



Research on the Three-Dimensional Teaching Model for College Vocational English: Modularization, Outcome Orientation and Digitalization —Taking Nursing Oral English as an Example

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Abstract. Research and teaching practices indicate that, over a long period, classroom teaching of nursing oral English in vocational colleges has been challenging, and this situation remains unchanged today. This paper focuses on the teaching model of nursing oral English in vocational colleges as its research object. In response to the current problems in teaching—such as students’ weak awareness and interests in classroom participation, insufficient understanding and attention to curriculum learning objectives and outcomes, a monotonous teaching model, disconnection from clinical practice, and students’ weak application abilities, it proposes a three-dimension teaching model characterized by “modularization, outcome orientation and digitalization” for English for specific purposes in vocational colleges. Grounded in modular teaching theory, OBE theory, and digital education theory, this research conducts analysis and discussion by integrating the current status of relevant domestic and international research and the state’s relevant policies and regulations. The research findings indicate that this three-dimension teaching model is highly targeted, exerting a positive impact on enhancing students’ awareness of classroom participation, learning interests, teaching satisfaction and application competence in nursing oral English. It also offers reference for addressing the current predicaments in nursing oral English teaching in vocational colleges and advancing its pedagogical reform.

Keywords: higher vocational education; college vocational English; three-dimensional teaching model; nursing oral English in vocational colleges

1 Introduction

Research and teaching practice indicate that, over a long period, classroom teaching of nursing oral English in vocational colleges has been challenging, and this situation remains unchanged today. In particular, theoretical and practical improvements in this area have been inadequate: issues such as students' lack of proactive participation and interest in class, insufficient understanding and attention to the learning objectives and outcomes, monotonous teaching methods ^[1]. Additionally, the teaching content is

disconnected from actual job requirements, failing to effectively link nursing oral English teaching with students' future career development. These issues are widely recognized as intractable obstacles in teaching practice^[2]. As Hainan accelerates the construction of the internationally influential Free Trade Port, the role of nursing oral English has become increasingly prominent under the current context, making the task of this teaching improvement urgent. Therefore, theoretical research and practical innovation in this field require continuous refinement and exploration.

In recent years, the state has successively issued policies and regulations such as *The National Implementation Plan for Vocational Education Reform* and *The Action Plan for Quality Improvement and Excellence Promotion of Vocational Education (2020–2023)*, which propose reforms of the three core teaching elements: teachers, teaching materials and teaching methods^[3–4]. Based on a historical review and current situation analysis of the research object, this paper takes the reform of teaching methods—one of the "Three Teachings" reform (of teachers, teaching materials, and teaching methods)—as the entry point and breakthrough for discussion. At present, relevant studies have reached a consensus that the core of the "Three Teachings" reform lies in teaching methods, which constitute the key to the reform^[5], as teaching methods directly connect teachers and students^[6]. Furthermore, the core of advancing the reform of teaching methods is the reform of classroom teaching models^[7]. Based on job requirements, modular teaching decomposes teaching content into several relatively independent yet interrelated modules, facilitating students' step-by-step mastery of knowledge and skills. OBE designs teaching activities with expected learning outcomes as the starting point, while digital teaching provides efficient and convenient technical support for teaching practice. The three-dimensional teaching model, formed by the integration of these three approaches, is expected to address the current predicaments in oral English teaching for nursing majors in vocational colleges. Specifically, it is of practical significance for improving students' practical application ability in nursing oral English, enhancing their learning interest and professional identity, increasing teaching satisfaction, optimizing teaching models and promoting teaching quality.

In 2024, the Ministry of Commerce, the National Health Commission and other relevant authorities issued *The Notice on Conducting Pilot Programs for Further Opening-up in the Medical Sector*, in which this document advocates the introduction of foreign investment to advance high-quality development in medical-related fields in China and better satisfy public demands for medical and health services, and authorizes that wholly foreign-owned hospitals are to be established in eight municipalities and provincial capitals, including Hainan Island as a whole^[8]. Against this policy background and given Hainan's pivotal role as a pioneer in the construction of the Free Trade Port, empirical research on the classroom teaching model of nursing oral English is both imperative and highly significant. Cultivating high-quality talents for the Hainan Free Trade Port and International Tourist Destination is a pressing task, with indisputable academic merit, practical application value and far-reaching implications.

