

The Exploration of Ideological and Political Teaching Reform of Architecture Curriculum Under the Cultivation of Professional Quality ——Taking the Course "Fundamentals of Architect Business" as an Example

He Hai Fang^{1,a} Zheng Kan^{2,b*} Gao Jia Wei^{3,c}

¹ College of City construction, Jiangxi Normal University, Nanchang, Jiangxi, China

² College of Architecture and urban planning, Guangzhou University, Guangzhou, Guangdong, China

^a 382155503@qq.com

^{b*} 82823179@qq.com

^c 1572170548@qq.com

ABSTRACT

In view of the current situation of architecture education, this paper proposes the ideological and political teaching reform mode under the cultivation of professional quality. Taking the implementation of basic courses of architects as the carrier, through the construction of ideological and political education, it puts forward the training objectives and teaching methods of the reform, and explores the way of teaching reform of architectural education.

Keywords: Professional quality, Architecture curriculum, Ideological and political, Architect business basis

1. INTRODUCTION

Architecture is a discipline that studies architecture and its surrounding environment. For most architectural colleges and universities that have passed the evaluation of undergraduate education in architecture, training professional architects has become their orientation of undergraduate education in architecture.^[1] In addition to students' solid basic skills in design, the cultivation of professional quality focuses more on the cultivation of various factors that influence architectural creation, such as philosophy of life, way of thinking, aesthetic taste, and interpersonal skills. At present, "the foundation of a university is to establish morality and cultivate people", ideological and political work in a university involves the fundamental problem of "what kind of person to train, how to train people and for whom to train people", the classroom of a university has the function of educating people, not only for students "intellectual education", but also for students "moral education". Under the influence of the cultivation goal of professional quality and the ideological and political education concept of professional courses, the growth of ideological and political education in architectural courses has been accelerated.

2. THE NECESSITY OF IDEOLOGICAL AND POLITICAL TEACHING IN ARCHITECTURE MAJOR

Mr. Liang sicheng once taught students at tsinghua university: "an architect should have a wide range of knowledge, including the mind of a philosopher, the vision of a sociologist, the precision and practice of an engineer, the sensitivity of a psychologist, and the insight of a writer... But at its core, he should be a cultured, integrated artist." [2] Cultural accomplishment in a broad sense includes the comprehensive quality of cultural connotation and personal morality. Now China's institutions of higher learning education is given priority to with learning scheme design skills of architectural design, emphasis on professional knowledge and neglect moral education, architecture speciality students on knowledge structure and the requirement of professional architects have a certain gap, not enough to support architecture graduates as a "professional architect" based on the society. Because the student understanding of the architect's accomplishment and professional role is not comprehensive, it is difficult to a while to adapt to the society and the job, and the concept of "course education" to solve this contradiction. The ideological and political content throughout the course of the professional, in-depth

exploration of the combination of professional knowledge and ideological and political education, greatly enrich the ideological and political education connotation and extension, but also through the professional courses for students to establish a correct outlook on life and value orientation.

2.1 The ideological and political education in the professional teaching system is not comprehensive enough

The basic goal of architecture teaching is to train professionals engaged in architectural design. In the five years of teaching system, mainly for the construction of the professional knowledge to students. Different age of the orientation of training have some emphasis. The cultivation of professional knowledge starts from the lower grades, and systematic learning is carried out by designing core main courses from the shallow to the deep. However, ideological and political education is mainly in the compulsory general education courses in the first year, and the combination of ideological and political education in the teaching of professional courses is limited, and ideological and political education has not been paid enough attention. (Fig 1)

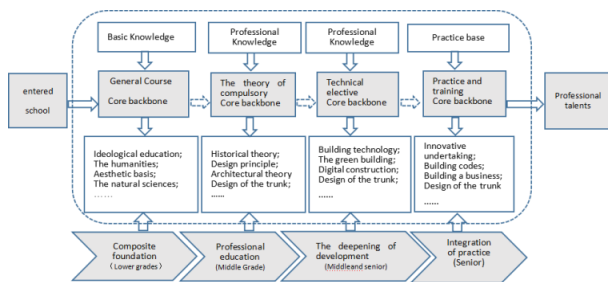


Fig1 Frame diagram of curriculum system of architecture major

2.2 The quality requirements of construction units for graduates are increasing day by day

At present, the construction industry has raised the quality requirements for professional architects, and the construction units also pay attention to the moral education of students from the aspect of recruitment and employment, so the quality requirements of graduates are increasing day by day. Whether students have the spirit of hard work, whether they have a sound personality, whether they show a strong desire for the post is one of the core criteria of their recruitment. The quality demands on the construction industry to the employees performance on the job whether to abide by their professional ethics, and the rigorous work style and the excelsior professional spirit, which can be subtly in the middle of the classroom education and edification, it also requires the architectural design cannot be confined to the classroom teacher to student's

