Application of online and Offline Teaching Mode in Basic Nursing

Huan Li, Qingqing Xie, Rui Hou, Hongmin Wang, Min Lin, Chunyu Li
School of Nursing, Nursing School of Sias University, Xinzheng, 451150, China

Abstract: Nursing teaching is the key stage of training nursing talents. Its teaching quality directly affects the quality of the trained talents and the development and outlet of nursing education. Nursing is a main course which aims to train "practical" and "innovative" senior nursing talents and enable students to complete the overall nursing of patients during the perioperative period. The new nursing mode and education goal put forward new requirements and challenges to nursing teaching. Nursing educators need to deepen the teaching reform, improve the teaching system, and integrate with the internationalization process. This paper systematically summarizes the development of teaching theory in nursing through literature search, and explores the application of various teaching methods in actual teaching, so as to better provide theoretical reference for nursing educators. The development and renewal of nursing technology are fast. In terms of curriculum setting, nursing includes a large number of theoretical courses, laboratory practice and operation contents, clinical internship and practice stage, with close time arrangement, rich information covered in each class, and close contact with clinical practice. In terms of teaching methods, the traditional nursing teaching methods are teaching methods and instilling methods. In the long-term teaching, nursing educators gradually realize the one sidedness of the traditional teaching methods, and are actively reforming and introducing new effective teaching methods to improve the teaching quality and efficiency.

Keywords: Offline teaching; Teaching mode; Nursing

1. Introduction

In recent years, on the basis of the development of evidence-based medicine, some scholars have put forward the concept of evidence-based teaching. They believe that teaching activities should be based on the best teaching research that can be found at present as evidence. At the same time, they should consider the personal experience of teachers and the characteristics of students, and discuss and put forward the framework steps of evidence-based teaching. However, up to now, the relevant research is still very weak, especially the research on nursing teaching. Teaching method is the key link to ensure the quality of teaching [1]. The reasonable selection and use of teaching method is very important for the realization of teaching objectives, and can directly affect students' learning interest, learning motivation, learning confidence and learning effect. Therefore, teaching method plays a very important role in the teaching reform at home and abroad. Up to now, most nursing educators at home and abroad still choose teaching methods mainly by experience and convenience, which will inevitably affect the scientificity and applicability of teaching methods, and then affect the teaching effect [2]. Therefore, based on the concept of evidence-based practice, it is of practical and important significance to develop the evaluation tool of the reference value of teaching methods

literature, and to study the path of scientific selection of nursing teaching methods on this basis, so as to help nursing teachers select teaching methods scientifically and reasonably and promote teaching reform. With the development of social economy and the improvement of people's living standard, great changes have taken place in etiology and disease spectrum, which has also led to the progress of medical science and technology and the transformation of medical model, and has put forward new challenges to nursing work [3]. It is required that nursing work should change patients' overall concept of biology, psychology and society from simple disease nursing model to "people-oriented" "From individual nursing to group nursing, we can change the concept of patients from passive nursing to active disease prevention. Of course, with the change of the disease spectrum and the aging of the population, the cooperation and communication in the field of nursing are expanding day by day[4]. Diversified community nursing services, such as family nursing, hospice care and day ward, also put forward higher requirements for nursing, requiring the development of nursing work to be professional and specialized, requiring the nurses to strengthen theoretical learning, strengthen the ability of independent learning, and actively change nursing service mode and nursing education concept.

2. Application of online and Offline Teaching Mode in Basic Nursing

2.1. Analysis of the current situation of basic nursing teaching mode

At present, the traditional classroom teaching mode is still the leading teaching mode of China's education system, that is, teacher centered, cramming knowledge, students are just passive acceptance. The purpose of education is to improve students' moral character and build up a positive outlook on life and values [5]. Then, the purpose of higher education is to require teachers to guide students to study and think independently, strengthen professional quality education, play creative thinking, and improve the learning level of professional knowledge on the basis of cultivating the ability to analyze and solve problems. In the traditional sense, the teaching method of classroom teaching not only ignores the cultivation of students' self-learning ability, but also lacks the subjective initiative of students' learning and the cultivation of new things' creativity. Problem based learning is a problem-based, student-centered learning model [6]. In online online and offline teaching, teachers design specific situations, let students take questions as the main line of learning, and inspire students to actively think about and explore the unknown parts. Online and offline teaching can improve the enthusiasm and initiative of learners, so that learners' ability to acquire and use knowledge can be fully exercised.

