

# The Logical Reconstruction of Global Education Competition: Collaborative Mechanism and Path Innovation for Cross cultural Talent Cultivation in Universities

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**Abstract:** *With the continuous advancement of globalization, the cultivation of cross-cultural talents in colleges and universities faces many challenges, such as cultural differences, conflicts in educational concepts, and imbalanced educational resources. The existing training model is often difficult to effectively cope with these complex cross-cultural environments. Therefore, this paper introduces the logical reconstruction of global educational competition, aiming to explore the collaborative mechanism and path innovation of cross-cultural talent cultivation in colleges and universities. Through the framework of global educational competition, this paper proposes a collaborative mechanism of multi-party cooperation and resource sharing to promote interdisciplinary and cross-cultural cooperation within and outside colleges and universities. Specifically, the synergy mechanism has enhanced students' cross-cultural adaptability, innovative thinking and global competitiveness by promoting interdisciplinary cooperation, international cooperation and inter-school exchanges. In addition, the synergy mechanism has also strengthened cultural exchanges and mutual understanding, provided more international educational opportunities, and ensured the fairness of educational quality and teaching results. This paper refines the strategies and paths for cultivating cross-cultural talents through logical reconstruction, and provides theoretical support and practical guidance for colleges and universities to cultivate high-quality talents with international vision and cross-cultural ability in the context of globalization. The experimental results show that the experimental group's global competitiveness assessment data shows that the experimental group students generally perform well in terms of employment status, degree of internationalization of employment positions, overseas internship opportunities, and improvement of global vision.*

**Keywords:** Global education competition and cooperation, Cross-cultural talent training, Collaborative mechanism, Path innovation, Education quality.

## 1. Introduction

In the context of rapid globalization, cross-cultural adaptability and innovation have become key factors in measuring an individual's global competitiveness. With the expansion of international exchanges and multinational companies around the world, the demand for talents with cross-cultural communication and cooperation capabilities continues to rise. In particular, in the face of increasingly diverse working environments and cultural backgrounds, how to cultivate students with global vision, innovative thinking and efficient cross-cultural interaction capabilities has become an important issue that needs to be addressed in the field of education.

This study aims to explore the role of cross-cultural adaptability and innovation in improving students' global competitiveness. Through comparative analysis of the experimental group and the control group, this paper evaluates the performance of these two abilities in practical applications and their impact on students' employment, recruitment by multinational companies, and the improvement of their global vision. The study not only focuses on the importance of cross-cultural adaptability in the global workplace but also explores how innovation can become a breakthrough in global competition.

This paper first explores the theoretical background of cross-cultural adaptability and innovation and their importance in global competitiveness, and then analyzes in

detail the performance of the experimental group and the control group in these two aspects and their impact on global competitiveness. Through data analysis, this paper evaluates the role of different abilities in students' employment, recruitment by multinational companies, and the improvement of their global vision. Finally, it summarizes the research findings and puts forward educational suggestions to enhance students' global competitiveness.

## 2. Related Work

Existing research involves the synergy of technology, talent, education, finance and other fields and their impact on regional, industrial and social development, showing the interaction and mutual promotion between different factors. Hena et al. analyzed the synergy of technology and talent in the industrial transfer of Wanjiang Demonstration Area (WDA) in Anhui Province. The study showed that the coordination between technology and talent in the Wanjiang Demonstration Area was low, which was manifested as system imbalance and the synergy was in a low coupling stage [1]. Gai and Yang explored the synergistic relationship between agricultural green efficiency (AGE) and agricultural economic resilience (AER), filling the research gap on the interaction between agricultural efficiency and resilience. The data showed that AER dominated the synergistic system, and AGE and AER in the Northeast region were mainly at a high synergistic stage, with obvious temporal and spatial differences and insufficient regional radiation effect [2]. Peng et al. used a spatial simultaneous equation model combined with a three-stage

generalized spatial least squares method to study the synergy between green finance development and renewable energy consumption. The results of the study found that the development of green finance can promote the growth of renewable energy consumption by promoting economic growth, green technology innovation and industrial structure upgrading [3]. Zhuang and Zhou explored the intention and effect of China's national policy to promote industry-university-research cooperative education. The study found that China strives to achieve industry-university-research cooperative education by strengthening the main role of enterprises, formulating a policy support system, incorporating external stakeholders into the university governance structure, and building a collaborative education framework [4]. Teng et al. used a spatial Durbin model to examine the spatial spillover effect and mediating mechanism of the coordinated development of inflow and outflow FDI (foreign direct investment) on regional ecological well-being performance. The results show that the coordinated development of inflow and outflow FDI can significantly improve regional EWP (ecological well-being performance) and has a positive spatial spillover effect [5].