instruction, more important is to lay a good foundation for the student's career. Therefore, it is necessary to introduce ideological and political education into the professional curriculum.

2.3 How to integrate professional teaching into ideological and political education

Curriculum ideological and political education is an important baton in the current education sector. Many colleges and universities have carried out relevant work on how to integrate professional teaching into ideological and political education in different professional fields. The teaching mode of architecture specialty has its particularity. How to integrate its curriculum system, curriculum tasks and teaching content into ideological and political education is mostly in practice, and no standard reference has been formed that can be implemented. At present, most of the research results are still focused on ideological and political education of a single course.[3]

3. TEACHING STATUS AND PROBLEMS OF THE COURSE "FUNDAMENTALS OF ARCHITECT BUSINESS"

The course "fundamentals of architect business" is aimed at students' comprehensive understanding of professional roles and professional environment before entering the construction industry, and always undertakes the fundamental task of "building people with morality". This course has been taught in our school with theoretical explanation as the main teaching mode supplemented by practice. Teachers guide students to learn and master the knowledge and skills related to vocational education, visit in design units to strengthen understanding, promote the student to the professional knowledge and improve, but in the experience of the traditional teaching mode to focus on the inheritance of knowledge and neglect the cultivation of the moral education, thought moral education is the counselor work, severely limits the students' practical ability and the level of moral education.

Architect business foundation from the Angle of the course, students will master architect history origin, construction and building production relations, the rights and obligations of architects and architects, the function scope of career management and organization, the design architect for the whole management as the key point of the core content of vocational education, to improve students' understanding of the professional architect, for the future work in the architectural design to provide the necessary professional knowledge. The architect business foundation course content, however, lay particular stress on the basic theory and research, the actual engineering case is relatively small, limited the choice of teaching material, knowledge is scattered and complicated, it is difficult to realize the social demand for students, as the technology by leaps and bounds and the trend of education is urgently

needed, this disconnect will be more apparent. Based on this, the teaching reform of "the foundation of architect's business" needs to innovate the ideological and political reform model of curriculum from the perspective of professional quality and improve the quality of talent training.

4. THE REFORM STRATEGY OF IDEOLOGICAL AND POLITICAL TEACHING BASED ON THE CULTIVATION OF PROFESSIONAL QUALITY

In order to achieve the goal of cultivating students' professional quality, let course become the effective carrier of ideological and political education, explore curriculum of basic course for the architect business education teaching new mode, modify the course syllabus, into the teaching content education material, perfect the evaluation system of the course, refining the evaluation contents and index, conform to the requirements of the new standard of architectural talents, the architect should have noble moral accomplishment and professional spirit. After the curriculum reform, the teaching task not only requires students to understand the nature and scope of work of professional architects, but also takes into account the training objectives of professional quality and professional ethics.

4.1 Reform of training objectives and teaching contents

4.1.1 Establish a sense of social responsibility and professionalism

Ideological and political integration: Education teaching material selection of representative and sense of worth, combination with the construction of fire mountain, thor hill hospital case, the pritzker architecture prize winner, such as domestic building great master of architecture design concept and related works, promote the architect should bear the social responsibility and professional dedication, special set "domestic building great master" special topic and the current hot topic "architect responsibility system", interpret the architect design idea, architecture masters humanistic literacy and expertise complement each other, cause the student to the national confidence, professional faith, communication, and discussing the building designers should shoulder the social responsibility of this topic.