The characteristics of nursing science require teachers to have rich clinical teaching experience, good modern technical knowledge, evidence-based consciousness, innovative spirit and lofty moral quality, so as to reasonably arrange teaching design, explore and solve new problems in teaching activities, inspire students' creative consciousness, and gradually guide students to consciously become a person who can serve the people's health wholeheartedly Nurse [7]. Teaching theory is a method, strategy and technology to study the phenomena and problems of teaching, reveal the general laws of teaching, and use and follow the laws to solve the practical problems of teaching; teaching mode is a relatively stable structure framework and active program of teaching activities established under the guidance of teaching theory. Under the change of teaching theory and teaching mode, the teaching of nursing is also facing many changes. In many years of exploration and practice, educators and nursing experts at home and abroad have summed up many teaching theories and models, which is of certain significance to the teaching guidance of nursing.

There are many contents and classes in nursing science. Students often feel "deep, scattered and numerous" in their study, and it is difficult to understand and remember. Some colleges and universities pay more attention to

knowledge imparting and less attention to ability cultivation in their teaching [8]. They have not got rid of the ideological shackles of the "warehouse theory" centered on imparting knowledge. Although the teaching methods are gradually diversified, the scope of use is small and formalized, which can not be used in Teaching purposefully. In terms of assessment method, the traditional assessment method is mainly the combination of theoretical examination and operational assessment [9]. The test proposition is mostly "seeking the same method", which refers to the ready-made answers in textbooks, which makes the students' thoughts rigid and forms the tendency of cognitive psychology, resulting in the phenomenon of "high scores and low abilities". Some colleges and universities adopt the lottery examination method for the operation examination, which to some extent reflects the real teaching effect, which may also lead to the great difference of western culture and education idea in the students' fluke psychology, leading to many differences in the development of teaching method, but many people do not seriously distinguish the application of online and offline teaching in these two environments, and some educators do not [10]. When there is a large amount of scientific evidence, blindly praise the online and offline teaching methods from the west, and even some people start to apply them without mature resources and perfect conditions. The research shows that under the current teaching mode in China, there are still some problems and limitations in the development of online and offline teaching methods.

The foundation of students is weak: some students are lack of information acquisition ability, weak in self-study and understanding ability, introverted personality, and weak in cooperation ability.

Limited teachers' energy: online and offline teaching requires teachers to have excellent professional knowledge and classroom regulation ability [11]. But at present, some teachers have not received the professional training of online and offline teaching application, which leads to the lack of teaching experience. At the same time, the teaching and research tasks of nursing teachers are heavy, so it is difficult to have the energy to carry out meticulous teaching design for different levels of teaching objects.

Lack of campus resources: teaching resources in some colleges and universities are relatively lacking, campus network is not perfect, etc., which to some extent restricts the application of online and offline teaching methods.

Poor arrangement of class hours: the energy spent on online and offline teaching work is far more than ordinary classroom teaching [12]. However, the nursing teaching time arranged by some schools is limited, so it is difficult to organize more teaching contents.

Teaching materials need to be improved: the teaching plan, teaching materials and teaching evaluation system

of online and offline nursing teaching matching are not mature, and there are no online and offline special teaching materials at present, which requires relevant teaching and research workers to re prepare the teaching materials according to the online and offline teaching objectives.

Potential social ethical factors: teachers usually use real cases as the introduction, which is likely to involve ethical issues, bringing certain difficulties to online and offline development.

2.2. The application of offline teaching mode in basic nursing

In recent years, education has paid more and more attention to the all-round development of human beings. Advanced education methods can stimulate students' desire for knowledge, stimulate students' curiosity and learning motivation, create independent thinking and free learning space for students, set goals, plans and learning contents for themselves, and choose learning methods suitable for them[13]. The education idea of "student-oriented" advocated by humanistic education thought has become the focus of the education circle, which has important guiding value for education and teaching, and has been widely used. Nursing psychology is an interdisciplinary subject combining nursing science and psychology. It applies psychological knowledge, theory and technology to the field of nursing, studies the relationship between psychological factors and health and disease, as well as the rules of mental activities and the best psychological nursing methods related to human health and disease in the field of nursing, and combines PBL teaching method to the offline teaching mode of nursing science The characteristics of PBL teaching method are as follows:

a. Class in groups, mainly by self-study;
b. Raise and solve problems;
c. Comprehensive knowledge;
d. Do not give systematic lectures, but give priority to guidance;
e. have the team spirit of unity and cooperation;
There are no teachers in the group, and there are mentors as "supporters".

