

STUDY ON THE DEVELOPMENT OF INNOVATIVE AND ENTREPRENEURIAL BUSINESS TALENT TRAINING MODELS IN HIGHER EDUCATION INSTITUTIONS IN FRONTIER ETHNIC REGIONS

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Abstract: This paper addresses the current challenges in the business education of higher education institutions in frontier ethnic regions, such as limited educational resources, misalignment between talent training models and market demands, and an imperfect system of innovation and entrepreneurship education. Based on the "Four Integrations and Four Transcendences" theory, this study proposes an innovative model for cultivating business education talents that integrates industry and education, disciplines, cultures, and innovation and entrepreneurship. Specific implementation paths and safeguard mechanisms are also presented.

Keywords: Frontier ethnic regions; Business education in universities; Innovation and entrepreneurship education

1 INTRODUCTION

The frontier ethnic regions, due to their unique geographical positions, ethnic cultures, and economic development statuses, hold a significant place in national development strategies. With the advancement of China's "Belt and Road" initiative and the growing developmental needs of these ethnic regions, universities in these areas are tasked with a critical mission to cultivate business talents who possess international perspectives, innovative capabilities, and entrepreneurial spirits. Significance of the Research: Universities in the frontier ethnic regions play a crucial role in the economic development of these areas. By establishing the "Four Integrations and Four Transcendences" model for innovative and entrepreneurial business talent training, high-quality talents capable of adapting to and leading regional economic transformations can be effectively nurtured, injecting new vitality into the economic development of the frontier ethnic areas.

2 ANALYSIS OF THE CURRENT STATE OF BUSINESS EDUCATION IN UNIVERSITIES IN FRONTIER ETHNIC REGIONS

Business education in universities located in frontier ethnic regions is characterized by significant cultural diversity and unique economic development features. This diversity is not only reflected among the student body but also in the content and methods of instruction, providing a unique cultural perspective and resources for business education. The economic development status, industrial structure, and market demands of the frontier regions differ from those in the inland areas, which necessitates that business education pays more attention to the actual needs of local economic development, emphasizing the integration of industry features and regional characteristics, and cultivating students' international perspectives and cross-cultural communication skills. Due to relatively lagging economic development, there is a heightened need to focus on fostering students' innovative and entrepreneurial qualities to drive local economic growth. The main existing challenges in business education at frontier ethnic region universities include limited educational resources, a disconnect between talent training models and market demands, and an incomplete innovation and entrepreneurship education system [1].

2.1 Limitations in Educational Resources

Universities in frontier ethnic regions face challenges such as insufficient faculty strength, outdated infrastructure, and information blockages in business education.

It is difficult for these areas to attract and retain high-quality teaching and research personnel, which compromises the quality of education.

The internationalization level of the faculty and their practical experience are also relatively deficient, affecting students' global perspectives and practical abilities.

Compared to inland universities, those in the frontier regions invest less in teaching facilities, laboratories, and library resources, which impacts students' learning experiences and research capabilities.

Although the development of the internet has alleviated some issues with information asymmetry, there are still obstacles in accessing international business information and the latest business research findings, affecting the cutting-edge nature and timeliness of instructional content.

2.2 Disconnect Between Talent Training Models and Market Demands

The talent training models in business education at frontier ethnic region universities are out of sync with market demands, primarily reflected in rigid course settings, a lack of practical components, and difficulties in balancing local features with a global vision.

Some university courses struggle to meet the rapidly changing market demands, especially in emerging fields such as the digital economy and cross-cultural management.

Graduates often find it challenging to quickly adapt to the work environment due to insufficient operational abilities and problem-solving skills.

While there is an emphasis on cultivating talents with local characteristics, some universities fail to effectively integrate a global perspective, putting students at a disadvantage in global competition.

2.3 Imperfections in the Innovation and Entrepreneurship Education System

The system for innovation and entrepreneurship education in business schools of frontier ethnic regions is lacking, with insufficient entrepreneurial resources and lack of substantial support for students.

The innovation and entrepreneurship efforts often do not go beyond the business plan stage due to a lack of angel investment and inadequate information about industry trends and market needs.

The small scale of local enterprises, typically at the lower end of the industry chain, and the scarcity of cooperative resources between schools and businesses result in a limited variety of cooperative forms, which hinders effective integration of education and industry production.

