

Study on the Curriculum Setting of Architecture Major in "Communicative" Teaching Module ——Taking "Contemporary Architecture Criticism" as an Example

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Abstract. Based on the teaching contents and characteristics of the "Contemporary Architecture Criticism" course of architecture graduate students, this article combines teaching practice with the introduction of a flexible and adaptable "communicative" teaching module. Through the online media, master interviews, critics' classroom commentary, cross-professional teacher-student exchanges, and other teaching processes, the interactive and interactive teaching philosophy can be embodied in curriculum training. We hope to stimulate the students to learn kinetic energy and the ability of thinking, to promote the coordination and interaction between "teaching and learning", "learning and use", to improve the teaching quality and to improve the teaching objectives.

Introduction

The Contemporary Architectural Criticism Course is a postgraduate degree course in architecture. The purpose of its teaching is to learn and think through basic theory, and to cultivate students' theoretical judgment and architectural appreciation from the height of theory. Improve academic level and creative ability. It is a professional basic course that emphasizes both theory and practice.

In recent years, the author has summarized and reflected the experience and lessons from the teaching process of "Contemporary Architectural Criticism" through the study of related teachers from other universities, critics of the construction industry, and previous exchanges with students. From the teacher's "grant" and the student's "acquisition", we make bold reforms and explorations of the course content and teaching methods to form a new innovation and perfection in the teaching system.

Course setting goals

In the "Contemporary Architecture Criticism" curriculum, on the one hand, we focus on cultivating students' ability to find problems and think actively, improve course teaching techniques, strengthen the practicality and interactivity of curriculum content, increase interest in learning, and expand professional vision and insight. On the other hand, we pay attention to the construction of building knowledge system, make the students know how to understanding, from the Angle of macroscopic and microscopic building in the world, and between formation and construction related professional courses complement each other, each other to promote good fit.

Therefore, we use the "Contemporary Architecture Criticism" curriculum as a carrier, "communicative" teaching as a means, change "passive acceptance" as "active acquisition", and actively implement the teaching goal of transforming professional knowledge into students' personal qualities. It is hoped that through systematic classroom training, a teaching module with strong application and operability will be formed.



"Communication" teaching module settings

From the question of "who is the classroom and who is the principal?", we answered and clarified that the formation of a "communicative" teaching model with students as the protagonist can also be referred to as a "turning" teaching experience.

Here, we put forward several can connect with each other, but also independent of the teaching content, such as the top 10 list, master interview, critics into classroom, network voting, grade across different professional communication, communication, etc. The corresponding teaching model forms a multi-dimensional dynamic teaching scene throughout the teaching process. The details are as follows:

Module 1: "Blog" Platform

At the beginning of the class, each student was asked to create his own blog and publish his blog address in the class, which became an important form of submitting assignments and reporting results after each class. This rule has been established since the first year of our contemporary architectural criticism class, and we have persisted in such a dialogue with students after school for several years.

On the one hand, it is convenient for the students to record the after-class information acquisition (after-school assignments) and experience of each lesson, which can be described as the "notes" of the learning process. Secondly, it forms a communication platform between students, and it is also convenient for teachers to communicate, review and assess the contents of students' publication in a timely manner. Third, it also attracted more Internet users to pay attention to and participate in the blog posts made by the students, and even participate in and interact with the class. Therefore, it enhances the social role of the course of study and also greatly enhances students' enthusiasm for learning.

Module 2: Information and Media

In the digital age, students can have extensive access to the interface of knowledge sources, which is far from being limited to traditional static graphic materials. The convenience and capacity of online media is beyond the traditional media. Students can use professional media knowledge such as online information sources, popular online voting, blog publishing, and big data to acquire professional knowledge through colorful, intuitive and dynamic learning methods. And be happy with it.