The application of synergy in various fields has gradually become a research hotspot, but there are still many issues that have not been explored in depth. Datta et al. explored topics related to Talent Development Environment (TDC) and tested its role in promoting innovative work behaviors of management employees. The results showed that TDC has two dimensions and emphasized the mediating role of TDC in the relationship between human resource management practices and innovative work behaviour (IWB) [6]. Lin's study used IAA (importance-attention analysis) technique to evaluate the status of competence development aspects/standards and determined NRM (network relation map) based on DEMATEL (decision-making trial and evaluation laboratory) technique. The results found that implicit ability and explicit attitude were the main influencing factors of competence development in the coffee industry [7]. Gardiner et al. aimed to explore how the discourse of talent management (TM) reinforces and perpetuates structural barriers of exclusion and discrimination. The authors proposed that the mainstream TM discourse needs to be examined in order to achieve authentic talent development (ATD) practices, and emphasized the shift from identifying talents to cultivating talents [8]. Luo et al. explored the talent crisis and its causes facing Longzhou Zhuang brocade weaving skills, and proposed effective vocational education countermeasures. The study found that the skills are facing a crisis of inheritance, due to reasons including a significant reduction in the number of weavers, the aging of skill inheritors, and low social recognition [9]. Hoque and Zheng explored the succession planning (SP) strategy in higher education, analyzed the existing literature and put forward suggestions for improvement. The study found that higher education faces problems such as scarcity of successors, gender inequality, lack of innovation and unstable personnel turnover [10]. Touriano et al. explored the role of information technology, especially the human resource management system (HRMS), in improving the efficiency and effectiveness of talent management. The study found that IT has a significant positive effect in employee recruitment,

selection, skills development, employee participation and data management [11]. Al Balushi et al. used a mixed research method to analyze the role of factors such as the balance between theory and practice, experiential learning, industry collaboration, and real cases. The research results are intended to provide guidance for curriculum developers to help develop effective entrepreneurship education programs to cultivate students' innovative spirit, risk-taking ability, and opportunity identification ability, thereby preparing students for entrepreneurial success in dynamic markets [12]. Although existing research has explored the application of synergy in multiple fields, there is still a lack of in-depth analysis of its cross-field integration and long-term mechanisms, as well as research on the differences in synergy in different regions and cultural backgrounds.

### 3. Methods

#### 3.1 Main Challenges Faced by Universities

##### 3.1.1 Cultural differences and conflicts in educational concepts

In the context of globalization, cross-cultural talent training in colleges and universities faces challenges brought by cultural differences. Students, teachers and managers from different cultural backgrounds have significant differences in teaching concepts, communication methods, values, etc. For example, the Western education model usually emphasizes critical thinking and personality development, while the Eastern education model may focus more on knowledge transfer and collectivist values. This difference not only affects classroom interaction but may also cause friction in cross-cultural team collaboration, thus affecting students' cross-cultural adaptability and educational effectiveness.

##### 3.1.2 Unbalanced educational resources caused by globalization

Globalization has provided broad opportunities for the cultivation of cross-cultural talents, but it has also exacerbated the imbalance of educational resources. Universities in developed countries and regions usually have richer educational resources, including high-quality teaching teams, advanced teaching facilities, and more international cooperation opportunities. On the other hand, universities in developing countries are facing problems such as funding shortages, uneven teacher quality, and low internationalization. This uneven distribution of resources not only affects the quality of education in universities in various countries but also makes it difficult for some students to accept cross-cultural education in the context of globalization.

##### 3.1.3 Differences in teaching systems and assessment standards

Universities in different countries and regions have different teaching systems and evaluation standards. For example, academic evaluations in European and American universities often focus on paper writing, independent research ability, and innovative thinking, while Asian countries may rely more on midterm and final exams and course participation. This difference in evaluation standards not only affects the

expectations of teachers and students but also causes trouble for the cultivation of students' cross-cultural adaptability.