The characteristic of this teaching mode is not to instill knowledge, but to focus on the cultivation of students' ability to find, analyze and solve problems. In the process of teaching, students become the main body of classroom learning, and teachers play the role of guides in the process of students' learning. Students become the core force of the classroom, while teachers become the auxiliary force [14]. In the process of group learning, teachers use clinical cases as the motivation to stimulate students' learning, guide students to grasp the learning content, let students learn to think and reason correctly, and constantly improve students' self-learning ability. In view of this purpose, in the process of designing PBL curriculum, teachers try their best to make students pay attention to the connection of interdisciplinary horizontal knowledge in their learning content, and make the consolidation and application of basic courses throughout the whole PBL teaching process [15]. This requires PBL teaching to break the tradition of non-interference of basic subjects in the past teaching, and gradually realize the vertical connection between basic medical subjects and clinical nursing subjects and the horizontal connection of multiple basic subjects. Based on this, the offline teaching mode and influencing factors of basic nursing were optimized, as shown in the table below:

Table 1. Influencing factors of offline teaching mode of basic nursing

Teaching elements	Traditional mode	PBL mode
Teacher	Teaching work is independent, which is mainly to transfer the previous experience to students	To guide students to obtain strategies to solve problems, the whole teacher team cooperates and supports each other
Student	The protagonists, experts and authorities in teaching are regarded as "containers" of knowledge. They are passive receivers of information. They mainly memorize and repeat the experience and knowledge of their predecessors. They study independently and compete with each other	In the process of teaching, the guide, the promoter and the cooperative learner should not only construct the meaning of knowledge, but also form various abilities to cooperate in the form of groups
Teaching strategies	In a single form to all students	Students participate in learning, establish partners with other students or teachers, solve problems in groups; students acquire and apply knowledge in various situations; students find information by themselves, and teachers only play a guiding role
Media	Service for teachers to broadcast demonstration knowledge to students in the process of teaching	As a cognitive tool for students to acquire, process information and solve learning problems
Evaluation method	Students are divided into different grades according to their grades. Teachers are the only evaluators to evaluate their grades by completing certain tasks	According to the combination of teacher evaluation, peer evaluation and self-evaluation, in addition to examinations, there are many flexible ways to evaluate students
Evaluation method	Students are divided into different grades according to their grades. Teachers are the only evaluators to evaluate their grades by completing certain tasks	According to the combination of teacher evaluation, peer evaluation and self-evaluation, in addition to examinations, there are many flexible ways to evaluate students
Learning environment	Learning is self-centered, learning in a competitive environment	Students learn in a cooperative and supportive environment

Based on the information in the table above, the offline teaching mode of basic nursing based on PBL teaching has the following advantages:

The understanding of situational cases changes from confusion to open mindedness. By overcoming difficulties and finding answers to questions, the sense of achievement in this process is conducive to enhancing students' confidence in learning.

There are many opportunities to find, solve and analyze problems, which can cultivate students' ability to grasp opportunities.

Let students fully participate in the process of seeking answers to questions, change their thinking of passively accepting knowledge, and actively acquire knowledge.

Hiding problems in cases, arousing students' curiosity, guiding students' enthusiasm and desire to explore problems.

Effect of PBL application:

PBL Teaching method can stimulate students' thinking activities and change the traditional

In the way of classroom teaching, students are no longer passively sitting in the classroom to learn boring theories. They have a fresh sense of active participation from passive reception, which greatly improves students' interest in learning and thirst for knowledge

In PBL teaching, teachers guide students to carry out discussion and analysis activities, grasp the problems and puzzles existing in students' learning in time, and make the teaching focus easy to understand after repeated circulation.

Students can connect Book Theory with clinical practice in case study, with specific content and firm memory.

4.PBL It is beneficial to cultivate the ability of cooperation among students and the skills of communication between students.

The form of group discussion makes the relationship between teachers and students more harmonious.

PBL Teaching can cultivate students' ability to integrate knowledge of various disciplines and learn science and technology, and it is conducive to the cultivation of critical and innovative thinking.

It can improve individual nursing ability and medical record writing ability, and lay a solid foundation for the development of evidence-based nursing.

2.3. Application of online teaching mode in basic nursing

On the one hand, it creates an independent virtual ward learning environment which adapts to the teaching objectives of nursing, the age characteristics of students and cognitive psychology. Using the visual image of virtual reality, presenting learning information vividly, cultivating students' good learning attitude and emotion, and completing the construction of knowledge through independent inquiry activities and mutual cooperation and communication with teachers and other students. Virtual clinical cases are interactive, immersive and imaginative. Students can maximize their autonomy in the learning process. On the other hand, autonomous learning in virtual clinical cases requires learners not only to control and master the learning environment, learning content, learning progress, etc., but also to connect the virtual environment with the real world, so as to better construct the assimilated knowledge and skills in the virtual situation. In the virtual clinical case software, it provides learners with appropriate control means, which helps to exercise their self-discipline ability and enhance their motivation of lasting learning.