2 Literature Review

2.1 Current Research Status of Teaching Models for College Vocational English

Scholars at home and abroad have carried out in-depth and extensive research on the teaching models of college vocational English, putting forward a series of teaching models such as Competency-Based Education (CBE) and Project-Based Learning (PBL). In light of the distinctive characteristics of college vocational English teaching, some researchers have further proposed integrated teaching models, including the "post-course-competition-certificate" integration model and blended teaching models. Nevertheless, most of the current studies focus solely on the application of a single teaching model, lacking systematic integration of various teaching elements. On the whole, although the current research has laid a certain theoretical foundation and provided valuable practical experience for the innovation of nursing oral English teaching models, it still has obvious deficiencies as follows: First, the teaching models lack systematicness, that is, most studies have failed to construct a multi-dimensional or multi-level three-dimensional teaching model. Second, the integration of professional knowledge and language teaching is not enough, that is, the combination between nursing professional knowledge and English language skills is not close enough, which fails to fully reflect the distinctive features of English for Specific Purposes (ESP). In response to the aforementioned deficiencies, this study proposes a three-dimensional teaching model characterized by modularization, outcome orientation and digitalization. By integrating multi-dimensional educational and teaching theories as well as related resources, this model is expected to make up for the gaps in the current research.

2.2 Overview of the State's Relevant Policies and Regulations

The Outline of the "Healthy China 2030" Plan (2016) proposes establishing a medical quality management and control system that aligns with international standards while reflecting Chinese characteristics, along with the launch of a series of international standards and norms^[9]. *The Guidelines of the Eight Ministries Including the Ministry of Education on Accelerating and Expanding the Opening-up of Education in the New Era* emphasizes accelerating the construction of a modern vocational education system with Chinese characteristics that meets internationally advanced standards, as well as nurturing a new generation of young people who develop in an all-round way—morally, intellectually, physically, aesthetically and labor—and possess an international perspective^[10]. In fact, all these policies set clear requirements for fostering the professional English competence of nursing personnel. *The English Curriculum Standards for Higher Vocational Education (2021 Edition)* clearly specifies that higher vocational students should be capable of using English knowledge and skills to accurately understand and express information, viewpoints and emotions, thereby conducting effective oral and written communication in cross-border workplace^[11]. These standards offer specific guidance for

setting goals, selecting content, and implementing teaching in oral English courses for higher vocational nursing majors.

In summary, the state's relevant policies and regulations provide clear policy guidance and strong support for the construction and implementation of a three-dimensional teaching model of nursing oral English from multiple perspectives, including vocational education reform, English teaching objectives, and nursing industry demands. They emphasize the practicality, operability, and internationalization characteristics of college vocational English teaching, which provides supporting evidence, guiding directions and a solid policy foundation for this study.

2.3 Challenges in Nursing Oral English Teaching and the Teaching Model Reform

According to a survey by Tang Jun (2018), 62.88% of students regarded medical English as more difficult and demanding than college English. The survey also indicated that only one student expressed an interest in learning norms for oral English in academic communication. In a separate survey conducted by Pan Linglan (2018), merely 10% of medical students were able to communicate relatively fluently with foreign patients in English^[12–13]. In addition, research has shown that medical English poses greater challenges compared with general college English, particularly in terms of terminology. Scholars both domestically and internationally have noted that the vast majority of medical English terms derive from Greek and Latin, whose corpora continue to form the foundation of modern medical language, resulting in highly challenging vocabulary^[14]. For non-native English speakers, this creates substantial learning difficulties and is a major reason why many students feel intimidated by medical English^[15]. Currently, medical English teaching—including nursing oral English—in China's higher medical institutions faces severe challenges, and outdated teaching models are in pressing need of reform^[16].