	The Influence of The Architect (The Result of Inheritance)										
Architect	Network Clicks	The Number of Downloads Quoted in The Paper	Number of Exhibitors	Number of Evaluations							
Wang Lu(王路)	1870000	1671	5	35							
Li Xiaodong(李晓东)	29600	1516	2	32							
Zhang Pengju(张鹏举)	66500	731	2	14							
Liu Kecheng(刘克成)	160000	961	3	21							
Wang Shu(王澍)	353000	3004	3	38							
Zhang Lei(张雷)	1300000	2224	4	8							
Shan Jun(単军)	1900000	1105	5	11							
Dong Yugan(董豫赣)	25800	2224	0	23							
Wang Xingtian(王兴田)	3230	703	2	6							
Cui Tong(崔彤)	173000	764	7	10							
Zhuang Weimin(庄惟敏)	82000	994	6	9							
Ni Yang(倪阳)	291000	1760	1	8							
Zhao Yuanchao(赵元超)	10300	652	0	6							
Zhu Xiaodi(朱小地)	770000	773	2	4							
li Xinggang(李兴钢)	64000	757	2	9							

Fig.1 The preliminary ranking of candidates obtained from online data selection and online voting.

In the specific curriculum setting, we propose topics such as the "Top10" list of architects with special achievements in a particular area, "Pritzker Architecture Prize winners prediction" and other topics, that is, asking for the evaluation of this specific topic and discuss. In this regard, information



media methods naturally become an important medium for students to obtain conclusions. For example, a student in the TOP10 competition with the title of "The 60th-erarchitect with the most inherited national spirit in China" first selected a total of 75 architects through online literature, and further selected the principle of selection based on the list. With the evaluation of the architects on the Internet and their online voting, 15 architects were selected and included in the list of candidates for selection (Fig. 1), which became the basis for the introduction of SPSS statistical analysis in the next phase.

Module 3: Approaching "Famous Master"

Even the best graphics and video files are not as realistic and vivid as the on-site immersive and verbal communication. In the teaching module of "Famous Master", we have set two related courses: first, we will bring many famous contemporary architecture critics into the classroom. Second, interview a famous architect and approach the architectural works they have designed.

First, in the "Building Critics Entering Classroom" section, we have repeatedly invited famous contemporary Chinese architectural critics, Professor Zhou Rong of Tsinghua University, and Professor Jing Qiuye of Beijing University of Civil Engineering and Architecture, or some young teachers and scholars to enter our classroom to provide students with related topics on architectural review, or participate in the classroom reports of students at different stages of the site for comment and discussion. Therefore, in the recognition and understanding of architecture ontology, it provides students with a new thinking and enlightenment with respect to a single way of thinking. At the same time, students are encouraged to use "Architectural Review" as a flexible way of thinking and practical ability.



Fig.2 Students approached an famous master and his work



Fig.3 In class, students discuss and communicate with graduate students in statistics.

Secondly, in the "Interview with Architects" session, we provide each student with a well-known architect as an interview object, that is, a one-on-one interview opportunity. Students can work in groups of two and they will agree with the master during their spare time. During the interview, the interview content was prepared in advance, and the theme of the Top10 list of the final results of the course can be selected based on the subject's personal architectural style or architectural ideas.



The novel and relevant course links have increased students' enthusiasm. From collecting and arranging the basic information of the master architect, to designing the interview outline, the discussion and exchange of the classroom, to the whole process of the interview and the collation of the results, it is substantial and unforgettable. More fortunate students, as well as the opportunity to visit the architect's work in progress with the architect she interviewed (Fig. 2). "I feel very happy to build a house. I will take you to see this house now, just like visiting a loved one." In an interview, the architect's inadvertent words left a deep impression on everyone present.

Module 4: Integration of Cross-Disciplinary Expertise

In the traditional sense, people have different perceptions and subjective awareness of architectural criticism. In this curriculum setting, we hope to see "architectural criticism" as a evaluation process on the separation, screening, differentiation and identification of buildings. The objectivity, scientificity, and quantification are taken as the criteria and analysis basis for the construction ontology.