The interface design of virtual clinical case software is discussed and modified by researchers and virtual software development experts. The user interface of virtual software is the communication channel between human and computer. It is mainly composed of visual elements such as color, text, image, symbol, and multimedia elements such as 3DMAX, flash, XML, etc. it conveys the information of virtual situation, which is convenient for students to operate and communicate with computer. Interface design mainly includes two aspects: interface layout and interface color.

The demand and function orientation of virtual clinical case teaching software are analyzed. The core members of the research group carefully analyzed the advantages and disadvantages of virtual cases in foreign countries, the development trend, the form of domestic nursing teaching, and then determined the demand of virtual clinical case software. Virtual clinical case software makes use of the advantages of virtual reality technology to present the teaching contents related to system diseases in a systematic and orderly way in the form of virtual hospital according to a certain organizational structure, and presents the clinical symptoms, physical signs, auxiliary examination, diagnosis, treatment, nursing, rehabilitation and pathogenesis of typical cases. To provide nursing students with clinical situation platform and resources to carry out independent, cooperative and research-based learning can better assist the teaching of nursing, improve the effect and efficiency of nursing teaching; to establish a clinical case related resource database, to provide teachers and students with a systematic and rich clinical case resource database.
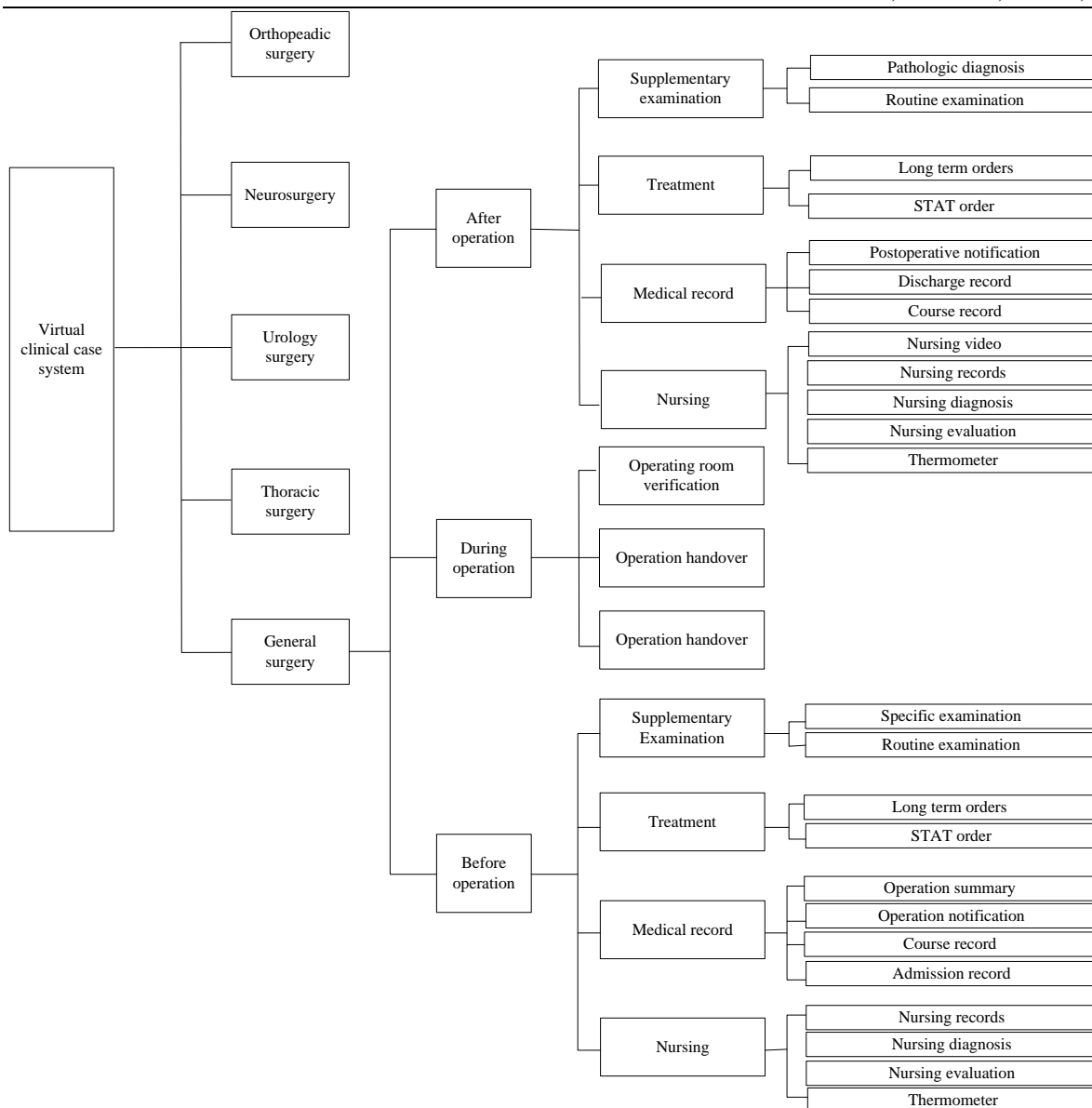
Figure 1. Functional structure of virtual clinical case software