Expected effect of teaching: As an architect, he is responsible for urban construction, public interest, security and social progress. Through the introduction of relevant ideological and political cases, students can understand the significance of carrying out the architect responsibility

system. When an architect takes over the design of a project, it means that it has a great responsibility for it. At the same time, let the students understand the different historical responsibilities that architects bear under different historical backgrounds. Architects should have a sense of social responsibility and professionalism, dare to take on responsibilities and be responsible for the society and social groups.

4.1.2 Develop a sense of teamwork and competition

Ideological and political integration: Architectural activities are generally a team battle, one person can not solve all the problems to complete a design. The design industry especially needs the two qualities of teamwork and competition, so it should pay attention to the cultivation of both in the education of architecture majors. In the theoretical part of the teaching framework, the composition of well-known architectural design institutions at home and abroad and important architectural competitions at home and abroad are added to carry forward the team consciousness and professionalism of architectural masters. In the course practice, according to the task of phased teaching, students are arranged to complete the relevant research projects and survey assignments as a design team, so as to inspire students to study independently, discuss collectively and enhance the spirit of teamwork.

Expected results of teaching: To make students understand that teamwork and competitiveness are essential to becoming an excellent professional architect. Through the explanation of the composition of the firm and the construction of the team, students can understand that the completion of any architectural work requires the joint efforts of a team, and the unity and cooperation of architects is of vital importance. Through the case study of architectural competition, one of the ways to acquire the architect's business, students can fully understand that the competition of architects is everywhere in the course of history. Architects should be brave enough to compete and improve the design standard.

4.1.3 Abide by professional ethics and integrity

Ideological and political integration: Architects should abide by laws, regulations and professional ethics, and safeguard the public interests through their own professional skills, which is a contract of moral principles between the profession of architects and the society. Asked the students to understand the basic construction procedures, to master relevant rules on construction, introduces the "law of the People's Republic of China, regulations on the registered architect, the" regulations on the administration of construction survey and design ", "civil construction project design contract", "the civil building design standard", "code for fire protection design

of buildings and so on, in combination with the investigation of architect irregularities, illegal practice, alert violations such as bidding cases and will be a good example of design, the concept construction as ideological instruction material.

Expected effect of teaching: It is clear that the architect's business is not only a market behavior, but also a legal behavior under the laws and regulations. To make students understand the laws related to occupation, business activities must adhere to the principles of openness, fairness, integrity, transparency, not to obtain illegitimate interests, abide by professional ethics, norms of professional behavior. Through the study of laws and regulations and the intervention of ideological and political materials, students can understand that architects should abide by professional ethics in architectural design activities, which is the bottom line of architects' practice.

4.1.4 Cultivate a sense of innovation and perseverance

Ideological and political integration: Architecture is the witness of the era of historical reflection. As history develops and times change, architecture also needs innovation, which requires architects to have the consciousness of innovation. In the course "the foundation of architect's business", the discussion topic of innovative design and a series of practical tasks are set to propose how to break the conventional design thinking and means, analyze the original works of well-known architects at home and abroad, master innovative methods, and pay attention to the cultivation of students' artistic quality and innovative ability.

Expected results of teaching: The society needs high-quality compound "new engineering" talents with strong engineering practice ability, strong innovation ability and international competitiveness. Through setting up the organization of innovative design related content, let the students experience the innovation consciousness that the architect should have from the architect's business ability and innovation cases. It also emphasizes the training of professional architects, strengthening the training of innovative thinking and practical ability, so as to encourage students to develop the innovative quality they should have to deal with any problems and challenges.[4]

4.1.5 Spread the idea of lifelong learning and the spirit of seeking knowledge

Ideological and political integration: The rapid

development of science and technology, the continuous updating of market demand, the emergence of new materials, the breakthrough of new technology and people's different attitude to life all require professional architects to learn new knowledge, which requires architects to have a strong spirit of seeking knowledge. The course introduces the profound changes in the architectural design industry and the professional functions of architects under the guidance of the Internet thinking, and systematically sorts out the keywords frequently appearing in the architecture industry in recent years, such as rural rejuvenation, smart city, xiong 'an new area, BIM, parametric design and other new architectural design fields and directions.