### 3.2 Innovation in the Path of Cross-Cultural Talent Training

#### 3.2.1 Collaborative mechanism for cross-cultural talent training in colleges and universities

##### (1) Basic concepts and framework of the synergy mechanism

The synergy mechanism, derived from the synergy theory, refers to a mechanism for achieving common goals through multi-party cooperation and resource sharing. In the cultivation of cross-cultural talents, the synergy mechanism emphasizes the mutual cooperation between different educational subjects under a multicultural background, with the aim of improving the quality of education, promoting cultural exchanges and improving the comprehensive abilities of students. The synergy mechanism is not a simple cooperative relationship, it includes multiple levels such as resource integration, knowledge sharing, and responsibility sharing among all parties.

##### (2) Collaboration within universities: interdisciplinary cooperation and resource sharing

The coordination mechanism within universities is first reflected in the cooperation and resource sharing between disciplines. In the process of cultivating cross-cultural talents, education in a single discipline is often difficult to meet the comprehensive development needs of students. Therefore, universities need to promote interdisciplinary cooperation and integrate multiple disciplines such as cultural studies, linguistics, international business, sociology, psychology, etc. to achieve the comprehensiveness and systematicness of cross-cultural education. For example, culture and language subjects can be combined with international business and international relations subjects to design comprehensive courses to help students fully understand cultural diversity and its impact on global economy and politics. At the same time, colleges and universities can achieve interdisciplinary knowledge flow and resource sharing by sharing teaching resources, teaching equipment and academic research results, thereby improving the overall effect of education.

##### (3) External collaboration of universities: international cooperation and inter-school exchanges

The core of the external coordination mechanism of universities lies in strengthening the cultivation of cross-cultural talents through international cooperation and inter-school exchanges. With the deepening of global educational cooperation, many universities have established a wide range of international cooperation networks, and have promoted the improvement of students' cross-cultural capabilities through cooperation with universities around the world in the form of joint degree programs, academic exchanges, and overseas internships. International cooperation not only helps to improve students' international vision but also promotes the exchange of educational resources. For example, joint degree programs allow students to complete academic studies in two or more cultural

backgrounds, further improving their cross-cultural adaptability. In addition, inter-school exchanges strengthen the interaction and understanding between different cultures through student exchanges and teacher visits, providing students with more international education opportunities.

#### 3.2.2 The role of collaborative mechanisms in cross-cultural talent training

##### (1) Improve students' cross-cultural adaptation and innovation capabilities

The synergy mechanism helps students improve their cross-cultural adaptability by providing a platform for cross-cultural communication. With the deepening of globalization, cross-cultural adaptability has become one of the core qualities in the competition for talents. Through the synergy mechanism, students can exercise their adaptability in different cultural environments, learn to communicate and cooperate effectively in a multicultural context, reduce cultural conflicts, and improve the efficiency of cross-cultural communication.

##### (2) Improving education quality and global competitiveness

Through the collaborative mechanism, colleges and universities can effectively improve the quality of education, thereby enhancing their global competitiveness. In today's increasingly fierce global education competition, schools must continuously improve the quality of education and attract more outstanding students and teachers through international cooperation and resource integration. In the process of cultivating cross-cultural talents, colleges and universities must not only ensure the internationalization of course content but also attach importance to the innovation of teaching methods and promote the improvement of education quality.

## 4. Results and Discussion

### 4.1 Experimental Objectives

Verifying how the collaborative mechanism in cross-cultural talent training can enhance students' cross-cultural adaptability, innovative thinking and global competitiveness through interdisciplinary cooperation, international cooperation, cultural exchanges and other means.

### 4.2 Experimental Design

Experimental subjects: Selecting student groups with different cultural backgrounds (for example, a combination of domestic students and foreign exchange students) as experimental subjects.

Experimental and control groups:

Experimental group: educational programs that implement cross-cultural collaboration mechanisms. Including interdisciplinary cooperative courses, international exchanges, cross-cultural projects, etc.

Control group: traditional single-discipline curriculum system,

without deliberate internationalization and cross-cultural cooperation.

