Exploring the wisdom teaching model of practical operation in nursing courses under the OBE philosophy

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Abstract: Nursing, as a comprehensive discipline in the field of medical science, the transformation of its teaching mode plays a more profound impact on the whole nursing education. In order to promote the transformation of the teaching mode of nursing courses, the exploration of the teaching mode of practical operation wisdom of nursing courses under the concept of OBE is now proposed. First, the OBE concept is analyzed, and the teaching mode under the concept is compared with the teaching mode under the general guidance concept. Then the significance of carrying out wisdom teaching mode in nursing courses is analyzed from the aspects of teaching content as well as learning effect. Finally, in combination with the OBE concept, specific teaching mode construction strategies are proposed, including clarifying the training objectives, setting up pre-course pre-study, constructing an open learning environment, and building a linkage classroom in multiple modes. The aim is to cultivate students with high moral and professional cultivation on the basis of mastering high professional knowledge in nursing.

Keywords: OBE concept; nursing program; practice teaching; smart teaching

1. Introduction

Nursing is a required course in the study of human growth and development, disease prevention, and clinical care, and the subject area brings together the theory, knowledge, and skills of nursing and its developmental patterns in restoring human health. Since nursing is a profession closely related to human beings, it requires not only solid theoretical foundation and skillful operation skills, but also good professional ethics, professional conduct and humanistic qualities[1]. For this reason, the Steering Committee for Teaching of Nursing Programs in Higher Education has formulated the Guidelines for Teaching Civics and Politics in Nursing Programs, aiming to comprehensively promote the reform of teaching Civics and Politics in Nursing Programs, and to cultivate first-rate nursing talents who are all-rounded in morality, intellect, physicality, aesthetics, and labor[2]. With people's deep understanding of the concept of health and the continuous improvement of health demand, modern society urgently needs to cultivate high-quality nursing talents with rich professional knowledge, skillful operation skills and strong communication ability. "Basic Nursing is the main course that every nursing student needs to learn, and its content mainly involves theoretical teaching and practical instruction. This course plays a role in the nursing curriculum system[3]. In order to ensure the effectiveness of nursing students' absorption of nursing knowledge as well as the level of practical nursing operation, it is crucial to choose an appropriate teaching mode. The author summarized and sorted out the teaching mode of "Basic Nursing" in China by reviewing relevant information and literature, combining with the actual teaching experience, analyzing the characteristics, advantages and disadvantages of the teaching mode of "Basic Nursing", and proposing the future use of the strategy to provide certain references for nursing educators[4]. It analyzes the characteristics and advantages and disadvantages of the teaching mode of "basic nursing" and proposes strategies for its future use, so as to provide some reference for nursing educators. Wisdom education is an educational information ecosystem built on modern information technology, which is a high-level form of information education and an inevitable trend in the development of education informatization. Wisdom teaching is the specific embodiment of wisdom education at the teaching level, and how to utilize wisdom resources to carry out teaching is one of the main research directions of wisdom education for undergraduate nursing students.

2. Definition of concepts

Based on behaviorist learning theory, Spady proposes an outcome-based education model, which he defines in Outcome-based Education: Critical Issues and Answers. The model aims to clearly position the training objectives, and through the systematic organization and implementation of teaching and learning, to ensure that students carry out learning activities around the training objectives, and master experiences that can achieve substantial success, so that they can be competent in their future lives[5]. Therefore, the OBE concept has changed the traditional "knowledge-oriented" teaching concept, reverse design and positive implementation of teaching oriented to the acquisition of students' expected results, focusing on "student output" and emphasizing learning outcomes as the fundamental goal. The focus of teaching is on "student output", emphasizing learning outcomes as the fundamental goal, and ensuring the realization of the expected learning outcomes through the rational design of teaching links and optimization of teaching activities around the expected learning outcomes[6]. This requires teachers to have a clear vision of what students can achieve before the course education, and then design the course, organize the teaching and implement the evaluation to ensure the achievement of the expected learning outcomes. The expected goals of this course include strengthening the national sentiment of patriotism and love of the country for nursing students at the national level, helping students to establish correct values, outlook on life, life, health and philosophy at the personal level; cultivating nursing students to inherit the traditional Chinese virtues of respecting the elderly, loving the elderly and honoring the elderly[7]; developing positive attitudes toward the elderly, improving nursing students' willingness to take care of the elderly, and having positive attitudes toward the cause of gerontological nursing; improving humanistic caring; having good vocational ethics; and improving the quality of nursing care. The differences between teaching based on the OBE concept and traditional teaching are shown in the table 1 below.

