

Study on the Index Factors of Quality Evaluation of Pre-service Education for Art Teachers

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Abstract: In contrast, the pre-service training quality evaluation of teachers in China lacks professional standards in terms of overall service significance. This article will investigate the normal school students and front-line art teachers in a certain normal school. The research results show that the idea of running a school, resource management (including teacher qualifications), curriculum teaching, educational practice, and student harvest, all of which affect the standardization of teacher education pre-service training Five core elements of quality evaluation. After establishing the structural equation model for fitting degree test, path analysis and effect analysis, the internal connection, conflict, core factor clusters and basic tree development ideas for establishing the quality evaluation of pre-service training of art teachers in China are obtained.

1 Status Quo of Evaluation Indexes for Teachers' Training Quality in China

According to the basic requirements for the professional development of teachers in the compulsory education stage and the principles of development, comprehensiveness, operability, and pluralism in the cultivation of normal students[1], Chinese scholars combined with the practical experience of the training of teachers in elementary and secondary schools in China on the basis of learning from foreign experience. The quality structure of primary and secondary school teachers and the general criteria for quality evaluation: Professor Ye Lan of East China Normal University believes that the quality of primary and secondary school teachers can be based on the "three-point method" (divided into educational philosophy, knowledge structure[2], ability structure). Later, some scholars believed that the physical and mental structural quality should also be an indispensable element of elementary and middle school teachers. On this basis, Gu Yiming and others randomly surveyed 60 primary and secondary school principals in Anhui and determined 14 secondary evaluation indicators[3]. However, the quality evaluation methods and index systems proposed in the existing studies have not received recognized standards.

2 Screening factors for evaluating the quality of art teacher education

2.1 Research Notes

One of the three college teachers from A, B, and C was selected, and 120 questionnaires were issued using the Likert 10-point scale, and 100 valid questionnaires were recovered. In the same year, the school's art teachers were selected to conduct a special survey, interviewing 20 trainee teachers, school supervisors and vice presidents, principals, and 100 trainees and trainee teachers.

2.2 Screening factors

After conducting teacher-student survey interviews, we summarized and summarized the comprehensive index factors of education quality evaluation before the education of art teachers (see Table 1), and used statistical software to analyze the data. Analysis of variance variance validity. The test result is ① the total factor C; ronhach composed of the above six factors. The coefficient is 0.851[4], which indicates that there is a strong convergence between these six factors; ② After the

PP graph confirms that the load score of the factor cluster is a multivariate normal distribution, the inter-group validity test shows that each factor has a gender, grade, and college The Wilks' significance of the three control variables at the level are all greater than 0.05, that is, the interaction effects of the control variables are not obvious, and only the main effect terms of the corresponding factors of the control variables need to be examined; the main effect inspection results are that the gender, grade and school as a whole The Wilks' significance of the three control variables at the level are all greater than 0.05, and only the factor 6 "resource management" and factor 5 "school running ideas" have significant differences in the "academic level" variable.

Table 1 Comprehensive index factors of education quality evaluation before art teacher education

Factor 1 Student level	Factor 2 Course teaching	Factor 3 Practical practice	Factor 4 Teacher level	Factor 5 School ideas	Factor 6 Resource management	Other inconvenience classification factors
Professional foundation (a)	course structure	Cooperation relationship	Faculty Structure	School positioning	basic situation	Integration
Expertise	Course quality	progress status	teaching research	School characteristics	Books situation	Industry-University-Research
Teaching skills	Teaching supervisor	Student harvest	Service model	School strategy	Leadership level	Teaching reflection
Educational attempt	Improvement Program	community	Teacher output (b)	School culture	Financial situation	Social reputation (c)
Student output (d)	Elective Courses				Personnel situation	Student source

3. Structural equation model test of quality evaluation factors for pre-service training of art teachers

3.1 Structural Equation Modeling

According to the practice ecological research of professional education services, stakeholder management and benchmarking management theory, the evaluation activities of teacher education quality focusing on the cultivation and growth of new art teachers should mainly involve education by normal students (future new teachers) and art teachers. Implementing institutions and social (employer) units are the "ecological circle" of the inspection target; on the premise of drawing on the benchmark of international first-class experience, the entire process of teacher education provided by the art teacher education implementation institution should be borrowed from the "capital" The theory of "transformation" is not difficult to find[5]: Similar to the training of talents in ordinary colleges and universities, the process of art teacher training is the cultural capital of teacher education institutions, which acts on teaching and scientific research to accumulate human capital; only in this process, art teacher education is more prominent Educational practice activities that focus on teaching skills. Based on the above theories and experiences, the researchers have constructed a theoretical model of quality evaluation factors for pre-service training of Chinese art teachers.

