

## Research on Innovation of Multimodal Foreign Language Teaching for Postgraduates Based on CDIO

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**Supported by** Teaching Reform Project of Higher Education in Heilongjiang Province: Research on Multimodal Teaching Innovation of Foreign Language Pedagogy Based on CDIO (SJGY20190113).

Received 12 November 2020; accepted 6 February 2021  
Published online 26 March 2021

### Abstract

With the continuous development of modern information technology and improvement of multimedia teaching equipment, it has become the training goal of universities to cultivate graduate students with high quality and strong comprehensive application ability of foreign languages. CDIO concept is based on practice, guides the practice and exploration of multimodal teaching mode, constructs the multimodal teaching mode of “Ordinary classroom teaching + Online course teaching + Extracurricular autonomous learning + Innovative practice training”, cultivates graduate students’ language practice ability, autonomous learning ability, and makes graduate students’ foreign language teaching keep up with the pace of the times.

**Key words:** Multimodal teaching mode; CDIO; Foreign language teaching

Dong, J. Y., & Zhao, K. (2021). Research on Innovation of Multimodal Foreign Language Teaching for Postgraduates Based on CDIO. *Higher Education of Social Science*, 20(1), 1-3. Available from: URL: <http://www.cscanada.net/index.php/hess/article/view/12085> DOI: <http://dx.doi.org/10.3968/12085>

### INTRODUCTION

Since 2000, MIT in the United States and three universities in Sweden have constructed a new concept

of engineering education, called CDIO (coherent design implementation operate). CDIO is a kind of learning method that allows students to actively participate in the cycle of product conception design implementation operation. Its core is to focus on students and cultivate students’ ability of active learning, hands-on practice, analyzing and solving problems.

Mode is the attribute or circumstance that things express through certain mode, manner or form. Multimodal expression can be divided into more than two single modes expressing different meanings at the same time. Multimodal discourse is a kind of language communication through hearing, vision, touch and other senses, using language, image, sound, action and other means and symbolic resources. Foreign language scholar Stein pointed out: “multimodal teaching method highlights the indivisibility of the body and brain participating in communication through multimodal and multi-sensory cooperation.”

Although they mainly aim at different disciplines, they have the same educational ideas. This project is to combine these two educational concepts and apply them to the foreign language teaching of postgraduates, and build a comprehensive multimodal teaching mode of “Ordinary classroom teaching + Online course teaching + Extracurricular autonomous learning + Innovative practice training”, so as to improve the teaching effect and the comprehensive cultural quality of Foreign Language Pedagogy Postgraduates, cultivate their language practice ability and autonomous learning ability, and make them more effective Teaching activities keep pace with the development of the times. The research is consistent with the development trend of teaching, emphasizing that active learning and autonomous learning are complementary to each other, which is suitable for the training requirements of advanced application-oriented talents.

## **UNDER THE CDIO CONCEPT, MULTIMODAL TEACHING MODE CAN REORIENTATE THE TEACHING OBJECTIVES OF FOREIGN LANGUAGES FOR POSTGRADUATES AND MAKE IT MORE SUITABLE FOR THE DEVELOPMENT OF DISCIPLINES AND TALENTS**

Language is the foundation of tools, identity, resources, and national soft power. Foreign language education is not a simple language teaching, it reflects the needs of the times, the country's openness and the level of economic and social development. Foreign language education should be combined with the major to cultivate high-level professionals who are proficient in foreign languages, pay attention to oral and written communication ability, and create international talents of various majors. In January 2017, the state issued the 13th five year plan for the development of national education, which clearly put forward the implementation of the overall development strategy of philosophy and Social Sciences in Colleges and universities centered on educating people and talents, and built a comprehensive development system of students, academics and disciplines. Therefore, it puts forward new and higher requirements for graduate English teaching. The idea of CDIO education is changing from teaching to learning. It is of far-reaching significance to re position the goal of foreign language teaching for postgraduates and re set the curriculum, so that various abilities in CDIO syllabus can be infiltrated, promoted and strengthened in the foreign language curriculum for postgraduates.

