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Research on the Construction of Learning Evaluation System for Preschool Teacher Students in the Context of Digitalization

Li Yan*

Handan Preschool Teachers College, Handan City, Hebei Province, 056300, China

***Correspondence to:** Li Yan, Handan Preschool Teachers College, Handan City, Hebei Province, 056300, China, E-mail:18034005686@163.com

Abstract: In the context of digitalization, the construction of a learning evaluation system for students is particularly critical. This system must adhere to core principles such as scientific accuracy, objectivity, comprehensiveness, diversity, dynamism, developmental focus, operability, and practicality. It also requires continuous innovation, incorporating advanced technologies such as big data and artificial intelligence. Through precise design of evaluation indicators and the effective use of intelligent platforms, the system enables real-time data collection, efficient processing, and in-depth analysis, with timely feedback integrated into teaching and learning. This system not only promotes in-depth exploration of personalized student development but also leads to the comprehensive improvement of preschool education quality, laying a solid foundation for cultivating future societal talents.

Keywords: Digital background; kindergarten teacher students; learning evaluation system

Introduction

In today's digital age, the field of education is undergoing profound changes, and the training of preschool teacher students is no exception. Digitalization has brought new opportunities and challenges. Traditional learning evaluation systems can no longer meet the development needs of preschool teacher students. On one hand, digitalization enriches learning resources and methods; on the other, the learning process presents new characteristics. Constructing a learning evaluation system suitable for the digital context not only allows for more scientific assessment of preschool teacher students' learning outcomes but also effectively guides their growth in a digital environment, with profound implications for the development of preschool education.

1. The Importance of the Learning Evaluation System for Preschool Teacher Students

In the context of digitalization, the construction of a learning evaluation system for preschool teacher students leads the field of early childhood education towards a new era of precision and personalized education, with profound and significant implications. It is not only a

measure of student growth and progress but also an engine driving the improvement of educational quality. The system uses advanced technology to accurately trace learning trajectories, providing strong support for personalized development. Additionally, it guides teaching reform, inspiring students to achieve new heights of innovation, deepening practical exploration, and promoting dual leaps in knowledge and ability[1]. Moreover, the system serves as a think tank for educational decision-making, offering precise data insights to support scientific planning and policy-making, ensuring the steady progress of the early childhood education sector. In summary, the construction of this system is key to modernizing preschool education, cultivating outstanding teaching talents, and promoting sustainable development in the field, deserving our full effort and continuous exploration.

2. Principles for Constructing a Learning Evaluation System for Preschool Teacher Students in the Context of Digitalization

2.1 Principles of Scientific Accuracy and Objectivity

The principles of scientific accuracy and objectivity are indispensable foundations when constructing a learning evaluation system for preschool teacher students in the digital era. The principle of scientific accuracy requires that the evaluation system be based on relevant educational and psychological theories, employing scientific methods and tools for its design and implementation. This means that the system should have clear evaluation objectives, reasonable standards, and reliable tools to accurately reflect students' learning status and growth trajectories[2]. The evaluation process must adhere to educational and student development laws to ensure the accuracy and effectiveness of the results. The principle of objectivity emphasizes minimizing subjective factors during evaluation, ensuring fairness and impartiality. Digital technology strongly supports this by allowing objective recording and quantitative evaluation of student learning behaviors through data analysis and machine learning, reducing human judgment errors. Evaluators must also remain neutral, avoiding personal bias and emotional interference, ensuring the objectivity and authenticity of the evaluation results.

2.2 Principles of Comprehensiveness and Diversity

The comprehensiveness principle requires the evaluation system to cover all aspects of students' learning, including but not limited to theoretical knowledge mastery, professional skill application, practical ability improvement, emotional development, and innovative thinking cultivation. This ensures that the evaluation reflects students' overall quality and potential, avoiding one-sided or singular evaluations. The diversity principle emphasizes the variety and flexibility of evaluation methods. In the digital age, evaluation is no longer limited to traditional written exams or interviews but should make full use of modern information technology, such as online tests, virtual simulations, project assessments, peer reviews, and self-reflections[3]. These diverse evaluation methods better cater to the learning characteristics and needs of preschool teacher students, stimulating their interest and motivation while showcasing their learning outcomes and abilities more comprehensively. By combining various evaluation methods, the system can more objectively and accurately assess students' overall quality, supporting their personal growth and career development.

