

Talent Cultivation Path of Chinese International Education Major under the Background of the Belt and Road Initiative

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Abstract: This article aims to provide an in-depth analysis of the effective paths for cultivating talents in Chinese international education in the context of the "The Belt and Road" initiative. Facing the challenges of globalization and the growing demand for international communication of Chinese language, the study used methods such as questionnaires, interviews and standardized tests, combined with statistical analysis of SPSS software, to conduct a comparative evaluation between the "Belt and Road" education integration model and the traditional Chinese international education model. The results show that the new education model is significantly better than the traditional model in terms of course content quality, teaching interactivity, teacher professionalism, course resource adequacy, and cross-cultural communication ability training. The specific improvement rate ranges from 7.25% to 31.15%, with an average of 20.87%, while the traditional model improvement rate is 3.75% to 15.15%, with an average value of 9.71%. Course satisfaction scores also reflect that the new model received higher ratings in all aspects. The conclusion emphasizes that the education integration model of the "Belt and Road" has effectively improved the quality of Chinese language education and the efficiency of professional talent training by combining international perspectives and local practices, and has provided innovative paths and empirical support for the international development of Chinese language education. Although there are sample restrictions, it has important enlightenment and guiding significance for the innovation of future education models.

1. Introduction

With the deepening of globalization, the importance of language as a bridge for cultural exchange has become increasingly prominent. As one of the most widely used languages in the world, Chinese is gradually increasing its international status and influence. The proposal of the "Belt and Road" initiative has not only brought new opportunities for economic cooperation to

countries along the route, but also opened up a broad space for the international dissemination and education of Chinese. However, in the face of the growing international demand for Chinese learning, the training of talents in Chinese international education faces a series of challenges such as shortage of teachers, insufficient teaching materials, and single teaching methods. The existence of these problems not only restricts the quality and efficiency of Chinese education, but also affects the breadth and depth of Chinese international dissemination. Therefore, exploring effective talent training paths is of great practical significance for improving the level of Chinese education and promoting cultural exchanges.

Through literature review and current situation analysis, this paper clarifies the background, purpose and scope of talent training in Chinese international education, as well as the significance of the research topic. Secondly, based on an in-depth analysis of the existing education model, this paper points out the problems existing in the current talent training process and proposes targeted improvement measures. This paper designs a new talent training model that combines international vision and local practice, innovatively combines information technology with Chinese teaching, and studies technical solutions to improve teaching efficiency and quality.

2. Related Works

In the field of talent management, Rustiawan et al. [1] discussed the human resource management of enterprises from four perspectives: employee recruitment, training programs, coaching, and leadership capacity building, and established a complete enterprise human resource management system. Cooke et al. [2] proposed four different talent development strategies based on the perspective of suppliers and products to deepen the understanding of the implementation mechanism of enterprise talent development strategies. Ma and Ding [3] demonstrated the importance of the system to the training of university teachers by constructing and developing a university teacher training system based on deep neural networks and data mining technology. Guo et al. [4] explored the issue of university internationalization through studying the internationalization development trend of Chinese universities and put forward the view that diversity and localization coexist. Wright et al. [5] analyzed how Chinese international schools seek a balance between the global and the local from the perspective of global nationalism. Nam et al. [6] focused on the development prospects of comparison and internationalization from the perspective of narrative exploration, and emphasized the role of teachers and students in cooperation. Su and Pan [7] explored the significance of conducting English education in higher vocational schools. Ge and Ho K C [8] analyzed the development trend of higher education in China and pointed out that higher education faces new opportunities for international cooperation and exchange. Huang and Zhen [9] studied the positioning and problems faced by higher vocational schools. Yue et al. [10] reviewed the development of higher education institutions and proposed the main research conclusions and research topics.

Although the existing literature provides rich perspectives and in-depth analysis on the internationalization of higher education, cross-cultural communication and other aspects, the research on the training path of Chinese international education professionals still needs to be deepened. In particular, existing research pays less attention to the professional talent training of Chinese as a second language education and how to balance local characteristics and international needs in the context of globalization. In addition, there is a relative lack of empirical research on how the "Belt and Road" initiative specifically affects the training model, curriculum setting and teaching methods of Chinese education professionals. Therefore, this paper explores the effective path of Chinese international education professional talent training through systematic research, as well as the new opportunities and challenges brought by the "Belt and Road" initiative to Chinese

education. This study will provide new theoretical and practical guidance for the international development of Chinese education.

