



A Study on the Current Status of Practical Teaching in Vocational Teacher Education under the Background of Industry-Education Integration

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Abstract. This study takes a vocational teacher education program in an university in Shaanxi Province as an example to explore the current status for practical teaching in the context of industry-education integration. Utilizing non-participatory observation over one month, textual analysis of training programs, curriculum systems, teaching outlines, and lesson plans, it was found that there are issues in goal setting, content arrangement, method selection in practical teaching. The research found that course objectives mainly emphasize knowledge mastery, neglecting practical application. Practical teaching content is moderately to severely outdated and does not fully align with industry demands. Additionally, traditional teaching methods dominate the practical sessions, limiting student engagement and active participation. In response to these issues, the study proposes optimization strategies grounded in industry-education integration. These include reconstructing teaching objectives, updating practical teaching content, and innovating teaching methods. The aim is to substantially enhance the quality of practical teaching in vocational teacher education, fostering graduates equipped with the skills and knowledge required by the early childhood education industry.

Keywords: Teacher Education, Industry-Education Integration, Practical Teaching.

1 Introduction

With the new stage of development in the Chinese economy, the industrial structure is continuously upgrading and adjusting. Professional technical and skilled talents are increasingly favored by the industry. In the realm of vocational education, effectively bridging the gap with industry demands and enhancing the career competitiveness of graduates has emerged as a pressing issue. Education, being a vital sector that shapes the country's future, relies heavily on the quality of professional talent cultivation, yet various issues persist in nurturing the professional competencies of teacher-training students [1]. This study investigates the current status of a vocational teacher education program in a university. The research methods employed include non-

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participatory observation and textual analysis of the program's documents. The research aims to uncover discrepancies between curriculum design, teaching content, and teaching methodologies, with industry requirements, and propose targeted strategies for improvement. Unlike previous research, this study focuses specifically on the challenges in practical teaching within teacher education programs, taking into account the unique characteristics of teacher education major, thereby offering a fresh perspective on addressing the mismatch between teacher education and industry demands.

Prior research [2] highlighting the pivotal role of vocational education industry-teaching integration service organizations in promoting deep integration, and Wei Qi and Shuhang Fan's [3] exploration of reform paths for legal practical teaching systems under the backdrop of industry-education integration, have laid a solid theoretical foundation and provided valuable references for this study.

The key contributions of this study lie in identifying key practical teaching issues in early childhood education via fieldwork and analysis, and proposing industry-demand based strategies to enhance talent cultivation quality in vocational education. Novelty stems from integrating teacher education characteristics to foster professionals with both strong theoretical knowledge and practical abilities.

2 Methods

This study primarily uses observation methods. A non-participatory observation was conducted over one month in a first-year class of early childhood education at a vocational college. The focus was on course objectives, teaching content, and teaching methods to understand the current state of practical teaching. Textual analysis of the professional training program, course syllabus, and lesson plans was performed.

3 Results

3.1 Course Objectives

Table 1. The course objectives.

Courses	Objectives
Introduction to early education	Understand the theory and methods of early education.
Teacher ethics and laws	To master the professional ethics of teachers, educational policies and regulations.
Infant nutrition and feeding	To know the nutritional needs and feeding principles of infants and toddlers, and to guide proper feeding.
Infant and toddler psychological development	To understand the basic laws of infant and toddler psychological development and to grasp the educational significance of critical periods.

During the observation period, freshman students were required to participate in a total of four specialized courses: Introduction to Early Education, Teacher ethics and

laws, Infant nutrition and feeding, Infant and Toddler Psychological Development. The following course objectives were summarized by analyzing the outlines of these four courses.

As can be seen from Table 1, the course objectives of the four specialized courses mainly emphasize the mastery of knowledge and do not pay attention to the application of knowledge in practice. Some courses reflect practice teaching objectives and implementation in course lesson plans. However, through observation, it was found that some objectives fail to closely align with the actual needs of the education industry [2]. For example, in "Infant and Toddler Psychological Development" course, the practical teaching objective is set as "being able to apply psychological principles to solve practical problems in development of infants and toddlers." However, in the practical component, students are only required to analyze textbook cases, lacking opportunities for observations and interactions with children. This hinders their ability to truly understand and apply the knowledge learned to solve real-life problems.

3.2 Teaching Content

All four courses under investigation include practical teaching components, with practical sessions accounting for 50% of the total course hours. Through observation, the researchers assessed the level of out-date of the practical contents in each course (by comparing them with the latest research findings) [4][5] and their alignment with industry demands (based on market demand analysis and industry standard) [6]. The evaluation results are presented in Table 2, with ratings ranging from 1 (extremely outdated) to 5 (very innovative) for the evaluation of practical content outdatedness, and from 1 (completely mismatched) to 5 (completely matched) for the evaluation of alignment with industry demands.

Table 2. Practical content evaluation.