Based on the above structure, the analysis of learning preparation, at the beginning of a specific learning, makes an objective and correct analysis of the learners' original knowledge and skills level, psychological development level, and adaptability to learning content. Learning preparation mainly includes two parts: the analysis of learners' previous experience and the analysis of learners' general characteristics. First, the analysis of learners' previous experience refers to the analysis of learners' previous experience Analysis of learners' knowledge reserve and attitude towards specific subject content. Nursing is an important branch of nursing students' learning, which is generally set up after the completion of basic courses such as systematic anatomy, pathophysiol-

ogy and physiology. When teachers use virtual clinical case software to teach, students already have preliminary medical basic knowledge and network operation skills, have certain independent learning ability, give targeted training to students before the implementation of teaching experiment to consolidate computer operation knowledge, and design the "learning suggestions" module in the software to facilitate students' self-study. Through the software, students can Increasing the accumulation of original knowledge can also promote the learning of new knowledge. Secondly, the general characteristics of learners are the analysis of learners' age, gender, cognitive maturity, life experience, cultural background, learning motivation, personal expectations of learning before

specific learning. Through the analysis of teaching practice of nursing specialty, the accumulation of professional knowledge and skill proficiency of nursing students need to be improved, the general self-confidence and consciousness are poor, and they are easy to receive visual and auditory stimulation. This software has rich case resources, using the interaction of virtual reality technology to design a virtual situation, so that students can quickly perceive the teaching content through a variety of stimuli, through its direct perception, form a rich and clear image, and cultivate students' sense of self-efficacy. According to the characteristics of specific courses, this paper discusses the teaching method of virtual clinical case software suitable for this course. Some courses with strong concept are not suitable for this teaching mode. Compared with other courses, basic nursing involves many knowledge points and is not systematic and conceptual. The author believes that virtual clinical case software teaching method can be used in some chapters of basic nursing which combine daily life and clinical practice. Creating appropriate discussion topics is the primary factor to determine the success of the whole virtual clinical case software teaching process. This experiment shows that The application of virtual clinical case software teaching method in basic nursing teaching has certain significance. It can introduce the teaching ideas and teaching methods of virtual clinical case software in basic nursing teaching. But not all the teaching contents are suitable for the virtual clinical case software teaching method, and it is not realistic to use the virtual clinical case software teaching method in the whole process of basic nursing teaching. Therefore, part of the contents suitable for the virtual clinical case software teaching method can be selected for implementation. Nursing educators need to continue to explore effective models, increase teaching chapters and hours for further research, so that virtual clinical case software teaching method can be better combined with traditional classroom teaching, and achieve better teaching results.

3. Analysis of Experimental Results

There are 194 middle school students in class 1 and class 2 of 2018 nursing specialty in a medical college. All the students were randomly divided into experimental group (98) and control group (96), experimental group (10 males and 88 females) with an average age of (19 ±) 14-24 years Four point one ）Years old. In the control group, there were 8 males and 90 females, with an average age of 20 ± Three point six ）Years old. There was no significant difference in gender and age between the two groups (P > 0.05) zero point zero five ）, with comparability. The students are all taught for one semester, with 65 theoretical hours and 55 practical hours. The teaching materials, theoretical hours, syllabus and practical hours of the two classes are the same. At the same time, 11

kinds of operation skills are taught, including various bed making methods, oral care, intravenous infusion, aseptic technology, nasal feeding, vital signs, enema, catheterization, various injection methods, sputum suction And oxygen. The teaching mode of the experimental group is online and offline, and the network learning platform is established.