3.2 Structural equation model modification

The valid measured sample data ((N = 412)) was substituted into Amos7.0. The fit coefficient test of the original SEM model I showed that the CMIN value of model I was large and the CMIN /

DF value was 11.20, which was much larger than the base standard value 2[6]; The model's GF1, CFI, NFI, and IFI values are between 0.7-0.8, which is less than the base standard value of 0.9; the RMSEA value is 0.163, which is greater than the base standard value of 0.05. This shows that the overall goodness of fitting of model I is poor, The main considerations when the model needs to be revised:

1. The reference model revision index 1 research found: a17 (service model) \leftarrow teacher level, a12 (instruction) \leftarrow course teaching ", a26 (financial situation) \leftarrow resource management" and a32 (student source) \leftarrow student level and other items The correction index of is small, and the P value accompanying its path coefficient is not significant at the level of 5%. After elimination, the model fit will be improved. But e23 (Basic conditions) \leftrightarrow School ideas", e22 (School culture) \leftrightarrow e23 (Basic conditions) , e12 (Guidance) \leftrightarrow e13 (Student harvest), e15 (Faculty Structure) \leftrightarrow e16 (teaching research), e19 (School positioning) \leftrightarrow e20 (School characteristics), The correction index of the above items is the largest, that is, by increasing the path between the two, the chi-square value of the model can be significantly reduced and the model fit degree can be improved.

2. Without reducing the goodness of fit of the original model and the value of theoretical interpretation, simplify the variables and paths of the model. In the process of optimizing the model, we integrated the potential variables "teacher level" and "resource management"[7]. From the perspective of realistic theoretical explanations, teachers in normal colleges and universities belong to the most important teacher education resources. Other resource management is a necessary allocation and guarantee around teacher management. Teacher resources and other resources are closely integrated organic entities; in On this basis, the integration of the two is conducive to simplifying the path and improving the goodness of fit. Therefore, the 15th, 16th, 18th, 23rd, and 24th items are combined into a unified "resource management" factor.

4. Conclusions and reflections

First, the factor model for evaluating the quality of teacher education pre-service training in China has a good fitting degree. In addition to being affected by the "academic level" in terms of "positioning of schools" and "basic conditions"[8], its generality The ductility is better. The classification and evaluation according to the school positioning of different teacher education pre-service training institutions is more in line with the school situation of teacher education in China.

Secondly, the quality level of the normal university's school running ideas (school goals, strategic planning, school positioning, etc.) plays an important role in "source" evaluation.

Third, the evaluation of teacher education pre-service training quality in our country shows a certain conflict on the connection between "educational practice" and "course teaching", reflecting that the evaluation of teacher education quality in China is affected by the existing talent training model in time[9], space and resources And conceptual constraints and constraints; to find the internal fit between the two, and to effectively promote the quality of teacher education services through the effective combination of theory and practice is a top priority.

Fourth, obtain the core factors (factor clusters) for the evaluation of teacher education pre-service training quality (see Table 2).

Fifth, when designing the quality evaluation index system, full consideration should be given to the internal correlation and validity between some indicators (clusters): ① Pay attention to examining the relationship between "school running ideas", "resource management", and "student level", and especially pay attention to Interaction with "basic conditions for running a school", "book materials", and "student output"; ② When designing observation indicators for "faculty

structure" and "teaching research", it should be carried out from the perspective of teacher professional level, professional interest and development evaluation Quality evaluation; ③ Focus on the linkage between the "educational practice" indicator setting and the "student level" indicator, guide the teacher education pre-service training institutions and the cooperation training of primary and secondary schools, and practically inspect the cooperation training of universities, primary and secondary schools, third-party guidance teachers Guidance and acquisition of teaching skills of normal students, forming a "community of interaction, cooperation and win-win" training practice community for normal students; ④ The inspection of the quality and quality of normal students should provide teachers with education and education management And mastery of professional knowledge such as development psychology and basic knowledge of "three words and one word" and "expression and communication" The level of teacher skills acquisition.

Table 2 Factor clusters of core indicators of art teacher education quality evaluation

Factor 1 School ideas	Factor 2 Resource management	Factor 3 Course teaching	Factor 4 Educational practice	Factor 5 Student level
School positioning	Basic conditions (a)	course structure	Cooperation relationship	Professional benchmark b
School characteristics	Books situation	Classroom quality	progress status	Expertise
School strategy	Faculty Structure (c)	Teaching supervisor	Student harvest	Teaching skills
	teaching research	Elective Courses	Educational practice community	Student output d
	Teacher output (e)			

5. Conclusion

Based on this research, the internal connection, conflict, core factor clusters and basic tree development ideas for establishing the quality evaluation of pre-service training of art teachers in China are obtained.

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