to be further deepened, but because we did not pay attention to the technical and service guidance of the

deepening of the works, the cooperative relationship between the truly sustainable project development and the discipline construction was not established, and only the comprehensive evaluation of the school curriculum was completed. It lacks the expansion of the discipline structure and the complete evaluation of social services.

4.3. The system completion stage of the rural construction project-based curriculum, 2016-2019.

Based on the observation of rural changes over the years, we realize that the understanding of rural areas has to incorporate a lot of phenomenological theories and subject models of complex systems, and it has become very important to reconstruct the system framework of construction project-based courses.

Only by re-understanding and pre-setting social needs and recreating project resources can the social service functions and professional research functions of university education be fundamentally solved, and the professional positioning and local value of the school can be discussed. Different from the previous site selection consideration of coastal villages, we focus on the following four aspects: the mountainous villages in Zhejiang Province, the execution and centralization of local cooperation teams, the collision supplement of different specialties between schools, and the stable continuation of the development direction of village planning. The government of Baofu town of Anji, Zhejiang Province started the construction of "characteristic town" in 2016. In the first phase, all ten villages in the region will complete the revitalization plan of the integration of village civilization, economic industry and space beautification with tourism as the carrier for a period of 5 years. At the invitation of the government, the studio selected five villages: Zhongzhang with ethnic minority characteristics, Tongli with historical relics, Baofu market town with lost trade, and Shenxi and Shiling in the farmhouse industrial cluster, and continued to carry out project-based courses. We hope to directly integrate social services, local emotional resonance, planning and design in the overall village development plan, and become the initial goal of the course.

The studio retained the main part of the course, only expanded in terms of the teacher and student team, execution time, and discipline structure, and tried new methods in the subsequent service transformation of the course and the introduction of student emotions. In addition to the international horizontal inter-school teacher and student team, the curriculum team also includes professional planning and design institutes, private capital investment teams, community building experts and local governments.

Compared with the conventional project-based curriculum, the project process follows the course; the current curriculum first follows the process of the project from planning to execution, and then logically inserts the course process. The advantage is that the conditional context of the course is more real and effective, and the

course rhythm and emotional introduction are also more public. In terms of discipline structure, the curriculum has been changed the previous strong guidance mode of tutors and hidden the research tasks. We get involved in the project from the perspective of students, stimulate students' local feelings through road observation, activity experience and other dialogue ways, and focus on issues from resonance to empathy with the local villagers, and then naturally fall into the needs of social and cultural reconstruction, and get the curriculum development results. Throughout the teaching process, basic theories such as public administration relations, microeconomics, information communication, and historical geography are naturally contained in the curriculum system, especially the socio-technical information closely related to the topic, such as: ecological theory of environmental conservation, land rights law, etc. These knowledge points become students' spontaneous expansion content under the guidance of the instructor.

The innovation of this stage lies in the fact that we link the project-based curriculum with the social service, and put the curriculum into the process of social revitalization practice. This not only completed the multiplier effect of local reform, but also smoothly integrated university education and social services. From such a height, its subsequent transformation and sustainable construction will be a matter of course.

But we found that there are still some variables in the course implementation. First, the centralization and execution of the local executive team is the primary external cause of the success of the project-based curriculum, the basis for the development of the project-based curriculum, and the main variable of the curriculum. Second, facing the social system of the real village, the curriculum knowledge structure requires the integration of social phenomenology, economics, information communication, art design, and technical regulations in order to fully understand and accurately find the design path. This is the internal cause of the curriculum and the driving force for the sustainable deepening of the curriculum. Third, teaching activities must be open to villagers, governments, and construction teams at different stages. The joint participation and interaction of the creative team is an important guarantee for the deepening and perfection of the subject.

Teachers play more roles in platform construction, project communication and filling loopholes. In addition to good communication skills, they also need to master the balance accurately. In addition to co-creation, teachers and students should also pay more attention to emotional resonance in local cultural narratives. Empathy with the base is the foundation of students' innovative design.

5. Conclusion: the paradigm of community building project-based courses

With the increasing number of participating teams, disciplines and information to be processed, the project's

service to the society is not only in the direction of community characteristics, policy basis, or business operation, but also has the influence of science and technology and geopolitics. Curriculum teaching methods have gradually changed from top-down strong goal guidance to bottom-up, weakly centralized methods of public participation. The project-based course is more like a community-based workshop course of subject experiments. These fine adjustments of these teaching models all show that the back-end system of the course has undergone a partial shift in the paradigm structure. We will elaborate on the theoretical basis, logical starting point, creative value and teaching model.

At first, the theoretical basis of the community building project-based curriculum comes from community construction and community space design. In response to common social needs, it emphasizes the creation of common social welfare through public power and professional innovation from the five perspectives of "humanity, culture, industry, landscape, and Taoism." However, in the path of project planning and design, the theoretical structure of the curriculum starts from "Tao", and gradually integrates the theory of rural construction with Chinese characteristics and the theory of Western public administrative relations. It has a strong impact on the phenomenological sociology, microeconomics and social sciences in the Western social sciences. The relevant knowledge in the information communication discipline has also been partially blended, and then the basic theoretical context of community planning under the guidance of critical sociology is formed. For the current and future construction and planning curriculum systems, the first series of professional theories are composed of planning and design theories and social science applied theories, and the metaphysical second series of thought theories will start from the complexity and systematic scientific philosophy.