3. Methods

3.1. Analysis of Problems and Causes of Talent Cultivation

In this study, this paper designed and implemented a questionnaire survey. The questionnaire content includes but is not limited to the education system, curriculum setting, faculty, teaching methods, cultural adaptability, technology application and other aspects, aiming to comprehensively collect the key factors and causes that affect talent cultivation. The questionnaire design uses a Likert scale to assess the respondents' views and attitudes on different issues, and also includes open-ended questions to collect more in-depth qualitative data. The questionnaire was distributed to the target sample group, including Chinese language educators, students, education administrators, and experts and scholars in related fields, through email, social media and professional network platforms. The collected data will be analyzed using SPSS (Statistical Package for the Social Sciences) software to understand the basic situation of the respondents and their views on the issues [11-12]. Table 1 shows the regression analysis data of talent cultivation problems and causes:

Table 1: Regression analysis data

Variable	Coefficient	Significance	Exp(B)
Education system	0.263	0.048*	1.301
Curriculum	0.197	0.059	1.218
Faculty	0.485	0.018*	1.626
Teaching method	0.359	0.031*	1.432
Cultural adaptability	0.477	0.028*	1.613
Technology application	0.339	0.046*	1.404

Note: * indicates 5% significance level

Among all variables, teaching staff has the highest coefficient (0.485), with a significance level of 0.018*, indicating that teaching staff has a significant positive impact on talent training. The Exp (B) value is 1.626, which means that for every one standard deviation increase in teaching staff, the probability of successfully cultivating talent will increase by 62.6%. The coefficient of cultural adaptability is 0.477, and the significance level is 0.028*. Cultural adaptability also has a significant positive effect on talent cultivation. In addition, the coefficients of teaching methods, cultural adaptability and technology application are also positive, and their significance values are less than 0.05, indicating significant effects. Based on the results of regression analysis, it can be concluded that faculty, cultural adaptability, teaching methods, technology applications and education system are the key factors affecting the cultivation of professional talents in Chinese international education. In particular, faculty and cultural fit show the strongest influence in the model.

3.2. Talent Training Paths for Chinese International Education Professionals in the Context of the "Belt and Road" Initiative

The training path design of Chinese international education professionals needs to comprehensively consider factors such as education goals, teaching content, teaching methods, teacher training, and technology application, in order to build a multi-dimensional and systematic talent training model. Figure 1 is a specific design of the training path for Chinese international

education professionals:

