

Strategies for Reforming Architectural English Education to Navigate Industry Challenges

Zitong Ma^{1, a}, Mingchang Ma^{1, b}, Lingxu Li^{2, c, *}, Yifeng Sun^{3, d}

¹ Changchun Institute of Technology, Changchun 130000, China

² Dianchi College of Yunnan University, Kunming 650500, China

³ Jilin University, Changchun 130000, China

^amzt_1021@163.com, ^bmmchangyhy@163.com, ^cllx20082024@163.com, ^dyifeng@jlu.edu.cn

*Corresponding author: Lingxu Li

Abstract: The Chinese construction industry has entered a downturn period, the recommendation of the Chinese construction market has been tightened, and the changes in the demand of the international construction market have new requirements for the foreign language ability of the present and future construction talents. In order to cultivate architectural talents with intercultural communication ability and solid professional English communication ability to improve international competitiveness, this paper discusses the teaching reform and innovation path of architectural foreign language, combining situational teaching and project-based learning, focusing on cultivating students' comprehensive ability of architectural English, intercultural communication ability and professional expression skills. This paper analyzes the impact of the downturn of the construction industry on the teaching content and methods, and hopes to cultivate the architecture talents with international communication ability through teaching reform and exploration.

Keywords: Architecture English; Reform in education; Situational teaching; Internationalization of talents cultivation.

1. Introduction

The Chinese construction industry has experienced a booming and prosperous period in the past four decades, but with the changing market demand and the slowdown of urbanization in China, the demand for the construction market has undergone a dramatic change. A large number of traditional new construction projects have decreased, and the demand for the construction market has gradually shifted to urban renewal and building renovation and protection, leading to an imbalance in supply and demand in the market, with a large number of construction projects stalled, low salaries for architects out of work, bankruptcy of real estate companies, difficulty in enrolling students in architecture majors, and architecture majors students filled with anxiety about their future employment prospects and starting to switch majors.

How to conduct the teaching of foreign language in architecture major under such industry background, the author has carried out a series of considerations.

The foreign language course for architecture majors plays an important role in cultivating architectural talents in a global and international background. In the background of China's gradually tightening construction market, the demand for cultivating architectural talents with cross-cultural communication ability and solid professional English communication and expression ability is becoming increasingly urgent. Therefore, it is imperative to reform and innovate the curriculum

2. Current Situation and Problems of Teaching Architecture English

2.1. The course content is disconnected from the actual needs

Currently, the content of English teaching for architecture majors in China is relatively monotonous, still focusing on reading and translation of documents, while neglecting oral expression and practical application. Without a corresponding language environment, it is difficult to apply the knowledge learned. Compared with university foreign language teaching, professional foreign language is a selective course under the specialty courses in universities. Students are not very enthusiastic about elective courses, and most students think that they don't need to take architecture professional English courses after passing the CET-4 and CET-6 exams at university. They are even less interested in the course setting and teaching content. Only by touching on the pain points in real life and future employment, and allowing interests and passion to be fully expressed, can true learning motivation be stimulated.

Through the "Belt and Road" initiative, China has carried out a large number of infrastructure and construction work in many countries [1], which is a rare opportunity for China's current and future architects. The implementation of large-scale international cooperation projects undoubtedly requires intercultural communication skills, strong international teamwork skills and sensitivity to different cultural differences.

2.2. Limited Teaching Methods and Incomplete Evaluation Systems

If architectural English instruction continues to prioritize traditional content such as literature reading and translation,

students may struggle with real-world challenges. Specifically, facing the risk of lacking the necessary skills for cross-cultural communication and professional articulation, leaving them unprepared for practical demands in the field. The traditional teaching method lacks the opportunity of interaction and language output of students, so it is weak to cultivate the application ability of future professional English. Of course, the curriculum evaluation system that students are most concerned about also needs to be changed [2]. Most courses of architecture major in our country are rely on final exams or quizzes based on the syllabus to measure students' language and intercultural communication skills. It is not a feasible way for written skills but to comprehensively evaluate students' practical application of professional English and communication ability, it is not perfect to complete the evaluation only through final exams and tests.

3. Concepts and Practical Exploration of Teaching Reform

In order to cultivate students' competitiveness in the international environment in a better way, increase students' interest in architecture English and architectural design, improve the employment rate of architectural students, and let students who are confused about the future regain hope, the courses of architectural foreign languages should make corresponding teaching reforms and reflections in line with the actual changes in the current domestic architectural industry.