Table 1: Differences between teaching based on the OBE philosophy as well as traditional teaching and learning

Project	Traditional Teaching	Teaching based on OBE concept
Talent Training Objectives	applied talent	Composite and innovative talents
Talent Cultivation Leads	Nursing skill-oriented	Oriented by social needs
Talent cultivation concept	Monolithic	Individualization, diversification
Cultivation Program Design	Positive Design	Reverse design
Education and Teaching Objectives	Knowledge-based	Competency-based

The research on the application of OBE concept in the field of nursing teaching in China started late, but it shows an upward trend over time and will remain a hot spot for nursing teaching in China in the future. Introducing the OBE concept in the reform of nursing experimental teaching changes the selection of teaching content from the past forward design to reverse design, determines the cultivation objectives oriented to social needs, and extracts the graduation requirements from them, and meets these requirements by adjusting the curriculum system[8]. In this way, the specific course objectives can be clarified, and the course objectives can be used to determine the course teaching content. Through continuous course evaluation and improvement, the quality of talent cultivation can be continuously improved, and the relevance and adaptability of nursing experimental teaching can be effectively ensured, so as to better meet the social demand for high-quality nursing talents.

3. The significance of developing a smart teaching model in nursing courses

3.1 Enrichment of teaching content

Basic nursing is a course that puts strict requirements on students' knowledge reserves and comprehensive abilities because nursing knowledge as well as nursing skills are constantly updated with the changes of the times. However, at present, teachers only transfer the contents of the textbook to students without expanding their knowledge, which directly affects students' acquisition of knowledge and development of their abilities[9]. However, the blended teaching mode can show students the knowledge points through diversified methods, and can further enrich the classroom knowledge structure. For example, in basic nursing classroom teaching, teachers can save the time of writing the board by showing the teaching content visually[10]. At the same time, students can also collect learning materials related to basic nursing through Internet channels in advance. At the end of

classroom teaching, the teacher will share a variety of extended materials to students, students can use the time to continue to expand the knowledge of the subject horizons.

3.2 Developing independent learning skills

Teachers play an important role in teaching basic nursing courses. However, a teacher's knowledge is limited, and it is difficult to meet students' learning goals only through the teacher's personal strength. In recent years, most teachers have attached great importance to the cultivation of students' independent learning ability, but the cultivation effect is not satisfactory[11]. In this context, intelligent teaching mode can further reduce students' dependence on teachers. The construction and implementation of a blended teaching methodology, which instructs students to collect and consult information after class, can significantly improve students' learning effectiveness and exercise their independent learning ability.

4. Exploration of Smart Teaching Models in Nursing Courses

4.1 Clarification of training objectives

Guided by the OBE education concept, the teaching status of the student body is determined, and the cultivation objectives are clarified by combining the talent needs of the nursing industry[12]. This requires us to pay attention to the following issues when formulating course objectives.

- (1) student-centered, increase students' interest in learning, mobilize students' initiative and enthusiasm in learning, and improve the effectiveness of education and teaching;
- (2) Teachers of the course from a single classroom teaching to the local medical institutions, to understand the medical and nursing industry on the needs of the role of the students, to understand the health needs of the people, so as to combine the course objectives with social needs, talent training needs[13].
- (3) Based on the concept of the Order of the British Empire education, continuously reverse design teaching modes and objectives, laying a solid foundation for cultivating high-quality nursing talents;
- (4) In the process of learning, the program is committed to shaping students' correct values, worldview and outlook on life, forming good professional ethics, and having a high degree of responsibility, compassion and love for children, and a lifelong commitment to the nursing career, with a view to cultivating high-quality nursing personnel with "value shaping, knowledge imparting and ability cultivation" in an integrated manner.

4.2 Reform of teaching programs based on OBE concepts

The traditional teaching process of Nursing is that teachers teach and students learn passively with little autonomy. The theoretical knowledge content of this course is large, if students do not use their free time to pre-study before class and review after class, it will result in forgetting what they have learned[14]. The OBE concept adheres to a student-centered approach to the construction of the curriculum system through reverse thinking, and adopts a diversified mode of teaching, which can effectively help students to construct a knowledge system and mobilize classroom motivation.