Before class, the teacher creates a teaching video, and makes a 10 minute micro class according to the syllabus and ideas. The knowledge points and operation points to be learned in the course are vividly displayed one by one. And upload it to the online learning platform, and guide students to actively watch the video. The teacher designs the homework before class. According to the learning objectives and preview plan of the next class, the teacher designs the homework before class in a targeted and planned way after the students watch the video before class to stimulate the students' interest in learning. Fourth, the class should be carried out in an orderly way, with two class hours of 90 minutes in one class. The first 15 minutes are for discussion, answering questions and solving doubts about the video content before the class, and free communication; In the next 10 minutes, the teacher will show the fox operation content on site, and then the students will operate in groups for 30 minutes; in the next 25 minutes, the students will gradually show the operation content according to the groups, and other students will score and comment as judges; in the last 10 minutes, the teacher will summarize and arrange the next lesson. After class 5, students can communicate with teachers online on the learning platform, discuss learning points and difficulties with each other, and urge students to finish homework on time. The teaching mode of the control group is to adopt the traditional teaching method. When teaching a certain kind of operation skills, the teacher first demonstrates and explains the theory, and then to the students practice and at the same time the teacher corrects the students' improper skills. The specific processing steps are as follows Table 1.

In terms of classroom teaching effect, the scores of online and offline teaching methods of classroom atmosphere, interaction with teachers, classroom attention, communication with classmates and participation initiative are higher than those of LBL teaching method (t = 2.49-3.83, P < 0.05), and the scores of time reasonable project LBL teaching method are higher than those of online and offline teaching method (t = 2.81, P < 0.05): in terms of promoting learning, the scores of online and offline teaching methods of pre class preview, subject connection, knowledge extension, reference, consolidation and review, and knowledge understanding are higher than those of LBL (t = 2.46-5.74, P < 0.05); In terms of improving learning ability, the scores of online and offline teaching methods of active learning, collaborative ability, independent thinking, problem-solving and com-

munication ability are higher than those of LBL (t = 3.92-8.65, P < 0.05). There is no statistical difference between the two teaching methods of improving innovation ability (t = 1.03, P > 0.05); In terms of teacher evaluation, the scores of online and offline teaching methods such as knowledge depth, guidance method and driving

students' thinking ability are higher than those of LBL teaching method (t = 3.27-9.61, P < 0.05), and the scores of key outstanding project teaching method are higher than those of online and offline teaching method (t = 2.98, P < 0.05). Based on this, the survey structure is counted and recorded as follows Table 2.
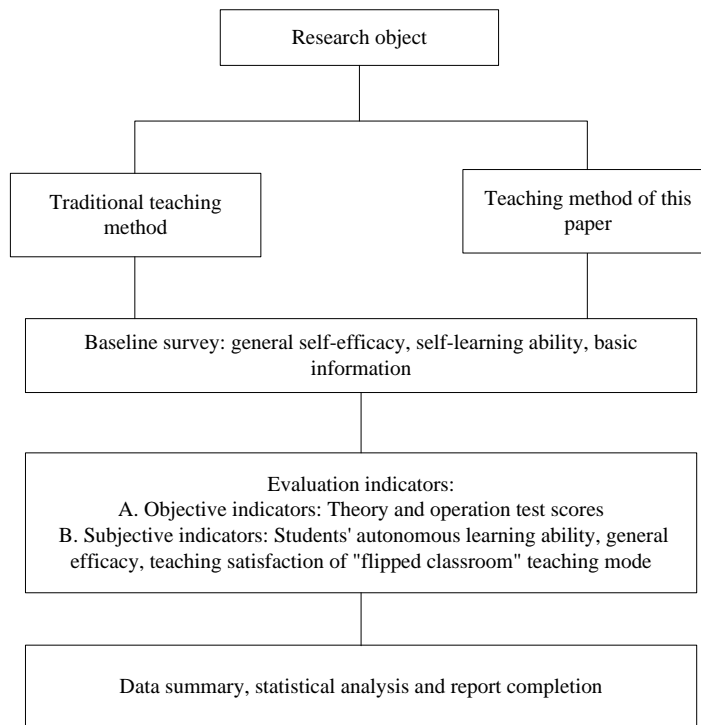
Figure 2. Experimental processing steps

Table 2. Statistics of questionnaire results

Project	Favor %	Neutral %	Disapproval %
1. Like learning virtual clinical case software	71	27	2
2. Virtual teaching can help me achieve my learning goals	83	14	3
3. Virtual teaching helps to improve learning interest	72	27	1
4. Virtual teaching is conducive to teaching and learning initiative	80	15	5
5. virtual teaching improves the ability of disease assessment and analysis	86	14	0
6. It is conducive to the development of critical thinking ability	75	20	5
7. Virtual teaching enhances the understanding and expansion of knowledge	74	24	2
8. Virtual teaching helps to improve the ability of cooperation and communication	78	18	4
9. Virtual teaching is conducive to the cultivation of computer information literacy	72	25	3
10. Before virtual teaching, teachers need to explain certain knowledge	75	24	1
11. Teachers can effectively guide us to use software	74	24	2
12. Teachers can guide me to finish my study tasks smoothly	76	23	1
13. Virtual teaching will increase the burden of learning	82	14	2
14. The virtual situation makes me feel personally	80	16	4
15. Satisfied with the application of virtual clinical case software in surgical nursing teaching	81	16	3