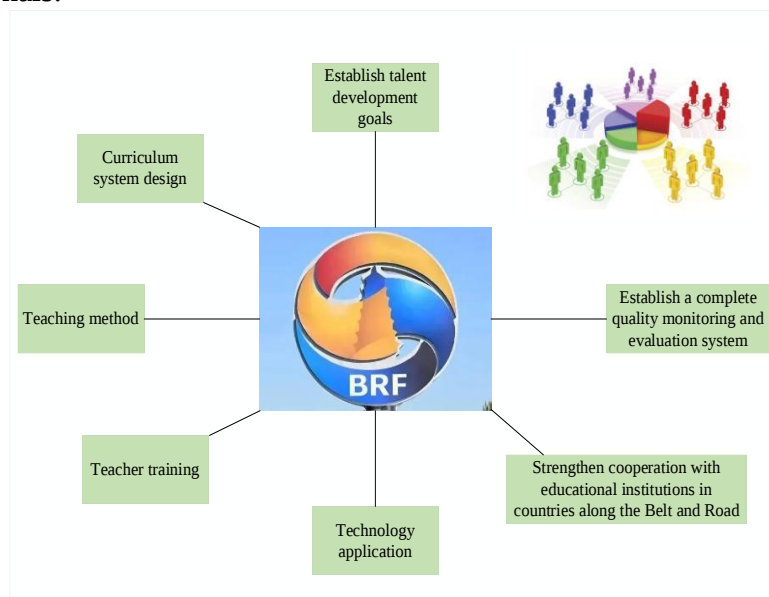


Figure 1: Training path for Chinese international education majors

First, we should establish the goal of talent training and clearly cultivate professionals with international vision, solid Chinese language and cultural knowledge, good cross-cultural communication skills and innovative teaching skills. This goal will guide the design of the entire education path and ensure that the educational results match the needs of the "Belt and Road" initiative. The curriculum system design needs to cover core modules such as Chinese language proficiency, Chinese history and culture, international business communication, and teaching methods. The course content should emphasize practicality and pertinence, and develop special courses based on the cultural background and language use environment of countries along the "Belt and Road", such as language policy and planning of countries along the "Belt and Road", and the application of Chinese in cross-cultural economic cooperation. In terms of teaching methods, we should adopt interactive and practical teaching methods such as task-based teaching, case analysis, and simulation teaching to improve students' participation and practical ability [13-14]. At the same time, we should use information technology, such as online education platforms and mobile learning tools, to provide students with flexible learning methods and rich learning resources. In terms of teacher training, we should implement international cooperation teacher training projects, select outstanding teachers to go to countries along the "Belt and Road" for teaching exchanges. In terms of technology application, a cloud platform for Chinese international education is established to integrate digital teaching resources such as online courses, virtual classrooms, and language laboratories, support distance education and intelligent teaching, and improve teaching efficiency and quality. In addition, cooperation with educational institutions in countries along the "Belt and Road" should be strengthened to establish inter-school exchange programs, joint degree programs, and overseas internship bases to provide students with an international learning environment and practical opportunities. Finally, a sound quality monitoring and evaluation system should be established to regularly evaluate and provide feedback on teaching plans, curriculum implementation, and student training effects to ensure that the quality of education continues to improve and meet the ever-changing talent training needs under the "Belt and Road" Initiative [15-16].

4. Results and Discussion

4.1. Experimental Design

The path evaluation of this paper will be achieved through a series of carefully designed data collection and analysis processes. Quantitative and qualitative research methods will be used in combination to ensure the comprehensiveness and accuracy of the evaluation results. Data collection will focus on multiple dimensions such as students' language ability improvement, cross-cultural communication ability, effectiveness of teaching methods, suitability of course content, convenience of technology application, and employment quality of graduates. Specifically, standardized Chinese proficiency tests will be used to measure changes in students' language ability; questionnaires and interviews will be used to collect feedback from students and teachers on course content and teaching methods; follow-up surveys will be used to understand the employment situation of graduates; at the same time, student behavior data on the use of online education platforms and digital teaching resources will be recorded and analyzed. Evaluation indicators will include but are not limited to the improvement rate of students' language test scores and course satisfaction scores. These indicators will help quantitatively evaluate the effectiveness of talent training paths. The comparative analysis with traditional education methods will focus on the innovation of teaching methods, the pertinence of course content, the internationalization of teacher training, the improvement of student participation, and the differences in graduate employment quality. The comparative experiments of the experimental group and the control group will be used to intuitively demonstrate the advantages and potential improvement space of the path design of this paper compared with traditional methods.

The experimental design will adopt a randomized controlled experimental method to ensure the reliability of the experimental results. The experimental group will adopt the talent training path designed in this paper, while the control group will adopt the traditional Chinese international education model. By comparing the key indicators of the two groups of students' language ability improvement, course satisfaction, graduate employment, etc., the effectiveness of this path can be scientifically evaluated.

4.2. Language Test Score Improvement Rate

It is crucial to compare the impact of different teaching methods on students' Chinese proficiency improvement. This study pays special attention to the changes in language test scores of students under the “Belt and Road” education integration model (BREEM) and the traditional Chinese international education model. By comparing the scores before and after the experiment, we can quantitatively evaluate the effectiveness of the two methods in promoting students' Chinese proficiency. Before the experiment, this paper first ensures that the students participating in the BREEM and the traditional model have little difference in basic language test scores to ensure the fairness of the experiment and the comparability of the results. Figures 2 (a) and (b) show the language test scores of students before and after the experiment, respectively:

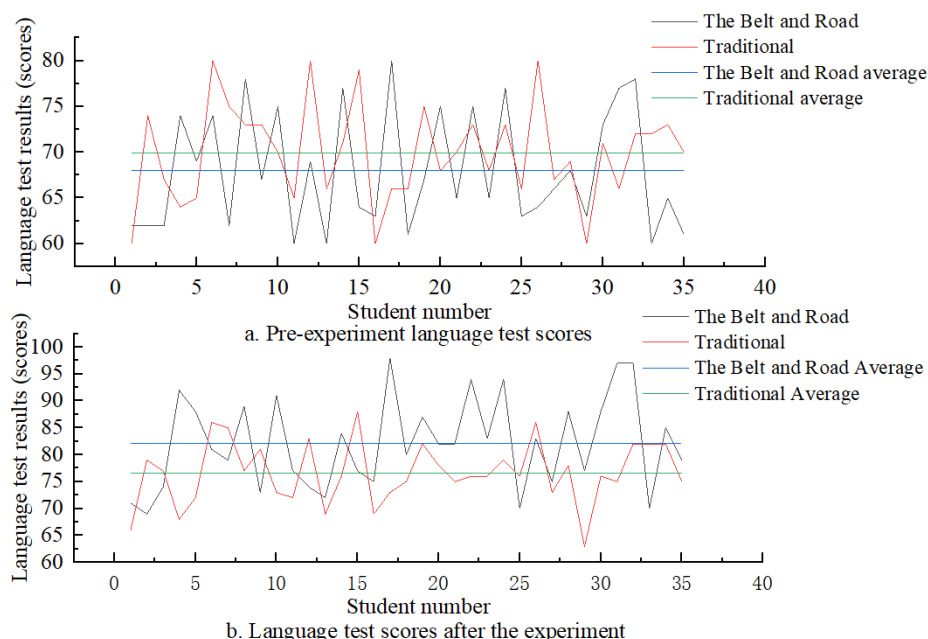


Figure 2: Language test scores

This article is based on the "Belt and Road" educational integration model, and explores and evaluates the impact of this model on Chinese teaching. Before the implementation of the trial, the average language test score of students in the "Belt and Road" education integration model group was 68.03 points, which was higher than the 9.91 points of the traditional method. At the beginning of the experiment, there was no obvious difference in the Chinese learning abilities of the two groups, which provides a good starting point for future research. The results after the experiment showed that the total score of the students in the BREEM group increased to 82.14, exceeding the 76.66 points of the traditional group. The results of the "Belt and Road" education integration model group have improved a lot, reflecting that this model has a good effect on improving Chinese proficiency. By comparing the language test results of the two groups of students before and after the experiment, it was found that the teaching model in the context of the "Belt and Road" Initiative has a significant promotion effect on the foreign language proficiency of Chinese major students. Table 2 shows the statistical results of the language test score improvement rate obtained by comprehensively analyzing the data in Figure 2:

Table 2: Language test score improvement rate

Statistical evaluation indicators	The "Belt and Road" education integration model	Traditional Chinese international education model	Difference
Minimum	7.25%	3.75%	3.50%
Maximum	31.15%	15.15%	16.00%
Mean	20.87%	9.71%	11.16%
Mean square error	0.07442	0.03606	0.03836

The comparison and analysis of the language test score improvement rates under the two models showed that the minimum average score improvement of students under the "Belt and Road" model was 7.25%, which was higher than the 3.75% under the traditional model. Among the maximum improvement rates, the comprehensive education model based on the "Belt and Road" Initiative had a maximum increase of 31.15%, which was much higher than the 15.15% of the traditional model. The gap between the two was 16.00%. This sharp difference highlights the potential and role of the

comprehensive Chinese teaching model under the "Belt and Road" Initiative in improving language proficiency. The average improvement rate of the "Belt and Road" education integration model was 20.87%, which was 11.16% higher than the 9.71% of the traditional model. This difference in average values further confirmed the effectiveness of the "Belt and Road" model for Chinese education. In the mean square error data, the mean square error of the "Belt and Road" education integration model was 0.07442, while that of the traditional model was 0.03606. Therefore, the "Belt and Road" education integration model still needs to strengthen its stability.