3 "FOUR INTEGRATIONS AND FOUR TRANSCENDENCES" TALENT TRAINING MODEL OVERVIEW

3.1 Definition and Connotation of the "Four Integrations and Four Transcendences" Model

The "Four Integrations and Four Transcendences" talent training model is an innovative strategy for business education, designed to adapt to the new economic context and market demands. This model aims to create a high-quality, composite talent cultivation system through interdisciplinary integration of educational concepts and practices. It emphasizes the integration of industry and education, academic disciplines, cultures, and innovation and entrepreneurship ("Four Integrations"), combined organically with the transcendence of boundaries between schools and businesses, theory and practice, domestic and international contexts, and across different disciplinary areas ("Four Transcendences"), to cultivate business talents with a spirit of innovation and practical capabilities.

Industry and Education Integration refers to the deep integration of educational processes with industrial practices, through collaborations between schools and enterprises and internships, enabling students to learn and practice in real industrial environments, thereby better preparing them for future career demands.

Disciplinary Integration encourages the crossover of different academic disciplines, breaking down traditional barriers through interdisciplinary course design and project-based learning, to develop students' comprehensive qualities and their ability to solve complex problems.

Cultural Integration involves incorporating diverse cultural elements into talent training, enhancing students' cultural identity and cross-cultural communication skills.

Innovation and Entrepreneurship Integration means incorporating innovative thinking and entrepreneurship education into the talent training system, through innovation labs and entrepreneurship incubation platforms, to foster students' innovative ideas and entrepreneurial skills.

Transcendences include:

School-Business Transcendence: through school-business collaboration models, achieving a complementarity of educational and industrial resources.

Theory-Practice Transcendence: combining theoretical knowledge with practical application to enhance students' practical application skills.

Domestic-International Transcendence: incorporating international elements in talent training, such as international exchange programs, to cultivate talents with a global perspective.

Inter-Disciplinary Transcendence: promoting the exchange of knowledge and skills between different disciplines, to develop composite talents.

The implementation of the "Four Integrations and Four Transcendences" model aims to effectively utilize both educational and industrial resources, strengthen the integration of theory and practice, and enhance students' international vision and cross-cultural capabilities, ultimately achieving high-quality training of business talents to meet new societal and economic development needs.

3.2 Theoretical Foundation of the Four Integrations and Four Transcendences Model

The theoretical foundation of the Four Integrations and Four Transcendences model includes theories of industry-education integration and cross-boundary integration.

Industry-Education Integration Theory emphasizes the close connection between education and industry to meet the needs of social and economic development. It focuses on tailoring educational content and curriculum systems to the actual demands of industry growth, ensuring that the talents cultivated meet practical market needs. Educational

institutions and businesses collaborate in course development, internships, and skill certification, sharing resources and complementary advantages.

Cross-Boundary Integration Theory concentrates on the crossover and integration between different fields, industries, or disciplines to foster innovative thinking and the ability to solve complex problems. Key elements include multidisciplinary integration, industry crossover, cultural exchange, and technology synthesis. Encouraging permeation and integration among various disciplines, through interdisciplinary learning and research, cultivates students' comprehensive qualities and interdisciplinary problem-solving skills.

By adopting these integrated approaches, the model not only enhances the practical and innovative capabilities of students but also prepares them to effectively contribute to and lead in the global business environment.

4 CONSTRUCTION OF THE "FOUR INTEGRATIONS AND FOUR TRANSCENDENCES" MODEL IN BUSINESS EDUCATION AT UNIVERSITIES IN FRONTIER ETHNIC REGIONS

4.1 Industry and Education Integration Strategy

In the strategy for integrating industry and education, exploring school-enterprise cooperation models and establishing enterprise training bases are key aspects aimed at enhancing students' practical work skills and innovative capabilities to better meet future career demands [2]. Here are detailed implementation strategies for these two aspects:

4.1.1 Exploration of school-enterprise cooperation models

Universities and businesses collaborate in course development to ensure that teaching content aligns closely with actual work requirements, combining theoretical knowledge with practical skills [3].

Professionals from businesses are involved as part-time instructors, providing real industry case analyses which enhance students' practical experiences.