Expected effect of teaching: With the development of information science and technology, architects are not faced with the invariable market demand. Professional architects' knowledge and ability reserve are never enough, so they should always have the idea of lifelong learning. The emerging BIM technology, the new computer-aided software, and the new architectural talents are constantly whipping architects into learning new knowledge and conducting professional re-education, so that they can continuously improve themselves without being abandoned by the times.(Table 1)

4.2 Reform of teaching methods

4.2.1 Create a high quality faculty, and set the ideological and political teaching framework for the course

To promote the reform of education teaching, first create high-quality teachers, fully mobilize the enthusiasm of teachers, enable the teachers to actively into the education of the teaching reform, strengthening the teaching concept, teaching ability, establishes the ideological putted forward, the education for the construction of the library to implement dynamic management, update education material, in order to ensure the smooth implementation of research projects. The architectural ideological and political cases are integrated into each teaching unit of the course, which fully improves the students' subjective initiative in understanding the ideological and political spirit. To construct a set of architectural ideological and political case library with socialist core values as the main line, and guide students to set up the concept of correctly using knowledge and skills to serve the country.

Table 1 Integration points of ideological and political curriculum objectives and teaching

The teaching objective of the course is ideological and political	Ideological and political elements mining	Integration point
Social responsibility	The construction cases of vulcan mountain and Raytheon mountain hospitals; Master architect panel discussion; Architect responsibility system.	Chapter 1: architects go to the world and world architects go to China
Professional dedication		Chapter 3: the rights and obligations of the architect Effect: dare to take responsibility for the society and social groups.
The team cooperation	The composition of architectural design institutions at home and abroad and the cases of important architectural competitions.	Chapter five: professional management and organization of architects
Competition consciousness		Effect: enhance the team spirit, the courage to compete.
The professional ethics	Examples of architects designing and bidding according to rules.	Chapter three: the professional quality of architects
Justice honesty		Chapter 7: related code requirements of architectural design Effect: understand the importance and function of laws and regulations
Innovation consciousness	Innovative design themes and practical tasks, the original design of outstanding architects at home and abroad	Chapter 2: architecture and architects
Tenacious perseverance		Effect: to form an innovative quality to deal with problems and challenges
Learning attitude	Profound changes in the architectural design industry and the professional functions of architects; New architectural design field and direction.	Chapter two: the history and functions of Chinese architects
Learning spirit		Effect: experience architecture is a lifelong career.

4.2.2 Flexible use of the teaching model, organic connection course ideological and political teaching system

Based education standards of teaching, according to the architect business analysis chapters content, enrich teaching means, flexible use of class, class, flip the series of patterns such as classroom, supplemented by heuristic teaching examples, case type, the curriculum of ideological elements organic throughout the whole teaching process, using the "transition" scene mode to involve students in combination with the actual project in interaction and to think, to visit is a case study of the practice teaching, organizes the student to architectural design institute of operation mode and the important construction projects, the head of the interview communication, guide students to truly feel the project works, guide students to shape good professional moral quality. By using virtual simulation

teaching resources and taking the design project of the primary school attached to jiangxi normal university as an example to demonstrate the whole process management, students can deeply feel the scheme design, preliminary design and construction of the architectural design practice project

4.2.3 Reform the evaluation and assessment mechanism and integrate ideological and political education into the curriculum

According to the course objectives, the connotation of professional qualities such as architect responsibility system, integrity, justice and social responsibility should be condensed from the course teaching contents. The evaluation and assessment mechanism should be reformed, the assessment method of ideological and political framework system of the course should be established, and the dual standards of process assessment and result

assessment should be added. Test involves the students throughout the learning links show the learning attitude, learning, organizational discipline, the coordinated ability, moral behavior performance review into the scope of the spirit of cooperation, improve the evaluation of the fairness and objectivity, in ideological education case, under the stimulus of a stature of students, the attitude towards life, the social responsibility and so on spiritual education, realize the comprehensive development of students.

5. CONCLUSION

The construction of "curriculum ideology and politics" is a systematic and long-term project in the teaching reform and construction of colleges and universities. The ideological and political courses of architecture major have the characteristics of moistening things silently and subtly. To sum up, adhere to the "the architect business foundation" Morality Education core objective, curriculum education reform to improve the students' professional quality and comprehensive ability as the guidance.^[5] In the course teaching, the ideological and political elements of the course are constantly penetrated and the ideological and political education connotation is explored, so as to create a strong education environment, to change people with emotion, and strive to construct the architectural education pattern of "great ideological and political".

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