3.1. Innovation in Curriculum Design and Teaching Content

Traditional architectural English textbooks primarily focus on language training, often lacking specialized architectural content. To address this, courses can integrate foundational knowledge, such as architectural history and design principles, with language skills development. Moreover, emphasis can be placed on enhancing students' abilities in architectural design presentations, project introductions, public speaking, and professional communication. This approach aims to cultivate proficiency in architectural English, fostering better writing skills, communication abilities, and project-specific articulation[5][6]. Increase the number of architectural cases from all over the world, lead students to experience the architectural history of different countries and cultures of different times in the class without actually going abroad, and stimulate students' interest in architectural design and architecture English courses. Documentaries and real full-English- teaching mode are introduced into the curriculum. While watching English architectural documentaries, students can exercise their listening skills, participate in translating subtitles to mobilize the activity of the class, and finally express the meaning of the documentary. Through this process of translation practice, the students' professional English listening, understanding and translation ability and English expression ability are exercised. Then, the expression of words and professional terms used in documents or documentaries is taught in the course, so as to enhance students' reading ability and carry out creative writing.

3.2. Contextual Teaching and Project-Based Learning

By simulating the working environment of real architectural projects, such as international architecture

design bidding activities, international architecture studios or architecture design projects in architectural design courses in English-speaking countries, students can use professional English to report architecture design projects in real life situations. The report speech should introduce the project overview, design ideas, design process, difficulties, challenges and gains of architectural design in English [3]. During the simulation process, students can strengthen their oral English expression ability, on-the-spot response ability and writing ability before the simulation, improve the situation that they are afraid to speak English, and improve their language ability and professional quality.

Through situational teaching and practical project-based tasks, students' language learning ability and practical application ability in the professional context can be combined, so that they can really stand on the platform to communicate, report, show and answer questions in English, and the whole teaching process of architectural professional English can be closed loop, and the knowledge learned in the classroom can be comprehensively applied

3.3. Flipped Classroom and the Application of AI Technology

For a special elective course, it is difficult for a short 24-hour course to cover a huge language system and teaching content to exercise students' comprehensive learning and practice their comprehensive ability of professional English. With the flipped classroom model, students can access online learning platforms such as Coursera, MOOCs, and Khan academy before class

The extended reading materials provided by the teachers enrich the knowledge related to architectural English, use AI technology to simulate real dialogue scenes, exercise oral English expression ability, establish English environment language immersion, and conduct group discussion and case analysis in class.

3.4. Interdisciplinary Collaboration

Architecture is a comprehensive interdisciplinary discipline that requires collaboration and communication with many different disciplines. In the innovation and reform of architectural English courses, it is not impossible to carry out a cooperative project design exchange with students from different majors related to architecture, such as urban planning. For example, a task book on residential planning and design can be set in the course, and professional English concepts and ideas on residential planning and design and feasibility schemes can be conducted in the form of a group. Through interdisciplinary cooperation projects, students can fully understand the application of foreign languages in architecture at all stages, and enhance more comprehensive professional knowledge.

4. Summary

Architecture industry in China is experiencing an unprecedented winter period, and the entire architecture professional education is also a moment of change and innovation. Foreign language courses for architecture majors should also constantly adapt to the changes of The Times and the development needs of the industry. Future architects should not only have solid professional knowledge, design essentials and basic qualities, but also cope with technological innovation and cultural inheritance, have an international

vision and communication skills, and truly realize the value of sustainable development of architecture. Through the continuous reform and innovative practice of foreign language courses for architecture majors, it is not only necessary to improve English language ability, but also to combine professional English and architecture majors more closely, enhance students' comprehensive professional English ability, and lay a foundation for training architecture professionals with global competitiveness.

References

- [1] Wu Na. Architectural English Ability from Cognitive Perspective: A Review of Architectural English [J]. Building Structure, 2022(17).p155.
- [2] Li Xiaobo. A study on teaching design and practice of Architectural English [G]. Modern Vocational Education, 2020(41).p.120-121
- [3] Ling Li. An Exploration of oral Architectural English Teaching based on Situational Teaching Method [J]. Architectural Structure, 2022(17).p.166
- [4] Wang Yali. Construction of Professional English curriculum System for Architecture [J]. Architectural Structure, 2023(13).
- [5] Li Bingxin. Construction industry is the professional foreign language teaching in English teaching outlook analysis [J]. Journal of information science and technology, 2015, 13 (33) : 2. DOI: 10.16661 / j.carol carroll nki. 1672-3791.2015.33.183.
- [6] Zhang Chi. A Study on Architectural English Teaching and Overseas Engineering and Architectural Talents Training under the EOP Model [J]. Journal of Chifeng University (Natural Science Edition, 2016(12).p249-251