### 4.3 Experimental Procedures

Preliminary preparation:

Designing interdisciplinary courses, combining international business, sociology, linguistics, psychology and other subjects to cultivate students' cross-cultural abilities.

Arranging international exchange students, overseas internships or cross-border project cooperation opportunities.

Implementation phase:

Let the experimental group students participate in cross-cultural projects and cooperative courses, and work and study with students from different cultural backgrounds.

In the control group, the course arrangement continues according to the traditional teaching method, without involving cross-cultural cooperation.

### 4.4 Data Analysis

This study aims to explore the impact of different teaching interventions on the improvement of students' multi-dimensional abilities by evaluating the cross-cultural adaptability, innovation ability, and global competitiveness of students in the experimental and control groups.

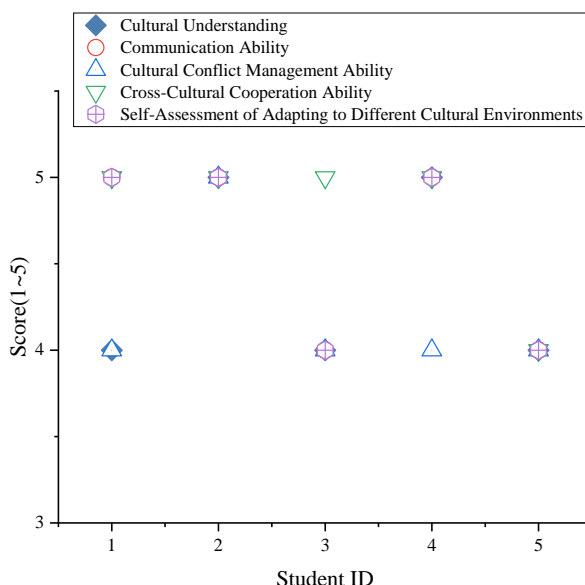


Figure 1: Evaluation of cross-cultural adaptability of the experimental group

The students in the experimental group show relatively good qualities in all dimensions of cross-cultural adaptability. In terms of cultural understanding scores, most students perform well, especially students 2 and 4, who both score full 5 points in this dimension, showing their deep understanding of different cultural backgrounds and high level of cultural sensitivity. The scores of other students are also generally

high, indicating that the experimental group has a stronger cultural understanding ability as a whole. In terms of communication skills, the experimental group also scores relatively well. Students 2 and 4 also score 5 points in this item, indicating that they are able to communicate clearly and effectively in a cross-cultural environment. Even the students 3 and 5 who score lower, with scores of 4, respectively, still show good communication skills and are able to overcome the communication barriers caused by cultural differences to a certain extent, as shown in Figure 1. Overall, the students in the experimental group show a high level of cross-cultural adaptability, especially in cultural understanding, communication and cooperation, indicating that the students in this group have strong global competitiveness and the ability to adapt to cross-cultural working environments.

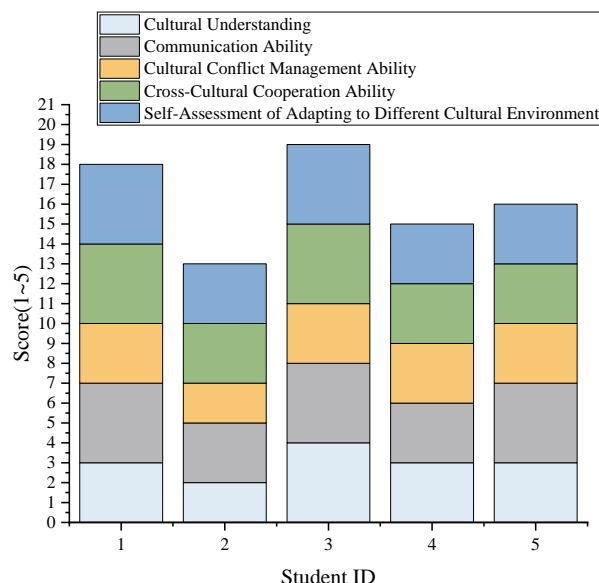
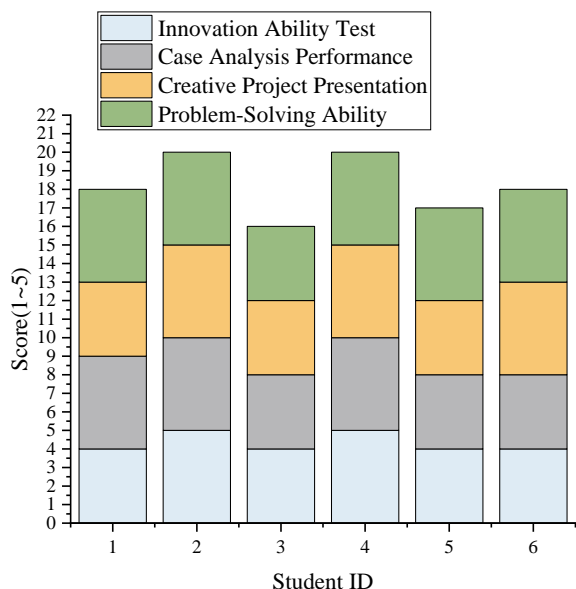