Peng Binbo (2024) pointed out that the internationalization of vocational education is not only an inevitable choice for enhancing the international competitiveness of China's vocational education, but also an urgent need for the development of vocational colleges themselves^[17]. However, the current challenges in English teaching in vocational colleges still include students' reluctance to speak and poor listening comprehension. For majors in foreign-related nursing, nursing practice can be effectively carried out only through effective communication and a clear understanding of patients' needs. Therefore, the teaching status of nursing oral English has become increasingly prominent in the curriculum of nursing majors in vocational colleges^[18].

At present, the development situation and trend of the nursing profession at home and abroad are positive. Driven by this favorable employment prospects, an increasing number of students choose foreign-related nursing as their future career^[19]. Against the background of a severe global shortage of nursing professionals and the upcoming entry of foreign-funded hospitals into China, there is an urgent need to improve the oral English proficiency of nursing students^[20], enabling them to use English effectively in future studies, daily life, social interactions, and

professional practice, so as to meet the development needs of the country, society, institutions, and individuals.

Through a literature review conducted in the CNKI database, it is found that research on oral English teaching models for nursing has long been a widely concerned issue. However, both theoretical discussions and teaching practices in this field are still at the exploratory stage. In particular, there is a lack of empirical research and published reports on teaching models and their effectiveness.

3 Construction of the Three-Dimensional Teaching Model of “Modularization, Outcome Orientation, and Digitalization” for College Vocational English

3.1 Basic Elements for Constructing the Three-Dimensional Teaching Model

1) Demand-Oriented Occupational Posts: The teaching content and objectives should align with nursing oral English competency requirements of the occupational posts that nursing students will work in the future. This ensures the teaching is targeted and practical, effectively meeting the actual demands of these roles.

2) Student-Centered Approach: This approach fully respects students' individual differences and learning needs, focusing on the achievement of their learning outcomes. It provides students with diverse learning resources, flexible learning methods, and personalized learning support, thereby stimulating their initiative and enthusiasm in learning.

3) Modular Integration: The teaching content of nursing oral English is systematically divided into multiple modules based on specific logical principles and standards. Each module maintains relatively independent teaching objectives and content, while remaining interconnected and mutually supportive, collectively forming a comprehensive knowledge and skill framework.

4) Outcome Oriented Approach: This approach takes preset learning outcomes as both the starting point and the ultimate goal, driving the backward design of teaching objectives, content, teaching activities and assessment. It ensures that every component of the teaching process is purposefully aligned to facilitate the achievement of students' learning outcomes.

5) Digital Integration: Digital teaching method are integrated throughout all links, including the setting of teaching objectives, presentation of teaching content, implementation of teaching activities, and conduct of teaching assessment, so as to realize the deep integration of digitalization and teaching, and improve teaching effectiveness.

6) Practical Training: Relying on school-enterprise cooperation bases, students are arranged to take internships in foreign-related departments of hospitals and participate in authentic English communication practices.

3.2 Origin of Modular Teaching and Construction of Its Teaching Content

The origin of modular teaching is closely related to technological development and the demands of vocational education. In the early 1970s, the International Labour Organization (ILO) developed MES (Modules of Employable Skills), which aimed to cultivate skills directly applicable to occupational posts by dividing relevant skills into independent modules for training.

In 2019, the Ministry of Education issued *The Construction Plan for National Innovative Teaching Teams in Vocational Colleges*, which required innovating the modular teaching model, breaking the traditional discipline-based teaching model, and implementing modular teaching through teachers' division and collaboration^[21]. In 2022, the General Office of the Ministry of Education issued *The Notice on Further Strengthening the Construction of National Innovative Teaching Teams in Vocational Colleges*, which clearly proposed highlighting the modular teaching model of innovative teams, implementing modular teaching design, formulating modular curriculum plans for professional capabilities according to the competency requirements of occupational posts (groups) and relevant vocational standards, and carrying out modular teaching^[22].