Secondly, the basic setting starting from the philosophy of science must also reconstruct the logic of the curriculum. The previous course was based on the discipline of planning and design, following the logic of thinking of Bauhaus modernism in the first half of the twentieth century, surveying social contradictions with the attitude of professional elites, solving social needs, emphasizing empirical evidence and neglecting public participation. The post-observation and logical speculative perspectives gradually sink, and they begin to re-understand and interpret the resource circulation and spatial relationships of social organizations through the sociological deconstruction of linguistics, hoping to interact in multiple directions to solve part of the social needs. But in the process of social evolution, along with the expansion of the horizon, the ecological links of information circulation gradually show phenomena such as emergence from nothing, automatic control, incremental benefits, and entropy increase. This, in turn, requires us to reconstruct the logical thinking and theoretical framework of the project-based curriculum based on the complex philosophy of science. It also requires us to rethink the relationship between decentralization and strong

centralization in social needs.

Therefore, the value of creating a community planning project-based curriculum not only meets the teaching needs of the curriculum and serves the needs of the society, but also reflects: 1) Even if the creative projects inspired by the students' local emotions cannot fully meet the needs of social services, the distance between them and the actual needs just exceeds the value of empirical evidence and reflects the forward-looking judgment of university professional education. 2) The emotional journey of the students in the course enriches their later life experience level, and they tend to be more tolerant and ample for subsequent creation and employment. The public activities on site and villagers have also produced a lot of benefits for the village's future training system.

Finally, the new paradigm will inevitably lead to multiple alienation of teaching models. Teaching methods such as immersive narrative teaching methods, field experience, roadside observations, the extraction of spatial detail symbols and the deconstruction of social resource structures are all fully used, which has accumulated basic materials for the paradigm evolution of teaching models. We also studied the consequences of a single variable or a few variables in a semi-closed project environment; and the need to face social reality, whether these elements exist, and what proportional relationship exists. Therefore, in the near future, these nonlinear and complex teaching models can be decomposed by arithmetic methods, and relatively stable logical forms will inevitably be generated, including certain forms of weighted models.

What we need to do at present is undoubtedly to accumulate as many project-based curriculum cases as possible, and strive to build a bridge between disciplines and social phenomena in design projects. Incorporating the philosophy of science into our teaching structure helps us complete the evolution of university education.

References

- [1] H. George Frederickson. (2011) *New Public Administration*. China Renmin University Press, Beijing.
- [2] Robert Axelrod. (2007) *The Complexity of Competition: Agent-Based Models of Competition and Collaboration*. Shanghai People's Publishing House, Shanghai.
- [3] Daniel Bell. (2018) *The Coming of Post-Industrial Society*. Jiangxi people's Publishing House, Nanchang.
- [4] Huang Ruiqi. (2005) *Social Theory and Social World*. Peking University Press, Beijing.
- [5] Geoffrey West. (2018) *Scale: The Universal Laws of Life, Growth, and Death in Organisms, Cities, and Companies*. Penguin Books, Beijing.
- [6] Kevin Kelly. (2016) *Out of Control: The New Biology of Machines, Social Systems, & the Economic World*. Publishing House of Electronics Industry, Beijing.
- [7] Michel Foucault. (2001) *Les mots et les choses*. SDX Joint Publishing Company, Shanghai.
- [8] Pierpaolo Donati. (2018) *Relational Sociology: A New Paradigm for the Social Sciences*. Truth & Wisdom Press, Shanghai.
- [9] Thomas S. Kuhn. (2012) *The Structure of Scientific Revolutions*. Peking University Press, Beijing.
- [10] Wen Tiejun. (2006) *Theoretical exploration of new rural construction*. Beijing press, Beijing.
- [11] Wen Tiejun. (2009) *Problems of agriculture, rural areas and institutional change*. Economic Press China, Beijing.
- [12] Wu Jun. (2016) *Intelligent Era: Big Data and Intelligent Revolution Redefine the Future*. CITIC Press, Beijing.
- [13] Xia Zhujiu, Wang Zhihong. (1993) *The Cultural Form of Space and Social Theory Reader*, Ming Book Office, Taipei.
- [14] Janet. V. Denhardt, Robert. B. Denhardt. (2016) *The New Public Service: Serving, Not Steering*. China Renmin University Press, Beijing.
- [15] Pei Wenying. (2009-2019) *<Community Planning and Design> Course Completion Reports*. Shanghai Institute of Visual Arts, Shanghai.
- [16] Baidu Encyclopedia. (2020) *Chinese Characteristics Towns*. <https://baike.baidu.com/item/Small town with Chinese characteristics/20144095?fr=aladdin>
- [17] Zhejiang province Characteristics Towns Office. (2015) *Guidelines for the creation of characteristic towns in Zhejiang Province*. <http://town.news.cn/contents/66/506.html>
- [18] Li Qiang. (2017) *In-depth explanation of characteristic towns in the National Development and Reform Commission*. <http://town.news.cn/contents/67/496.html>
- [19] Baidu Encyclopedia. (2020) *Whole area tourism*. <https://baike.baidu.com/item/Global tourism/2987065?fr=aladdin>
- [20] GBF. (2018) *Guiding opinions of the general office of the State Council on promoting the devel*

opment of global tourism. http://www.gov.cn/zhengce/content/2018-03/22/content_5276447.htm

[21] Davost Intelligence. (2020) Comprehensive tourism. <https://www.davost.com/topic/comprehensive/index.html#js-first>

[22] Baidu Encyclopedia. (2020) Refined and innovative agriculture. [https://baike.baidu.com/item/Fine agriculture/22641507?fr=aladdin](https://baike.baidu.com/item/Fine%20agriculture/22641507?fr=aladdin)