

The Application Effect of the “Diverse and Comprehensive” Evaluation System in the Teaching of Geriatric Nursing Course

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Abstract: Elderly nursing is the main course for cultivating elderly nursing talents, and its teaching quality is a key element among geriatric nurses. The purpose of this study is to construct a “Diverse and Comprehensive” evaluation system and explore its potential effect on elderly nursing teaching. An experimental study was conducted on 256 second-year nursing students majoring in nursing at Zaozhuang Vocational College from March to July 2023. The experimental group adopted a “Diverse and Comprehensive” evaluation system, while the control group adopted a single theoretical examination evaluation method. The study found that the final evaluation score of the experimental group was higher than that of the control group ($P < 0.05$). In addition, the humanistic literacy level of the experimental group students has significantly improved after the start of the class compared to before ($P < 0.05$). The research results indicate that the application of the “Diverse and Comprehensive” evaluation system in elderly nursing teaching is beneficial for improving students’ learning effectiveness and humanistic literacy.

Keywords: “Diverse and Comprehensive” evaluation system; Geriatric nursing; Humanistic literacy

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1. Introduction

The “Overall Plan for Deepening the Reform of Education Evaluation in the New Era” released by China points out that we should focus on building a new education evaluation system with complementary functions centered on improving result evaluation, strengthening process evaluation, exploring new value-added evaluation, and improving comprehensive evaluation while promoting the establishment of a scientific education evaluation system^[1]. Due to the constraints of their development stage and the demand for high-quality social talents, the teaching evaluation system of higher vocational colleges still faces problems such as excessive focus on results, weakened process evaluation, single evaluation subject, and neglect of humanistic literacy.

Geriatric nursing is a core course for nursing majors in vocational colleges, but traditional elderly nursing teaching neglects the student’s subjectivity and restricts the development of their self-learning ability^[2]. However, teacher-led classroom teaching places more emphasis on imparting knowledge. Although it maximizes the

knowledge output, it neglects the cultivation of students' practical abilities and their humanistic literacy^[3,4]. Therefore, we construct a BOPPPS+ integrated online and offline teaching model named "Learning on the Front Line of Class, Learning on the Middle Line of Class, and Learning Online After Class." This mode requires students to complete relevant learning before class, and the classroom becomes a place for teachers and students to participate in knowledge discussions. Students actively learn, and teachers' roles shift from being the main lecturers to guides assisting student learning^[5,6]. The new teaching model focuses more on the learning process and development of students. Combining this characteristic, a "Diverse and Comprehensive" evaluation system is adopted to comprehensively evaluate students, which is of great significance for improving teaching effectiveness and exerting the motivating effect of evaluation under this model^[7]. Therefore, from the perspective of the long-term goals of talent cultivation and the practical needs of teaching evaluation, this study constructs an evaluation system that emphasizes the process, diversified evaluation subjects, and meeting job requirements. In addition, the application of teaching practice in vocational colleges can increase learning motivation, promote self-directed learning, and improve humanistic literacy, thus resulting in a better and well-trained talent.

2. Research object

This study used a convenient sampling method to select 256 students from six classes of the 2022 Vocational Nursing Major at the Medical College of Zaozhuang Vocational College. Three classes were randomly selected from the 6 classes as the experimental group, and the other three classes were selected as the control group.

3. Research methods

Both groups of students organized their teaching according to the BOPPPS+ integrated online and offline teaching modes. The experimental group adopts a "Diverse and Comprehensive" evaluation system, while the control group adopts a single theoretical exam (final exam). The experimental group used a self-designed nursing student humanistic literacy self-assessment scale to evaluate the improvement of humanistic literacy before and after the start of the class.

- (1) The construction of a "diverse and comprehensive" evaluation system. The main goal of "Diverse and Comprehensive" evaluation system is not only to evaluate the proficiency of students in mastering and applying theoretical knowledge in the traditional sense, but more importantly, to evaluate their learning process, learning effectiveness, and development^[8]. Based on this guiding theory, in combination with the analysis of learning situations, occupational cognitive laws, and teaching needs of nursing disciplines, the evaluation system which integrates basic theories, skill operations, and humanistic literacy is constructed (Figure 1).