Encourage joint technical research and product development projects between universities and businesses to solve real problems, improving innovation and teamwork skills.

Jointly build innovation and entrepreneurship incubation platforms for students, providing guidance and technical support for entrepreneurship [4].

4.1.2 Establishment of practice teaching and enterprise training bases

Establish training bases according to industry standards and real business needs, equipped with professional equipment and resources to simulate real working environments for high-quality vocational skills training.

Use a workshop-based teaching model to simulate business operations processes, organizing students in groups to complete all stages from market research and product design to manufacturing and marketing [5].

Regularly organize skill competitions at the training bases to encourage active participation in practical learning and to showcase skill levels, while also providing a platform for businesses to discover talents.

4.2 Disciplinary Integration Strategy

The strategy for disciplinary integration aims to break down the barriers between traditional disciplines through interdisciplinary course design and project-based learning, fostering students' comprehensive abilities and innovative thinking. Here are the specific methods implemented:

4.2.1 Construction of interdisciplinary course systems

Integrate resources to design courses that cover both depth and breadth, with team members including teachers from various disciplinary backgrounds.

For instance, a "Data Analysis" course combining business and computer science not only teaches data processing techniques but also explores the application of data in business decision-making.

Encourage student participation in course design through surveys and forums to collect their interests and needs for interdisciplinary learning, enhancing the attractiveness and practicality of the courses [6].

4.2.2 Project-based and case study teaching applications

Introduce real business projects in cooperation with enterprises as case studies for teaching.

Students apply their knowledge in interdisciplinary teams to devise solutions for specific business projects, such as designing marketing strategies for local businesses, requiring not only marketing knowledge but also insights from data analysis, psychology, and other disciplines.

Regularly organize project showcases, inviting business representatives, teachers, and other students to review and provide feedback.

Enhance students' practical experience and establish connections between students and businesses, providing a platform for future employment and entrepreneurship.

After projects conclude, organize sessions for students to reflect and summarize their experiences, with teachers providing professional feedback.

Through the implementation of these strategies, students deeply appreciate the value of interdisciplinary knowledge in solving real-world problems, preparing them for future professional careers. These strategies not only equip students with the necessary skills and perspectives required for today's diverse and dynamic work environments but also foster a proactive and innovative approach towards business challenges.

4.3 Cultural Integration Strategy

In the business innovation and entrepreneurship talent training programs at universities in frontier ethnic regions, the cultural integration strategy plays a pivotal role [7]. This strategy not only helps to preserve and pass on ethnic cultures but also provides students with unique perspectives on entrepreneurship and opportunities for international collaboration. Here are detailed introductions to the two main aspects of this strategy:

4.3.1 Combining ethnic culture with entrepreneurial education

Offer specialized courses that explore how to transform ethnic cultural resources into entrepreneurial projects. Analyze the potential commercial value and entrepreneurial opportunities within various ethnic cultures, such as handicrafts, ethnic attire, and traditional cuisines.

Develop practical projects that encourage students to use ethnic cultures as the backdrop for creating specific entrepreneurial ventures. Students can conduct in-depth market research within ethnic communities to uncover entrepreneurial opportunities and then, with guidance from instructors, develop business plans and even attempt to launch their own startups.

4.3.2 Integrating international perspectives with local practices

Actively establish international exchange and cooperation projects, such as student exchanges and international seminars, allowing students to encounter diverse cultural backgrounds and broaden their global perspectives while introducing local culture to international peers.

Introduce bilingual teaching in certain courses, especially those involving international business and cross-cultural communication, to enhance students' foreign language skills and their understanding of international markets and cultural differences.

Through these specific implementation strategies, cultural integration not only promotes the preservation and transmission of ethnic cultures but also provides students with unique perspectives on entrepreneurship and practical opportunities, thereby enhancing their competitiveness on an international level.

4.4 Innovation and Entrepreneurship Integration Strategy

The innovation and entrepreneurship integration strategy is a crucial component of higher education, particularly in business education, aimed at igniting students' innovative spirits and entrepreneurial abilities, providing opportunities and support for practicing innovation and launching entrepreneurial projects. Here are the specific implementation strategies:

4.4.1 Optimization of the innovation and entrepreneurship curriculum system

Build a comprehensive curriculum system covering innovative thinking, market analysis, business models, and financial management. Encourage cooperation between different disciplines to foster interdisciplinary education in innovation and entrepreneurship. For example, business students could collaborate with peers in engineering, design, and other fields to enhance creativity and innovative thinking.