Based on the training objectives of higher vocational nursing and the actual work scenarios of nursing posts, and through investigations in multiple medical institutions and consultations with nursing industry experts, the oral English teaching content for vocational nursing is divided into several core modules. Each module defines specific learning objectives, core vocabulary and sentence patterns, typical dialogue examples, and practical tasks. The modules are interconnected to form a complete knowledge and skill system of nursing oral English. The teaching content includes:

1) Basic Nursing English Module: This module mainly covers daily expressions used in nursing practice, including greetings and self-introduction, patient information collection, introduction to ward environment, diet and daily routine guidance, etc. Through this module, students can master the most basic English expressions in nursing and lay a solid foundation for the study of subsequent modules.

2) Symptom Assessment and Communication Module: This module focuses on the assessment and communication of patients' symptoms, including English expressions for inquiring about, describing, and conducting preliminary assessment of common symptoms. Students are expected to use appropriate English vocabulary and sentence patterns to communicate effectively with patients and obtain accurate health information.

3) Professional Nursing English Module: According to specialized fields of nursing, such as medical nursing, surgical nursing, obstetrics and gynecology nursing, pediatric nursing, etc., corresponding sub-modules of professional nursing English are set up. Each sub-module includes English expressions concerning key nursing points, treatment cooperation, and health education for common diseases in the specific specialty, so as to meet the needs of different specialized nursing posts.

4) Emergency Nursing English Module: Aimed at English communication demands in emergency settings, this module covers emergency instructions, rapid condition assessment, notification and cooperation of emergency measures, etc. It cultivates students' ability to communicate and cooperate accurately in English under urgent circumstances, ensuring the smooth progress of emergency care.

5) Psychological Nursing and Health Guidance Module: This module emphasizes English communication related to patients' psychological status and health guidance, including psychological counseling, emotional comfort, rehabilitation training guidance, and health precautions after discharge. It helps students learn to convey care and professional knowledge in English, promoting patients' physical and psychological recovery.

6) Cross-Cultural Nursing Communication Module: This module introduces differences in nursing etiquette, values, and communication habits across diverse cultural backgrounds, and develops students' cross-cultural awareness and communication competence. It enables students to respect patients' cultural differences in foreign-related nursing practice and provide higher-quality nursing services.

3.3 Origin of OBE Theory and the Design of Its Teaching Objectives and Evaluation Mechanism

OBE theory was proposed by American scholar William Spady in 1981. OBE is regarded as having a improving effect on traditional education and teaching. With its correct orientation, it has received extensive attention and application. It emphasizes outcome orientation, student-centeredness, and continuous quality improvement, holding that what students ultimately learn, master, and achieve is what matters. Wu Yan (2018) indicated that we should grasp the advanced concepts of global higher education development, highlight student-centeredness, and promote the transformation of teaching from "teaching well" to "learning well"; emphasize outcome orientation, stress the principles of talent training objectives, goal attainment, and continuous teaching improvement^[23].

The outcome-oriented teaching objective design include: Based on OBE theory and aligned with the oral English competency requirements of nursing posts and modularized teaching content, clear, specific, and measurable learning outcome objectives are established. These learning outcome objectives are categorized into overall objectives and module-specific objectives. The overall objectives include enabling students to proficiently use English for effective communication in various nursing work scenarios, accurately understand patient needs, clearly express nursing intentions, provide professional nursing services, and possess certain cross-cultural nursing communication skills. Each module has its own specific learning outcome objectives.

As for the design of the outcome-oriented teaching evaluation mechanism, it includes formative assessment, summative assessment, and comprehensive summative assessment. Formative assessment runs through the whole teaching process, covering classroom participation, completion of oral practice tasks, group cooperation performance, and the progress and quality of online and offline learning. It is

implemented through teacher evaluation, student self-assessment, and peer evaluation, providing timely feedback to help students adjust their learning strategies. Summative assessment is conducted at the end of each module through scenario simulation, oral tests, role-playing and other methods to test students' mastery of module-based knowledge and skills. Comprehensive summative assessment is carried out at the end of the course, in which real nursing scenarios are set to require students to complete communication tasks by using the English knowledge and skills they have learned. Covering the core knowledge and skills of all modules, this assessment comprehensively evaluates students' practical ability in nursing oral English.