Figure 2: Cross-cultural adaptability assessment of the control group

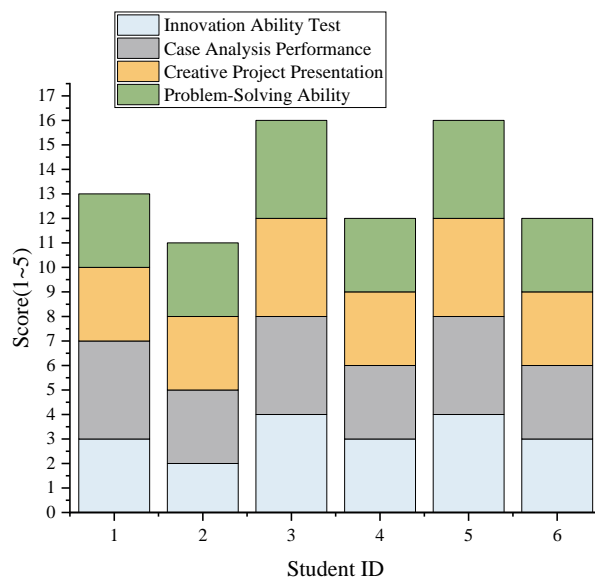
From the data in Figure 2, we can see that the scores of the control group students in various dimensions of cross-cultural adaptability are relatively low, showing certain differences. From the perspective of cultural understanding scores, there are more students with low scores. Student 2 scores 2, showing that he had difficulties in cultural understanding. The scores of other students are mostly 3, indicating that their understanding of different cultures in a cross-cultural environment is relatively basic and they have certain difficulties in adapting. In terms of communication skills, the scores are generally low, with Student 2 scoring only 3, and the scores of other students ranging from 3 to 4, indicating that students in the control group may encounter greater challenges in cross-cultural communication and find it difficult to communicate fluently and effectively in a multicultural context. In terms of cultural conflict handling ability, students generally score low, with only student 3 and student 5 scoring high (3 and 4, respectively). Overall, the control group students score low on various indicators of cross-cultural adaptability, indicating that they are relatively weak in cultural understanding, communication, conflict handling, and cross-cultural cooperation, and their ability to adapt to different cultural environments is relatively poor.



**Figure 3:** Evaluation of innovation ability of the experimental group

The experimental group students perform well in all the evaluations of innovation ability. From the perspective of innovation ability test scores, students 2, 4 and 6 all score high, 4 to 5 points, showing that they have strong ability in innovative thinking. In particular, Student 2 and Student 4 score 5 in all dimensions, indicating that they perform well in innovation and possess strong creativity and problem-solving abilities. In terms of case analysis performance, students 2 and 4 still perform well, scoring 5 points, indicating that they have strong ability to analyze complex problems and extract innovative elements from them (as shown in Figure 3). These results show that students in the experimental group have strong innovation awareness and ability, and can effectively deal with complex problems and propose creative solutions. The overall scores of the control group students in various evaluations of innovation ability are low, indicating that they have certain difficulties in innovative thinking and problem solving. From the perspective of the innovation ability test scores, Student 2 scores the lowest, only 2 points, showing his lack of innovative thinking, while the scores of other students are mostly concentrated between 3 and 4 points, indicating that their performance in innovation ability is relatively average. In terms of case analysis performance, the scores are generally low, with student 2 and student 4 scoring 3, and student 6 scoring even lower, only 3 points, indicating that they have limited ability to analyze complex problems and propose innovative solutions. Student 1, student 3, and