CDIO model not only pays attention to professional knowledge and practical ability, but also pays attention to the cultivation of cooperative communication ability, problem-solving ability, critical innovation consciousness, self-improvement ability and good professional attitude. The multimodal teaching method requires teachers to design multimodal tasks and students to use multimodal in the process of completing tasks. Classroom teaching system includes four elements: teachers, students, teaching content and teaching media. Each element is necessary for classroom teaching activities. As the leading of the classroom, teachers need to use teaching media to present the teaching content to the main students. All kinds of elements can exist independently, influence and restrict each other. Therefore, the combination of these two educational concepts and the construction of an all-round multimodal teaching mode of "Ordinary classroom teaching + Online course teaching + Extracurricular autonomous learning + Innovative practice training" is to change the traditional teaching concept, adjust the role of teachers and change the teaching mode These four

elements will play their greatest role in the teaching of foreign language pedagogy for postgraduates.

The combination of CDIO education concept and multimodal teaching mode forms an innovative training mode, which not only attaches importance to the guidance of teachers, but also attaches importance to the participation of students; emphasizes the continuity and systematicness of language learning, and creates a three-dimensional and diversified language learning environment from various aspects, so as to ensure that all students are fully trained and improved in language application ability.

## **UNDER THE CONCEPT OF CDIO, MULTIMODAL TEACHING MODE CAN UPDATE THE CURRICULUM SYSTEM OF FOREIGN LANGUAGE FOR POSTGRADUATES, AND PAY ATTENTION TO THE CULTIVATION OF POSTGRADUATES' ACADEMIC COMMUNICATION ABILITY IN ENGLISH**

Under the CDIO education concept, we should reform the targeted curriculum, teaching mode and scientific evaluation means to achieve the goal of integrating graduate English with undergraduate English teaching, embody the characteristics of graduate English teaching, take academic English as the teaching goal, and take learning writing, translation and oral English as the teaching focus, innovate the graduate English teaching mechanism, and construct the teaching system. The omni-directional multimodal teaching mode of "Ordinary classroom teaching + Online course teaching + Extracurricular autonomous learning + Innovative practice training" organically combines classroom teaching, multimedia teaching, network resource learning and practical activities. It not only attaches importance to the cultivation of language knowledge, language skills and language cultural literacy, but also attaches importance to the exercise of comprehensive ability and quality of foreign language education postgraduates. It is an exploration to conform to the development trend of the times.

In order to update the curriculum system and build a multimodal teaching mode, first of all, according to the students' interests, needs, abilities and the needs of social talents, English elective courses and diversified courses should be set up. Secondly, we can set up the core course as ESP, pay attention to professional knowledge, and set up a series of professional English elective courses. Through the change of curriculum and teaching mode, postgraduates can improve their academic communication

ability in English, communicate their scientific research achievements with international professionals orally and in writing, enhance their ability to read the latest foreign language materials in this field, retrieve foreign language literature, and obtain useful scientific research information, and know how to write scientific and technological foreign language papers, participate in international conferences, Understand foreign language academic reports.

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## **UNDER THE CONCEPT OF CDIO, MULTIMODAL TEACHING MODE CAN INNOVATE AND BUILD A “FOREIGN LANGUAGE +” POSTGRADUATE TRAINING SYSTEM**

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CDIO is an educational concept that combines practical education with theoretical education. The core content of CDIO education is consistent with the development trend of graduate English teaching. Twelve standards are also applicable to the training standards of Applied English talents. CDIO education emphasizes that student-centered active learning and autonomous learning complement each other in English learning. CDIO education concept attaches importance to practical teaching, which is also in line with the practical requirements of postgraduate English ability training, and is conducive to improving the practical application ability of postgraduate language. The teaching model of multimodal teaching method mainly includes four steps: situational practice, overt instruction, critical framing and transformed practice. Therefore, the multimodal teaching mode under the CDIO concept can innovate and construct the “foreign language +” postgraduate training system, which solves the problem that the basic foreign language ability of college

graduate students is very strong, but the foreign language application ability is very weak. Its practical significance is mainly reflected in the following three points:

1) Fully reflect the characteristics of foreign language teaching for postgraduates and improve their comprehensive application ability of listening, speaking, reading, writing and translation.

2) Strengthen the guarantee of the quality of foreign language teaching for postgraduates and cultivate their innovative research ability.

3) Make clear the goal of foreign language teaching for postgraduates and shape their practical ability.

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## **CONCLUSION**

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CDIO concept has been applied in many disciplines, especially in science and engineering disciplines, but the research applied in foreign language teaching, especially in graduate foreign language teaching is still very little. Therefore, under the CDIO education concept, the teaching mode of graduate foreign language teaching is “foreign language +” with its characteristics of re orientation, re adjustment of focus, re setting of curriculum and construction of a new training system That is to say, they have strong comprehensive ability in foreign language and are proficient in the professional knowledge they have learned.

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