2.3 Principles of Dynamism and Developmental Focus

In the context of digitalization, the construction of a learning evaluation system for preschool teacher students must also adhere to the principles of dynamism and developmental focus. The dynamism principle means that the system should be continuously adjusted and optimized as students progress through their learning journeys[4]. Since learning is a continuous developmental process, students' needs, interests, and abilities change over time and experience. Therefore, the evaluation system must be flexible and adaptable, able to capture these changes in real-time, and adjust the content, methods, and standards accordingly. The developmental focus principle emphasizes that the evaluation should concentrate on long-term growth, not just immediate learning outcomes. This means evaluating not only current knowledge and skill levels but also students' attitudes toward learning, methods, innovation abilities, and future potential[5]. By setting challenging evaluation goals, the system encourages students to explore and experiment, stimulating their learning potential and promoting comprehensive development. The system should also provide personalized feedback and suggestions to help

students clarify their development directions and goals, preparing them for their future careers.

3. Construction Process of Learning Evaluation System for Preschool Teacher Students in the Context of Digitalization

3.1 Designing the Evaluation Indicator System

In the tide of digitalization, constructing a comprehensive and scientific learning evaluation system for preschool teacher students is not only an important hallmark of educational modernization but also a key factor in enhancing the quality of preschool education. The design of this system requires a deep understanding of the uniqueness of preschool education and the demands of the times, seamlessly integrating traditional educational wisdom with the essence of digital teaching. Each evaluation indicator should be like a carefully crafted puzzle piece, independently complete yet mutually supportive, collectively forming a grand blueprint for the holistic development of preschool teacher students. Specifically, the design of the indicator system should closely revolve around the core competencies of preschool teacher students and future occupational needs, assessing not only the solidity of their professional knowledge and the adeptness of their teaching skills but also their information literacy, innovative thinking, and problem-solving abilities in a digital environment. By refining indicators—such as distinguishing course grades into assessments of theoretical knowledge mastery and practical operational abilities, specifying practical skills in scenarios like simulated teaching and environmental setup, and incorporating digital resource creation into the evaluation system to encourage students to utilize digital tools for creative expression and knowledge sharing—we ensure a systematic and coherent evaluation from foundational knowledge to advanced skills and from individual abilities to comprehensive qualities[6]. Additionally, maintaining the flexibility and dynamism of the indicator system allows for timely adjustments based on the developmental characteristics and individual differences of preschool teacher students, ensuring that the evaluation system remains relevant and targeted. Advanced technologies like big data and artificial intelligence provide robust support for precise setting and dynamic adjustment of the evaluation system. Through data analysis, we can achieve a more objective and comprehensive understanding of students' learning states and growth trajectories, providing scientific evidence for personalized teaching. Moreover, the application of digital evaluation tools makes the evaluation process more efficient and convenient, offering strong support for self-reflection and continuous improvement among preschool teacher students.

3.2 Selecting Evaluation Tools and Platforms

Amidst the digital wave, the core of constructing a learning evaluation system for preschool teacher students lies in carefully selecting efficient and user-friendly evaluation tools and platforms. These tools and platforms must not only possess strong technical support but also have a profound understanding of educational needs, seamlessly integrating with the meticulously designed evaluation system. They act like smart navigation systems, guiding educational evaluation into an era of precision and personalization by leveraging data insights to reveal students' learning trajectories and growth needs, optimizing evaluation processes through technology, and enhancing efficiency. Ultimately, they should promote comprehensive development in knowledge, skills, emotions, and information literacy among preschool teacher students, transforming educational evaluation into a powerful engine for improving the quality of preschool education. These tools need to closely align with the evaluation system, facilitating data collection, analysis, and feedback. Online examination systems and Learning Management Systems (LMS) ensure precise and efficient grade evaluations, while video recording and simulation software provide direct demonstrations of practical operational abilities. The selection of platforms emphasizes stability, security, usability, and compatibility, integrating various tools to enhance data processing capabilities and presenting learning conditions through intuitive charts. Emerging technologies such as AI grading and big data behavior analysis, while promising, require careful evaluation of their practicality and applicability. In the selection process, it is essential to comprehensively consider evaluation objectives, indicators, technical conditions, and user experience to ensure that the tools and platforms not only meet current needs but also lead evaluation innovations, providing solid support for

the comprehensive development of preschool teacher students.