4.2.1 Setting up pre-class previews

The cultivation of applied talents is mainly supported by the curriculum and aimed at competence to meet students' graduation requirements. Based on the OBE concept, teachers of specialized courses formulate feasible teaching syllabus, course design scheme and unit learning objectives accordingly. Before class, teachers upload the syllabus, course design teaching objectives, PPT, course video and other contents to the Learning Pass platform, and require students to complete pre-course pre-study in their free time. Comprehensive cases are uploaded to Learning Pass, such as infant feeding, neonatal asphyxia, infant diarrhea, bronchopneumonia, congenital heart disease, and many other clinical cases, and the problems that need to be solved by the students in their clinical work are put forward to guide the direction of students' learning and deepen their understanding of the knowledge points. It can greatly mobilize the initiative and enthusiasm of students' learning, and it can also exercise students' ability of independent learning and constructing the foundation of knowledge system through pre-course preview, so as to improve the effect of the course on educating people.

4.2.2 Building an open learning environment

In the class, students will report and discuss the knowledge points formed based on the online pre-study and book pre-study thinking, and constantly carry out individual, inter-group and other different points of view of the refutation and argumentation, in the process of students as the "protagonist", the teacher is responsible for answering the questions and explaining the important and difficult points of the knowledge[15], and change the "knowledge transmitter "for students to learn the" guide "to change the passive learning for active learning, the use of open learning methods, to help students build the framework of the knowledge system. Teachers can also set up scenarios in the class simulation questions, individual or group form to guide students to deepen their knowledge. For example, when talking about "Nutritional Vitamin D Deficiency", put out the question: What are the main sources of vitamin D? What are the main sources of vitamin D? What are the pathologic mechanisms underlying the prevention of disease by exposure to sunlight? After active thinking and discussion, students learned that the sources of vitamin D are food, skin light synthesis, etc., of which skin light synthesis is the main source of vitamin D, thus recognizing the importance of sun exposure to children, which can further develop students' practical problem-solving skills, so that students can complete the expected teaching goals in a relaxed and harmonious classroom atmosphere.

4.2.3 Multi-modal linkage to build classrooms

- (1) Adhere to the teaching philosophy of "student-centered and problem oriented", implement the concept of subject knowledge, set knowledge content in specific situations, and enhance students' ability to think, explore, and analyze on their own. Through students' ability to think, explore and analyze, they can understand the relevant knowledge concepts and treatment and nursing measures, cultivate students' critical thinking and learning ability, improve their ability to establish disciplinary knowledge structure, and build up their own characteristic and reasonable knowledge system.
- (2) Using the teaching mode of flipped classroom, the teacher establishes a network teaching platform for the flipped course of pediatric nursing, records the course video in advance, collects relevant network teaching resources, and uploads them to the teaching platform; the teacher collects the students' feedback before the class, designs the course program for offline teaching, and answers the questions and solves the puzzles during the class; after the class, the teacher uploads the course test on the teaching platform to know the students' mastery of the current class. Through this method, the two-way communication between teachers and students can be realized, so that students really become the center of the classroom, which can to a certain extent increase the students' interest in knowledge exploration and learning, ensure the effectiveness of teaching and improve the students' academic performance.
- (3) In the teaching process of pediatric nursing, you can use the more typical cases in the course content, through a variety of ways to design the corresponding teaching situation, such as the use of multimedia equipment, role-playing, clinical simulation and other methods, so that students can learn in the real situation link. In such a scenario, students can stand in the perspective of the child or parents to see the problem, can be immersed in the situation, produce a strong empathy, so that the students on the treatment and care of the disease is more profound, but also to improve their comprehensive ability.
- (4) multimedia teaching method is widely used in teaching, teachers in the production of teaching courseware, can be appropriately interspersed with pictures, video, audio, animation, etc., can make the teaching more intuitive and vivid, so that the students feel the fun in learning. Teachers use multimedia teaching, the knowledge of the books presented in the big screen, can make the students can be more intuitive grasp of theoretical knowledge, clear the content of this section of the key points.

5. Conclusion

"Basic Nursing Science is a core course of nursing specialty, which plays a role of bridge between professional basic courses and clinical practice courses. The course has many knowledge points and strong practicality, so it is one of the key points of teaching reform to improve the teaching quality and let students improve their comprehensive ability on the basis of learning basic knowledge and basic skills. Teachers should explore and innovate the most suitable teaching mode according to factors such as school conditions, academic conditions and specific practical training conditions to improve teaching quality, enhance students' vocational competitiveness and better serve the society.

Acknowledgements

- 1) Zhengzhou Sias College Key Discipline Support Project (School Science [2022] No. 1)
- 2) Henan Province Undergraduate University "War Epidemic" Course Ideological and Political Model Course Funding Project (Jiao Gao [2020] No. 531)
- 3) Zhengzhou Sias College Campus Level Course Ideological and Political Demonstration Course Support Project (School Education [2023] No. 45)
 - 4) Zhengzhou Sias College Key Curriculum Support Project (School Education [2023] No. 44)

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