4.3. Course Satisfaction Rating

Course satisfaction scores are an important indicator for measuring teaching effectiveness and student learning experience. It not only reflects students' satisfaction with course content, teaching methods, teacher performance and course resources, but also reflects the degree of fit of the education model with student needs. This study collected students' course satisfaction scores on the "Belt and Road" education integration model and the traditional Chinese international education model through questionnaires and interviews, in order to comprehensively evaluate the status and effectiveness of the two models in the minds of students. In order to deeply analyze various aspects of course satisfaction, this paper designed a scoring system with multiple dimensions, covering key indicators such as course content, teaching interaction, teacher professionalism, course resources and overall satisfaction. The scores of each indicator are based on a 5-point system to more accurately reflect student satisfaction and feedback. Figure 3 is the course satisfaction score data compiled based on student feedback:

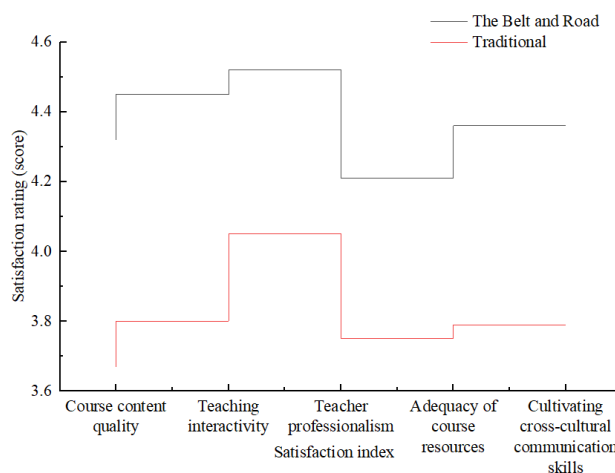


Figure 3: Course satisfaction rating

The average score of the "Belt and Road" education integration model in this aspect is 4.32 points, which is significantly higher than the 3.67 points of the traditional model. Students generally believe that the course content under the "Belt and Road" education integration model is richer, more in-depth, and closer to the actual needs of the "Belt and Road" initiative. In terms of teaching interactivity, the "Belt and Road" education integration model scored 4.45 points, which is also higher than the traditional model's score of 3.80 points. This result reflects that the "Belt and Road" education integration model can better stimulate students' enthusiasm and enthusiasm for learning. In terms of teacher professionalism, the average score of the "Belt and Road" education integration model is 4.52 points, which is slightly higher than the 4.05 points of the traditional model. Because the "Belt and Road" education integration model provides training and career development for "Belt and Road" teachers, the quality and professional level of teachers have been improved. The "Belt and Road" education integration model scored 4.21 points in terms of course resources, which is

higher than the traditional model 3.75 points. The comprehensive teaching model in the context of the "Belt and Road" can enable students to obtain richer and more diversified course resources. The focus of the "Belt and Road" education integration model is to cultivate students' intercultural communication skills. Judging from the score, the average score is 4.36 points, which is much higher than the traditional model's 3.79 points. The "Belt and Road" education integration model plays an important role in promoting international knowledge and international exchanges among college students. Comprehensive comparison of various indicators, the "Belt and Road" education integration model is satisfactory in all aspects. In terms of degree scores, they are better than the traditional Chinese international education model.

5. Conclusion

This article has carried out a more systematic exploration and practical research on the "Belt and Road" environment and the talent cultivation issues in the field of Chinese international education, and has obtained good research results. By comparing the "Belt and Road" education integration model with the traditional Chinese international education model, it is found that the "Belt and Road" teaching reform has significant advantages in improving Chinese language application ability, teaching interaction ability, teacher quality, curriculum resource allocation and cross-cultural communication ability. In particular, the strengthening of faculty and cultural adaptability plays a key role in improving the quality of talent training. In addition, this study innovatively applies information technology to Chinese teaching, providing an effective technical solution for improving teaching efficiency and quality. The research results not only enrich the theoretical basis of Chinese international education, but also provide practical guidance and suggestions for the practical field, which have important practical significance and application value. However, this study also has certain limitations. The specificity of sample selection and experimental conditions may limit the general applicability of the research results. In addition, the innovation and improvement of education models is a continuous process that requires continuous practice, evaluation and optimization. This study recommends further expanding the sample scope and strengthening cross-cultural and interdisciplinary research to enhance the adaptability and effectiveness of the educational model.

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