	Total Variance Explained									I		1	Standard	Change Statistics				
			Initial Eigenvalu			Extraction Sums of Squa				ı		Adjust	Estimated	R ²				Sig. 1
Compo	nent_Total		% of Variance	Çum	ulative %	Total	% of Variance	Cumulative %	Mode	R	R ²	R ²	Error	Alter	F Alter		df2	Change
1		2.887	20.622		20.622	2.887	20.622	20.622	1	. 642a	. 412	. 397	6. 1404	. 412	26, 663		38	. 000
2		2.708 1.932	19.343		39.965 53.768	1.932	19.343	39.965 53.768	2	. 795b	633	. 613	4. 9203	. 220	22. 182		37	. 000
3		1.932	9.666		63.435	1.932	9.666	63.435	3	. 872c	. 760	. 740 . 845	4. 0324	. 127	19. 088 25. 329		36 35	. 000
•		1.154	8.244		71.679	1.154	8.244	71.679	4	. 928d . 950e	. 861	. 889	3. 1150 2. 6352	. 101	14, 906		34	. 000
6		1.016	7.254		78.933	1.016	7.254	78.933	6	968£	936	925	2, 1685	033	17, 207		33	000
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9		.477	3.407		92.594				9	.986i	. 973	. 965	1.4851	. 007	7. 575	1	30	. 010
10		.320	2.287		94.881				10	. 990 j	. 980	. 973	1.3049	. 007	9.854	1	29	. 004
11		.279	1.991		96.872				11	. 993k	. 986	. 980	1. 1107	. 006	12.027	1	28	. 002
12		.243	1.736		98.608				12	. 9951	. 989	. 984	. 9904	. 003	8. 214	1	27	. 008
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Fig.4 Introducing SPSS statistical analysis method to quantify the speculation of the winners of the Pritzker Architecture Award

SPSS as a top statistical analysis software, has been widely used in multidisciplinary quantitative research. In the curriculum setting, we introduced the statistical analysis method – SPSS. We invited statisticians and postgraduates to approach the classroom and communicate with the architectural students about the application of statistics (Fig. 3). From the early Top10 rankings to the predictions of the Pritzker Architecture Prize winners in recent years, we try to apply the SPSS analysis to data integration. Confirming survey data Whether it is suitable for factor analysis, constructing factor variables, making factor variables more interpretable, calculating factor variable scores and other analytical calculation steps, and providing basis for obtaining more objective and true evaluation results (Fig. 4). That is through the introduction of SPSS quantitative analysis, the perceptual "evaluation" of architecture is quantified by rational "price".

Although SPSS statistical results in the field of architectural commentary are still not perfect, especially for the Pritzker Prize winners of the world's tallest building awards, the difficulty is inferred because of the award-winning architects. Due to the limitation of the comprehensiveness and objectivity of information collection for award-winning architects, judges, and candidates to be selected, often the results of their final data rankings, online voting, and actual awards are very



different. However, as a kind of cross-domain teaching research and learning exchange, it has proposed more than one way for us to use "fishing". Constructing a multi-perspective, multi-disciplinary knowledge system has become a quality that critics should possess.

Module 5: "Comment" and "Be Criticized"

It is undeniable that the core of the architectural criticism course is a dynamic speculative process, which includes the ability of subjective and objective evaluation of specific buildings, construction behaviors, or architects. In teaching practice, we have transformed it into a variety of forms such as opinion statements and topical debates. Whether it is a discussion in the classroom or a blog posting on the Internet, students may be both commentators and at the same time the objects that are commented by classmates, teachers, critics, or online media participants.

As a specific behavior in the teaching practice, it can be expressed as follows: First, "evaluate" architecture and express personal opinions; Second, form a defense against "opponents (classmates)" to comment on their own views; and third, select the winning factors and scores to form the ranking of candidates, and it will be further verified by SPSS statistical analysis software.

In the course of "Assessment" and "Be Criticized " curriculum, its essence is a kind of growing, participating, multi-perspective and blending process. For many years of teaching, we have seen students' great enthusiasm for these interactions. The excitement of student discussion, the dynamism of ideas, and the ingenuity of methods often give us an admiration. Students who actively participate in the program have also benefited greatly, and their teaching results have greatly improved.

Summary

In the teaching of postgraduate contemporary architectural criticism, the "communicative" teaching method is introduced. On the one hand, it emphasizes the cultivation of students' active brain, hands-on, and active participation in teaching and learning. On the other hand, efforts are made to promote coordination and interaction between teaching and learning, learning and use. The upcoming interactive and interactive teaching concepts will be applied to specific teaching methods and curriculum training. Change the traditional course-setting method that is based on theoretical input, inspire students' interest in learning, and make professional theory study more practical and enlightening.

However, we often need to make reasonable arrangements for the clarity and efficiency of the content in class and after class with limited class hours. It is also possible to use 2-3 modules in the course, supplemented by other modules, or as a reference. This will help the student to the understanding of the teaching content.

In a word, our teaching objective of the graduate course in this building is a kind of interaction and interaction, which is an incentive to stimulate and learn initiative. It is a kind of learning habit and the ability to learn things. Let us experience the pleasure of "teaching" and "learning" in teaching practice.

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