Courses	Evaluation of the obsolescence of practice content	Evaluation of the match with the needs of the industry
Introduction to Early Education	3	2
Teacher Ethics and Laws	4	3
Infant Nutrition and Feeding	2	2
Infant and Toddler Psychological Development	3	3

From Table 2, it can be observed that the practical contents of these four courses are to some extent outdated and do not align with industry demands. Specifically, the average scores for "Evaluation of Course Practical Relevance" and "Evaluation of Alignment with Industry Demands" for all courses are below 4, indicating the need to adjust the teaching content of the practical components in these four courses to adapt to current industry needs and the educational environment.

3.3 Teaching Methods

The research findings indicate that the four courses generally exhibit issues such as traditional teaching methods and a lack of emphasis on student involvement during the practical teaching process. Table 3 will present the specific observations regarding the practical teaching methods employed in these four courses.

Table 3. Practical teaching methods.

Courses	Practical Teaching Methods
Introduction to Early Education	Lecture; Case study
Teacher Ethics and Laws	Explanation of regulations; Homework exercises
Infant Nutrition and Feeding	Lecture; Recipe creation
Infant and Toddler Psychological Development	Lecture; Case study

As can be seen from the table, the practical teaching methods in all four courses are traditional and neglectful of the students' subjective position. Specifically, in the "Introduction to Early Education" course, although case analysis is incorporated, the level of student participation remains relatively low. The "Teacher Ethics and Laws" course focuses primarily on the explanation and memorization of regulations, lacking opportunities for practical application and in-depth understanding. The "Infant Nutrition and Feeding" course has limited practical operations, failing to adequately meet the personalized learning needs of students. In the "Infant and Toddler Psychological Development" course, although case analysis is involved, it mostly consists of predetermined scenarios, lacking space for students' independent exploration.

4 Discussion

This study's findings have illuminated several pivotal aspects of practical teaching in early childhood education, particularly regarding the discrepancies between course objectives, teaching content, and teaching methods, and their alignment with industry needs.

4.1 Inconsistencies in Course Objectives and Industry Demands

Recent studies have emphasized the importance of incorporating industry insights and standards into educational curricula to ensure graduates are prepared for the job market [7]. However, our study indicates that while some courses aim to equip students with practical skills, their objectives are not fully aligned with the current demands of the early childhood education industry. This suggests a need for closer collaboration between educators and industry professionals to update course objectives regularly. For instance, the objective in the "Infant and Toddler Psychological Development" course aimed at applying psychological principles to solve practical problems; however, students were short of the opportunity for hands-on experiences or interactions

with children. Therefore, it is necessary to reconstruct the teaching objective system. The teaching objectives should not only emphasize the mastery of basic teaching skills, but also include the cultivation of multidimensional abilities. Under the guidance of such teaching objectives, students can better adapt to the diversified needs of the education industry after graduation and become education professionals with comprehensive competitiveness.

4.2 Outdated Practical Teaching Content

Another notable issue is the outdated nature of the practical teaching content in the courses analyzed. Recent advancements in early childhood education, such as the growing emphasis on play-based learning and the role of technology in early education [8], are not adequately reflected in the current course curricula. As demonstrated in Table 2, the practical contents of all four courses received moderate to low ratings for their alignment with current research findings and industry demands. This underscores the need for regular updates and revisions to ensure the relevance and applicability of the taught material. To ensure the relevance of the teaching content of vocational education courses, universities should actively cooperate with enterprises to develop practical courses that meet the needs of the industry. These courses should be closely integrated with actual projects and cases, so that students are exposed to the latest industry trends and cutting-edge technologies throughout the learning process.

4.3 Traditional Teaching Methods and Lack of Student Engagement

As shown in Table 3, the current practical teaching sessions are still dominated by lectures, with limited opportunities for case studies, recipe creations, or other interactive learning experiences. This traditional teaching method hinders students' ability to engage critically with the material and actively participate in their own learning processes. This contradicts Chinese educator Huang Yanpei's 'student-centered' teaching philosophy, which emphasizes that education should focus on students, attend to their individual differences, and cultivate their autonomous learning ability and innovative spirit [9]. Therefore, to enhance student engagement and learning outcomes, it is necessary to draw on Huang Yanpei's teaching philosophy, improve existing teaching methods, and introduce more student-centered teaching strategies. The innovation of these teaching methods will stimulate students' interest and motivation in learning and promote their development in the background of industry-education integration.

5 Conclusion

This study has provided valuable insights into the current state of practical teaching in the early childhood education program at a vocational college. Through non-participatory observation, textual analysis, and semi-structured interviews, we have identified issues pertaining to course objectives, teaching content, and teaching methods. However, the findings are limited to a single vocational college and a short peri-

od of observation. To address the limitations of this study, future research could expand the sample size and geographic scope, including observations and interviews across multiple vocational colleges and regions.

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