

Analysis of the Application of Network Education Platform in Nursing Education

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Abstract: Objective: The major objective is to study the application of network education platform in nursing education. Method: 120 students majoring in the nursing profession are selected as the objects of study. All the objects are divided into two groups, i.e. the control group and the observation group, with 60 of them in each group. For the comparison of teaching effects of two different modes of teaching, the control group uses traditional teaching modes, the observation group uses network education platform. Result: The observation group has earned much more points in all subjects than the control group; the point differences between them are very obvious, making it statistically significant ($p < 0.05$). In terms of communication and preparation abilities, the observation group is better than the control group, making it statistically significant ($p < 0.05$). No obvious differences in critical thinking and team spirit between the two groups are discovered. Conclusion: The application of network education platform in nursing education improves teaching levels; therefore, it is worth the wide application and further promotion.

Currently, the “Internet+” strategy has been gradually pushed forward, making traditional teaching modes unable to satisfy present demands of education, especially in those highly practical subject areas [1-3]. The nursing profession is an independent discipline in the fields of medical science; it is a discipline based on the combination of natural science and humane studies, which requires its students to dissect human bodies and comprehend pathology and physiology thoroughly. However, traditional teaching modes of the nursing profession have difficulty in stimulating students’ interests and participation, leading to unsatisfactory teaching results [4-6]. Over the long term, students may find it difficult to find jobs after graduation; even the overall teaching level of the nursing profession may decline. As a result, more severe problems at different levels may arise. Therefore, the traditional nursing education modes are in great needs of innovations [7-10]. An “Internet+” strategy-based network education platform with various multi-media learning materials would not only stimulate the interests and subjective initiatives of students but also help teachers improve their teaching levels and class procedures, making the student-teacher communication and feedback in a positive circle [11-13]. In order to analyze the real application of network education platform with various multi-media learning materials in nursing education, 120 students majoring in the nursing profession in our school are selected as the objects of study. For the comparison between teaching effects of traditional teaching modes and network education platform, the study objects are divided into the control group and the observation group, with 60 of them in each group. The detailed research information is introduced below.

1. Materials and Methods

1.1 General Materials

120 students majoring in the nursing profession are selected as the objects of study. All the objects are divided into two groups, i.e. the control group and the observation group, with 60 of them in each group. The control group uses traditional teaching mode; the observation group uses network education platform. The gender allocations of study objects are 10 males and 110 females. The age of study objects ranges from 18-23; the average age is (20 ± 2.04) . All general references of

study objects in both groups have no statistical significance ($p>0.05$), making the study objects are of comparability.

1.2 Methods

The control group accepts traditional teaching modes, which are mainly realized through traditional multi-media teaching aids. Subjects that students in the control group are taught through multi-media aids include intravenous infusion and other nursing knowledge. After finishing both theoretical and practical courses of the nursing profession, students shall take exams.

The observation group uses network teaching platform, whose class ours are the same as that of the control group. Main contents of network education platform include major curriculum and teaching trends, access statistics and practice performance of students. Teachers upload corresponding teaching materials to the network platform, which are mainly about brief introduction on the nursing profession and syllabus, multi-media courseware of different chapters and pictures and videos. Students shall preview the basic knowledge of the nursing profession before the course starts via network teaching platform. After each class, teachers upload the courseware of this class to the network platform. Other teaching administrators upload videos of both theoretical and practical courses to the platform within one week and make sure that the platform upgrades in time for students to browse and download.

Besides, teachers instruct students to watch relevant videos of nursing practices through the platform, and browse the latest knowledge, operations and medical appliances of the nursing profession, etc. in the field of medical science, laying the foundations for future works. Limitations of time and space are broken by the platform. Teachers can interact with students through the platform, answer the questions that students may encounter during after-class reviewing, accelerate the teaching progress. For students, they can communicate about the knowledge they have learned through the platform, as well as showing their learning results on the platform.

1.3 Assessment Indicators

Students in both groups shall take the same exams in terms of theories, practical operation and intravenous infusion to compare their scores; besides, their daily behaviors are recorded and assessed by teachers for the comparison of communication ability, preparation ability, critical thinking, and team spirit.