3.4 Origin of Digitalization in Education and Teaching and Its Resource Construction

The concept of digitalization in education and teaching has undergone a gradual evolutionary process, which is influenced by the advancement of various technologies and the transformation of educational and teaching philosophies. For the first time, The Report of the 20th National Congress of the Communist Party of China wrote "promoting education digitalization" into the report of the Party Congress. In 2023, General Secretary Xi Jinping pointed out during the fifth collective study of the Political Bureau of the CPC Central Committee that "education digitalization is an important breakthrough for China to open up a new track for educational development and shape new advantages in educational development". In 2024, *The Outline of the Plan for Building an Educational Power (2024—2035)* made detailed arrangements for education digitalization as a key content^[24]. In recent years, the Ministry of Education has implemented the strategic action for education digitalization, issued documents such as *The Notice on Organizing and Implementing the Digital Empowerment Action for Teacher Development* and *The Guidelines on Accelerating the Advancement of Education Digitalization*^[25-26], identified digitalization as the core breakthrough in building China into an educational power, emphasized the prominence of application-driven development, implemented the action of digital empowerment for educational and teaching reform, promoted the transformation of teaching concepts, methods and models, and improved the quality of education and teaching. These major measures have accelerated the pace of digital transformation in education and teaching, marking that China's education has entered the digital era.

The initial construction of digital teaching resources includes:

Micro-Lecture and Video Resources: A series of micro-lecture videos will be elaborated with a focus on the key and difficult points of each module, including the interpretation of knowledge points, demonstrations of typical dialogues, and illustrations of English instructions for nursing operations. Also, a substantial volume of authentic nursing workplace videos and foreign-related nursing case videos will be collected and made, so as to provide students with an immersive real-language context.

Virtual Simulation Resources: A virtual simulation training system for oral nursing English will be developed and introduced to construct virtual patients, wards,

and nursing scenarios. By means of role-playing, students are enabled to conduct interactive communication with virtual patients and carry out repeated oral practice sessions to enhance their language proficiency.

Online Learning Resources: An online resource platform will be established, which covers the core vocabulary, sentence patterns, and online question banks of each module. Additionally, this platform will provide learning resources such as electronic textbooks, courseware, and extended reading materials, thereby facilitating students' independent learning, review, and consolidation at any time and from any location.

Interactive Communication Community: Functional modules including chat rooms and online Q&A will be set up to promote real-time and non-real-time interaction between students and teachers, as well as among peers. This community will also support the implementation of group discussions, collaborative learning, and other related learning activities.

4 Conclusion

Although many problems remain to be explored in the current teaching of nursing oral English, the teaching model serves as an important factor that deserves due attention. The three-dimensional teaching model of “modularization, outcome orientation, and digitalization” for college vocational English is oriented to occupational needs. It divides the content of oral English for nursing into multiple modules such as basic nursing, with clear logic and strong pertinence. Guided by learning outcomes, it sets teaching objectives, implements teaching activities, and establishes an evaluation mechanism, which enhances students' learning initiative and motivation and focuses on teaching effectiveness. The construction of digital teaching resources expands learning channels and methods, helps improve teaching interactivity and interest, and promotes the oral English application ability of nursing students. The three-dimensional teaching model proposed in this study integrates the modular teaching concept, OBE theory, and digital teaching, breaking through the limitations of the traditional English teaching model in vocational colleges. It provides a new perspective for the theoretical research and practical teaching of vocational English in vocational colleges. From a future perspective, it is worthwhile to conduct long-term follow-up research to examine the improvement and sustained impact of this three-dimensional teaching model on students' English application ability during and after their studies. This teaching model is worthy of continuous in-depth exploration and improvement.

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