At the end of the course, the two groups of students were investigated by questionnaire, and whether there was significant difference between the final examination results. A total of 194 questionnaires were issued and 194 valid questionnaires were collected, with an effective rate of 100%. Through the analysis of questionnaire and ex-

amination results, this paper demonstrates the important role of online and offline teaching in the basic nursing teaching, analyzes the application of online and offline teaching in the basic nursing teaching of higher vocational colleges, and puts forward the problems that need attention in the practical application of online and offline

teaching. Before the experiment, the students in the control group and the experimental group were assessed with ctdi-cv scale. The data statistics showed that there was no difference in other items (t = 0.88 ^ 1.14, P > 0.05), except for the self-confidence of judgment thinking (t = 2.92, P < 0.01). After the experiment, the total score of ctdi-cv in the experimental group was higher than that in the control group, and the difference was statistically significant (t = 4.69, P < 0.01). In the seven scores, the scores of openness, truth-seeking, analytical ability, cognitive maturity and curiosity in the experimental group were higher than those in the control group, and the difference was statistically significant (t = 2.49-3.84, P < 0.01), there was no difference between the two groups in the scores of self-confidence and systematization ability (t = 0.92,1.07, P > 0.05). Two months after the implementation of online and offline teaching, the total score of ctdi-cv in the experimental group was higher than that before the implementation of online and offline teaching, the difference was statistically significant (r-5.62, P < 0.01), and the score of seven items was higher than that before the implementation of online and offline Teaching, the difference was statistically significant (t = 2.40-4.09, P < 0.01). Further, pems3.2 statistical software was used, and T or T 'test of two independent samples was used for measurement data comparison. Inspection level α = 0.05.

Table 3. Application test results of basic nursing

Project	Experience group	Control group	Statistic	Pvalue
Number of cases	96	94	92	93
Aseptic technology	79.15±0.15	90.34±5.63	88.46±3.62	91.18±0.64
Oral care	82.16±5.16	86.46±3.43	88.12±4.10	91.39±3.18
Make anesthesia bed	81.46±5.14	84.05±2.83	90.73±1.40	92.40±1.52
Intravenous infusion	19.464	18.841	19.530	18.832
Nasal feeding	＜0.16	＜1.43	＜0.61	＜2.46

Traditional classroom teaching methods in traditional classroom teaching, if nursing students can't attend classes on time or don't pay attention in classroom teaching, they will miss the operation demonstration process and explanation of the teacher, resulting in students can't effectively keep up with the teaching progress of the teacher, which will have a serious impact on learning. However, the application of flipped teaching classroom allows students to freely arrange their time, watch the relevant teaching video in advance, or watch the relevant teaching video after class. Students can also watch the video in combination with their own actual situation. If they cannot effectively understand the teaching content, they can watch the teaching video for many times. So the application of online and offline teaching can make students' learning more independent and personalized. In the online and offline teaching, students are the main body of teaching, and teachers are the leading role in the actual teaching activities. After class, students can learn teaching videos by themselves, while in class, they can carry out relevant simulation exercises, so that students' comprehensive nursing skills can be fully displayed, and then students' learning initiative can be made.

Table 4. Survey results of traditional methods

Grouping	Control group	Experience group	T value between groups
Search for the truth	5746±6.16	56.48±4.48	58.12±5.54
Open mind	55.16±7.10	56.43±8.16	57.34±6.28
Analytical ability	59.13±6.48	58.86±4.56	59.12±5.46
Systematization capability	60.16±4.49	62.46±2.64	60.84±6.46
Self confidence in judging thinking	64.58±2.13	65.48±1.94	63.46±4.18
Thirst for knowledge	62.46±4.65	60.13±5.48	60.02±5.46
Cognitive maturity	59.46±8.46	61.46±5.13	60.43±6.83
Total score	62.46±3.46	65.48±4.26	66.38±7.12

Table 5. Survey results of this method

Grouping	Method before use	Method after use	T value between groups
Search for the truth	46.02±1.23	67.46±5.46	5.12
Open mind	42.16±0.23	66.59±7.16	4.29
Analytical ability	42.16±1.26	67.25±8.51	7.64
Systematization capability	43.29±0.85	70.12±7.28	6.23
Self confidence in judging thinking	40.56±1.12	71.12±8.25	7.12
Thirst for knowledge	41.15±0.82	70.26±7.65	6.87
Cognitive maturity	43.56±1.26	71.26±5.84	6.46
Total score	42.17±2.08	75.46±7.25	6.89