1.4 Statistics Analysis

The research data are analyzed through SPSS19.0 statistics software. The enumeration data are tested by χ^2 . Measurement data are tested by t. Measurement indicators are expressed as “mean \pm standard deviation ($\bar{x} \pm s$)”, if $p<0.05$, it is statistically significant.

2. Results

2.1 Comparison of Exam Scores between Students in Two Groups

In terms of theory, practical operation and intravenous infusion, the exam scores of students in the two groups are compared. The results show that points earned by students in the observation group are more than that in the control group. The differences are obvious, making the results statistically significant ($p<0.05$), as shown in Tab.1.

Tab.1 Comparison of Scores of Subjects between Two Groups

Group	Theory Exam	Practice	Intravenous Infusion
Observation Group (n=60)	88.56 \pm 2.17	96.58 \pm 3.54	96.58 \pm 3.25
Control Group (n=60)	76.54 \pm 4.02	95.65 \pm 4.25	95.24 \pm 8.66
t value	6.235	4.251	4.021
P Value	<0.05	<0.05	<0.05

2.2 Comparison of Teacher Assessments between Students in Two Groups

In terms of communication ability, preparation ability, critical thinking, and team spirit, teacher assessments of students in the two groups are compared. The results show that the communication and preparation ability of students in the observation group is better than that in the control group, making the results statistically significant ($p < 0.05$); however, no obvious differences of critical thinking and team spirit between the two groups are discovered. As Tab.2 indicates:

Tab.2 Comparison of Teacher Assessments between Two Groups

Group	Communication	Preparation	Critical Thinking	Team Spirit
Observation Group (n=60)	8.56±0.54	8.56±0.97	8.59±0.54	8.58±0.47
Control Group (n=60)	7.85±0.56	7.56±0.58	8.95±0.68	8.47±0.47
t value	7.561	4.254	0.654	1.147
P Value	<0.05	<0.05	>0.05	>0.05

3. Discussion

Traditional teaching modes are unable to satisfy the demands of students in terms of nursing education [14-16]. They have difficulty in activating students during the teaching process and realizing the anticipated objectives, leading to employment difficulty.

The network education platform is supplementary to traditional teaching modes, which has become the newly developing trend of nursing education [17-19]. It is of great significance to the alternation of domestic and international nursing education. However, in field applications, there are certain problems of network education platform. Students could have done better in terms of memorizing and understanding the references [20-22]; besides, male students are less effective than female students. In China, there are various types of schools setting up nursing majors, such as universities, colleges, and secondary specialized schools. However, different types of schools are different in teaching conditions. For instances, key universities have more excellent teachers, while normal secondary specialized schools have teachers with relatively low comprehensive abilities [23-25]. The network education platform can eliminate the asymmetry. Teaching resources and references are shared on the platform. Nursing students from any types of schools are able to watch the practical operation videos, look up the latest knowledge as well as broadening their scopes of knowledge through the platform [26]. In addition, the network education platform puts forward higher requirements on teaching abilities of teachers. Effectively applying the network education system requires teachers to manage the online teaching resources and improve the quality of the resources on the basis of network technology.

During the experiment, students in the observation group use the network education platform as supplements to traditional teaching modes. After comparing the exam scores of the two groups in terms of theories, practical operation and intravenous infusion, it is clear that the observation group has done better works than the control group [27, 28]. The differences between the two groups are obvious, indicating the statistical significance of the results ($p < 0.05$). After comparing the communication and preparation abilities of the two groups, it is clear that the observation group is better than the control group. The differences between the two groups are obvious, indicating the statistical significance of the results ($p < 0.05$). However, no obvious differences are found between the two groups in terms of critical thinking and team spirit [29, 30].

In summary, traditional teaching modes are unsatisfactory for nursing education. The network education platform based on traditional teaching modes helps students understand their courses better and improve their practical operation performances. It also helps schools and teachers improving their teaching levels. Therefore, the network education platform is worth applying and promoting.

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