3.3 Formulating Evaluation Implementation Processes

3.3.1 Data Collection for Evaluation

The collection of evaluation data is a cornerstone of the evaluation implementation process, ensuring the accuracy and effectiveness of results. It requires comprehensive and detailed capture of various types of information about preschool teacher students during their learning processes, including but not limited to academic performance, practical activity demonstrations, and the application of digital resources, thus laying a solid foundation for subsequent data processing and analysis. In the context of digitalization, this process becomes more efficient and comprehensive. By utilizing LMS, online assignment platforms, and classroom interaction tools, real-time and automatic collection of learning data—including course participation, assignment completion, test scores, and project reports—can be achieved[8]. Additionally, traditional methods such as surveys and interviews can be combined to gather subjective feedback and self-assessments from students about their learning experiences. This data collection should ensure thoroughness and accuracy, providing a strong basis for later data processing and analysis.

3.3.2 Data Processing and Analysis

The collected evaluation data must undergo scientific and systematic processing and analysis to be transformed into valuable evaluative information. In a digital context, advanced techniques such as big data analysis and data mining can be employed to conduct deep exploration and intelligent analysis of vast amounts of data, revealing underlying patterns and trends[9]. For instance, analyzing student learning behavior data can identify their learning habits, interest preferences, and potential difficulties, while analyzing test scores can assess their knowledge mastery and skill development levels. These analysis results will provide strong support for generating evaluation outcomes.

3.3.3 Feedback and Utilization of Evaluation Results

The feedback and utilization of evaluation results represent the ultimate goal of the evaluation implementation process. In the digital context, feedback on evaluation results can be more timely and personalized. Through online platforms or mobile applications, results can be directly pushed to preschool teacher students and their instructors, helping them understand their learning conditions and developmental directions[10]. Furthermore, evaluation results can serve as crucial evidence for teaching improvement and decision-making. Schools and educational management departments can adjust teaching plans, optimize resource allocation, and improve teaching methods based on evaluation results to enhance overall teaching quality and effectiveness. Additionally, evaluation results can be a vital reference for preschool teacher students' self-reflection and growth planning, motivating them to continually pursue excellence and realize their personal values.

Conclusion

In the future, as cutting-edge technologies such as artificial intelligence, big data, and cloud computing continue to develop, the learning evaluation system for preschool teacher students will undergo even smarter and more refined innovations. These technologies will enable the evaluation system to achieve more precise data analysis, more personalized learning path planning, and more timely feedback mechanisms. Additionally, the evaluation system will increasingly focus on integrating process-oriented and outcome-oriented evaluations to comprehensively reflect the overall qualities and growth trajectories of preschool teacher students. Such an evaluation system will not only aid students in self-awareness and self-improvement but also lay a solid foundation for cultivating outstanding early childhood education talents who possess innovative spirit, practical abilities, and a sense of humanistic care.

References

[1] Zhang Jianmei. Innovation of Higher Vocational Teaching Supervision in Educational Evaluation Reform[J]. China Higher Education, 2021(17):56-58.

[2] Xu Xueping. The bottleneck and crack of five education integration education in higher vocational colleges and universities[J]. Vocational and Technical Education, 2021, 42(23):71-75.

[3] Fu Yuyuan, Han Yingxiong. Evaluation of the

effectiveness of teaching methods of general education courses under the perspective of "Golden Class"[J]. Modern University Education, 2021, 37(2):103-110.

[4] Ma He. Strategies for Improving the Effectiveness of Online Teaching Behavior of Higher Education Teachers[J]. China Adult Education, 2022(22):61-64.

[5] Pan Chen. Research on the construction of evaluation index system of teaching ability of physical education teachers in higher vocational colleges and universities [D]. Nanjing: Nanjing Institute of Physical Education, 2020.

[6] Luo Chunlian, Shen Hongmei, Liu Dachuan, et al. Construction of vocational education quality evaluation system based on vocational ability orientation[J]. China Adult Education, 2023(11):24-27.

[7] Chen Hong. Research on Quality Evaluation System of Higher Vocational Classroom Teaching [J]. Journal of Hubei Open Vocational College, 2023, 36(10):57-59.

[8] Hu Wei, Shi Weiping. From High Adaptation to High Quality: The Positioning, Challenges and Path of Vocational Education Reform in the New Era[J]. Research on Education Development, 2022, 42(9):30-37.

[9] Si Lixia. Casting Efficient Classroom with Motivational Evaluation[J]. Language World (Window for Primary Students), 2021(11):24.

[10] Wang Wei. The design and practice paradigm of classroom evaluation framework for problem solving ability[J]. China Exam, 2021(10):51-60.