It is found that in the application process of this teaching method, the time arrangement is more than that of traditional teaching. Although PBL teaching effect is better than this teaching method, this teaching method takes up more time for students. For example, "chronic cor pulmonale" takes at least six hours to discuss, report and summarize in class, and students need to spend more time after asking questions After class, we use library, network and other methods to solve problems and discuss problems, so the time needed to complete the disease in this teaching method is far longer than six class hours, and only two class hours are needed for the teaching methodology of this paper. The teacher can complete the detailed, comprehensive and focused explanation in class. This proves that the online and offline teaching mode proposed in this paper has a better application effect in basic nursing.

4. Conclusion

With the deepening of teaching reform and the improvement of modern teaching methods, nursing teaching methods should be constantly updated. Under the guidance of advanced teaching theory, nursing teachers can optimize the use of a variety of advanced teaching methods in theoretical teaching, turn the focus and focus of teaching to students, and fully mobilize their enthusiasm for learning. At the same time, we should pay attention to the scientific, extensive and logical combination of teaching, so as to output the teaching content by the best means in a limited time, improve the teaching efficiency to the greatest extent, and make the quality of nursing teaching step up to a new level.

5. Acknowledgments

References

[1] Lino A., Rocha L., Sizo A. Virtual teaching and learning environments: automatic evaluation with artificial neural networks. Cluster Computing. 2019, 22(4), 1-11.

[2] Das S.P., Padhy S. A novel hybrid model using teaching-learning-based optimization and a support vector machine for commodity futures index forecasting. International Journal of Machine Learning and Cybernetics. 2018, 9(1), 97-111.

[3] Brito RM., Rodríguez C., Aparicio J.L.. Sustainability in teaching: an evaluation of university teachers and students. Sustainability. 2018, 10(2), 439-440.

[4] Kalyanaraman B., Cheng G., Hardy M., et al. Teaching the basics of reactive oxygen species and their relevance to cancer biology: Mitochondrial reactive oxygen species detection, redox signaling, and targeted therapies. Redox Biology. 2018, 15(3), 347-362.

[5] Suyidno, Nur M. , Yuanita L. , et al. Effectiveness of creative responsibility based teaching (CRBT) model on basic physics learning to increase student's scientific creativity and responsibility. Journal of Baltic Science Education. 2018, 17(1), 136-151.

[6] Vizeshfar F., Torabizadeh C. The effect of teaching based on dominant learning style on nursing students academic achievement. Nurse Education in Practice. 2018, 28, 103-108.

[7] Uerz D., Volman M., Kral M. Teacher educators competences in fostering student teachers' proficiency in teaching and learning with technology: An overview of relevant research literature. Teaching & Teacher Education. 2018, 70(4), 12-23.

[8] Andrea F., Moises P., Kalyan V. Comprehension of Top 200 Prescribed Drugs in the US as a Resource for Pharmacy Teaching, Training and Practice. Pharmacy. 2018, 6(2), 43-45.

[9] Agyepong N., Govinden U., Owusu-Ofori A., et al. Multidrug-resistant gram-negative bacterial infections in a teaching hospital in Ghana. Antimicrobial Resistance & Infection Control. 2018, 7(1), 37-40.

[10] Amanda G. Teaching and learning science in the 21st century: challenging critical assumptions in post-secondary science. Education Sciences. 2018, 8(1), 12-16.

[11] Moghavvemi S., Sulaiman A., Jaafar N.I., et al. Social media as a complementary learning tool for teaching and learning: The case of youtube. International Journal of Management Education. 2018, 16(1), 37-42.

[12] Alt Dorit. Science teachers conceptions of teaching and learning, ICT efficacy, ICT professional development and ICT practices enacted in their classrooms. Teaching and Teacher Education. 2018, 73(2), 141-150.

[13] Mommaerts C. Are coresidence and nursing homes substitutes? Evidence from Medicaid spend-down provisions. Journal of health economics. 2018, 59(MAY), 125-138.

[14] Palese A., Gonella S., Grassetti L., et al. Multi-level analysis of national nursing students' disclosure of patient safety concerns. Medical Education. 2018, 52(11), 1156-1166.

[15] Mbanga C.M., Efie D.T., Desmond A., et al. Prevalence and predictors of recreational drug use among medical and nursing students in Cameroon: a cross sectional analysis. Bmc Research Notes. 2018, 11(1), 515-520.