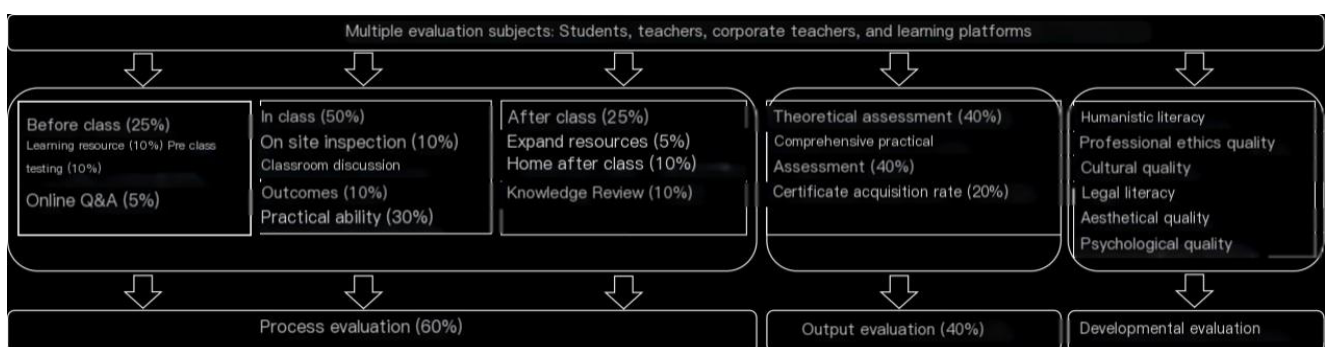


Figure 1. "Diverse and Comprehensive" evaluation system

- (2) Based on the nurse's humanistic literacy self-assessment scale developed by Zhang Yi ^[9], a nursing student humanistic literacy self-assessment scale was independently developed, which includes 25 items. The scale is measured with Cronbach's α . The coefficient is 0.865 while the construct validity KMO value is 0.817. The self-assessment scale was distributed to the experimental group twice before and after the start of the class, and students should fill it out independently.

4. Statistical methods

Statistical analysis was conducted using SPSS 22.0 software. Quantitative data were expressed as mean \pm standard deviation (SD), *t*-test was used for inter-group comparisons. In contrast, frequency and percentage (%) were used for qualitative data, and the χ^2 test was used to test inter-group association. *P*-value of $P < 0.05$ was considered statistically significant.

5. Result

In general, there was no statistically significant difference ($P > 0.05$) between the experimental and the control group in gender, age, race, and educational background. The final evaluation score of students in the experimental group was 86.5 ± 7.4 , while the score in the control group was 73.8 ± 8.1 , with a statistically significant difference ($P < 0.05$) between them. The final evaluation score of students in the experimental group was significantly higher than that in the control group. When compared with the self-assessment done before the start of the class, the students' humanistic literacy level in the experimental group showed a significant improvement in the cultural, legal, and psychological literacy dimensions after the class ($P < 0.05$). In terms of professional ethics, there was no significant improvement after the course ($P > 0.05$). A similar result was obtained in terms of aesthetic quality, showing no significant improvement in self-expression in daily life (such as clothing and makeup) ($P > 0.05$). However, there was a more significant improvement in areas that were highly correlated with course objectives ($P < 0.05$).

6. Discussion

6.1. The “Diverse and Comprehensive” evaluation system helps to improve students' overall semester grades

The evaluation system tracks the learning process at different stages of the curriculum, and students can notice the teacher's attention and support for them ^[10]. This positive emotional experience can stimulate students' learning motivation and interest, and promote their learning enthusiasm. In addition, through reflection and self-adjustment of the learning process, students can continuously improve their learning methods, form good learning habits, and improve learning outcomes ^[11]. Therefore, the “Diverse and Comprehensive” evaluation system is more conducive to students' understanding, mastery of knowledge and the improvement of their overall abilities.

6.2. The “Diverse and Comprehensive” evaluation system helps to improve students' humanistic literacy level

When compared with the evaluation result before the class, the literacy level of the experimental group students in the cultural quality, legal quality, and psychological quality significantly improved after the class. The course on Elderly Care includes the study of the physical, psychological, and social needs of the elderly,

excellent traditional Chinese culture, and relevant laws and regulations related to elderly care ^[12,13]. All of which contribute to improving students' cultural and legal literacy. Through the study of the course Elderly Care, students may experience changes in their attitudes and values towards the elderly, leading to a better understanding and respect for them, which can enhance their psychological resilience and sense of social responsibility ^[14]. However, in terms of professional ethics, the improvement level of elderly care after attending the course is not significant. Before the start of the course Elderly Care, students had already received certain moral education and influence in other courses and social life, so their basic level in this dimension is relatively high. In addition, the improvement of professional ethics requires long-term accumulation, which is not only the imparting of knowledge and skills but also the standardization of behavior and beliefs. In terms of aesthetic quality, students have a high level of proficiency in dress and makeup, so there is no significant improvement in self-assessment or evaluation. On the other hand, in terms of high relevance to course objectives, students will experience more significant improvement in self-evaluation. In summary, the improvement of students' literacy level is the result of the joint action of multiple factors, including the design of course content, the provision of practical opportunities, and the cultivation of students' emotional attitudes ^[15]. The "Diverse and Comprehensive" evaluation system can effectively evaluate students' humanistic literacy level and provide a reference for the next step of curriculum teaching and reform.

7. Conclusion

Geriatric nursing is a highly applied and practical discipline that emphasizes the cultivation of knowledge, skills, humanistic literacy, learning ability, and innovative thinking. The application of BOPPPS+ integrated online and offline teaching modes makes students the main focus in the learning process. However, the traditional evaluation system has problems such as excessive focus on results, weakened process evaluation, single evaluation subject, and the neglect of humanistic literacy. The "Diverse and Comprehensive" evaluation system expands the evaluation subject and dimension, focusing on the evaluation of the entire learning process and humanistic literacy. It can better meet the personalized needs of students, and provide timely and effective feedback to students. The evaluation system also enables students to set goals and stimulate learning motivation, besides promoting continuous improvement of learning methods and achieving the ultimate aim of improving learning outcomes. However, since "Diverse and Comprehensive" evaluation runs through every stage of the learning process, recording students' learning situations in real time may increase teachers' workload. In addition, this evaluation method requires the support of information technology tools on the Internet, which may pose some difficulties for schools that lack access to such tools.

Disclosure statement

The author declares no conflict of interest.

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