student 5 improve slightly in case analysis, scoring 4 points, showing that they have certain analytical and comprehension abilities in this regard, but there is still a gap compared with the experimental group. Creative project presentation and problem-solving skills are important dimensions for evaluating innovation ability, and students in the control group also generally perform poorly in these areas. Students 2, 4, and 6 all score a low 3 points in these two items, indicating that they may lack effective methods or ideas when presenting creativity and solving practical problems. Although students 3 and 5 score 4 points, they still could not match the performance of the experimental group, as shown in Figure 4.



**Figure 4:** Evaluation of innovation ability of the experimental group

According to the global competitiveness assessment data of the experimental group shown in Table 1, the students in the experimental group generally perform well in terms of employment status, degree of internationalization of jobs, overseas internship opportunities and improvement of global vision, demonstrating their strong adaptability and competitiveness in the global competitive environment. All employed students (No. 1, 2, 3, 4, 6) receive high scores for the internationalization of their jobs, especially students 1, 2 and 6, who are employed by world-renowned multinational companies such as Google, Apple and Deloitte, respectively, and all have experience in overseas internships. This not only reflects their advantages in an international working environment but also shows that they have a strong global vision. with scores of 5 for each.

**Table 1:** Global competitiveness assessment of the experimental group

Student ID	Employment Status	Job Internationalization	Overseas Internship Opportunity	Overseas Internship Company	Hired by Multinational Company	Global Vision Improvement
1	Employed	5	Yes	Google	Yes	5
2	Employed	5	Yes	Apple	Yes	5
3	Employed	4	Yes	Amazon	No	4
4	Employed	3	No	-	No	3
5	Unemployed	4	No	-	No	4
6	Employed	5	Yes	Deloitte	Yes	5

**Table 2:** Global competitiveness assessment data table of the control group

Student ID	Employment Status	Job Internationalization	Overseas Internship Opportunity	Overseas Internship Company	Hired by Multinational Company	Global Vision Improvement
1	Employed	3	No	-	No	3
2	Unemployed	2	No	-	No	2
3	Employed	4	No	-	No	4
4	Employed	3	No	-	No	3
5	Employed	3	No	-	No	3
6	Employed	4	Yes	French Company	No	4

According to the global competitiveness assessment data of the control group shown in Table 2, the students in the control group generally perform poorly in various indicators of global competitiveness. The internationalization of most students' jobs is low, with only students 3 and 6 scoring 4, and neither of them is hired by a multinational company, indicating that they are poorly adaptable in the global competitive environment. Although student 6 has overseas internship opportunities and interns in a French company, his global vision improvement score is only 4, which is still relatively limited. Other students score low in terms of the internationalization of their jobs and the improvement of their global vision, and most of them have no overseas internship experience and are unable to be exposed to a multicultural and multinational corporate environment. Overall, the global competitiveness of the control group is relatively weak, which shows that there are certain deficiencies in their training in cross-cultural adaptation and global vision expansion, and it is necessary to further strengthen the provision of international education and internship opportunities.

## 5. Conclusion

This study conducts an in-depth study on the impact of cross-cultural adaptability and innovation on global competitiveness. Through comparative analysis of the experimental group and the control group, the study reveals the key role of cross-cultural adaptability and innovation in improving students' global competitiveness. The experimental group performs significantly better than the control group in cross-cultural adaptability and innovation, indicating that relevant training and education methods have a positive role in promoting students' global vision and ability to adapt to a multinational work environment. The study finds that the cultivation of cultural understanding, communication skills and innovative thinking can not only help students better adapt to multicultural backgrounds but also improve their competitiveness in the international job market. The students in the experimental group generally have a strong global vision and can better integrate into multinational companies and multicultural environments, while the control group shows relatively weak cross-cultural communication and innovation capabilities. Therefore, this study emphasizes the importance of cultivating cross-cultural adaptability and innovation capabilities. In particular, in the context of increasing globalization, the education system should pay more attention to these capabilities to help students improve their competitiveness in the global workplace. Future research can continue to explore the long-term impact of different teaching models and methods on students' global competitiveness, in order to provide more effective strategies for international education.

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