4.4.2 Incubation and support for student innovation and entrepreneurship projects

Establish on-campus entrepreneurship incubators or innovation and entrepreneurship centers to provide necessary office space, entrepreneurial guidance, legal advice, and other support services. These incubators could also host regular entrepreneurial talks, workshops, and competitions to provide platforms for showcasing and exchanging ideas on student entrepreneurial projects.

Create a one-on-one mentorship system, assigning experienced mentors to each entrepreneurial project to offer personalized guidance and support. Mentors could come from the business, investment, or academic sectors, whose practical experience and networking resources are crucial for the success of student projects.

Establish collaborations with external entrepreneurship platforms, investment institutions, and industry associations to provide broader resource access and market expansion opportunities for student projects.

Through the implementation of these innovation and entrepreneurship integration strategies, students' innovative and entrepreneurial capacities are effectively fostered, providing comprehensive support from idea generation to actual business creation, thus promoting the innovative development of business education in universities and enhancing students' entrepreneurial skills.

5 IMPLEMENTATION PATHWAYS AND ASSURANCE MECHANISMS

To realize the "Four Integrations and Four Transcendences" model for innovative and entrepreneurial business talent training, key pathways to success include reforms in the educational system and curriculum content, updates to the teaching staff and methodologies, and comprehensive enhancement of student capabilities and qualities [8].

5.1 Implementation Pathways

5.1.1 Educational system and curriculum content reforms

Design courses that are closely aligned with industry needs, incorporating new fields such as innovation and entrepreneurship, intercultural communication, and digital technology applications.

Offer interdisciplinary elective courses that encourage cross-disciplinary learning.

Increase the proportion of experiential learning, such as case studies, practical training projects, and corporate internships, to ensure students can apply theoretical knowledge to solving practical problems.

Continuously update course content with a rapid response mechanism to adapt to industry developments and technological advancements, ensuring the relevance and applicability of teaching materials.

5.1.2 Updating teaching staff and methods

Focus on enhancing teachers' abilities through regular training to elevate their professional level and modern teaching skills, especially in areas such as innovative entrepreneurship education and intercultural communication.

Incorporate industry experts and entrepreneurs into the curriculum as guest instructors to share the latest industry trends and practical experiences, providing role models and career guidance for students.

Innovate teaching methods by adopting project-based learning, flipped classrooms, and open online courses to increase interactive learning and efficiency.

5.1.3 Comprehensive enhancement of student abilities and qualities

Emphasize the development of innovative and entrepreneurial skills through courses, competitions, and incubation platforms that spark students' interest in entrepreneurship and cultivate innovative thinking and entrepreneurial abilities.

Strengthen intercultural communication skills using international exchange programs, foreign language studies, and intercultural workshops to enhance students' abilities to communicate across cultures and collaborate internationally.

Focus on cultivating students' soft skills, including ethical education, psychological health, and teamwork, to holistically improve their overall qualities.

5.2 Assurance Mechanisms

To ensure the effective implementation and continuous optimization of the "Four Integrations and Four Transcendences" business innovation and entrepreneurship talent training model, establishing a comprehensive set of assurance mechanisms is crucial. Here are the specific measures:

5.2.1 Policy support and financial security

National and local governments should provide clear policy documents that support educational innovation and entrepreneurship, including guidelines for educational reform and talent cultivation objectives, to provide a legal and policy basis for these initiatives.

Schools should develop specific support policies, such as incentives for teachers and entrepreneurial support for students, to define clear tasks and goals and create a conducive atmosphere for educational reforms.

Government departments should provide special funding for educational reforms and innovative and entrepreneurial education projects, including infrastructure construction, teaching reforms, and incubation activities. Schools must allocate educational investments wisely to ensure sufficient operational funds for innovative and entrepreneurial education projects.

5.2.2 Quality control and evaluation system

Establish evaluation metrics based on the goals of the "Four Integrations and Four Transcendences" model, including teaching content, methods, student satisfaction, and employment rates [9].

Conduct regular quality assessments and reviews of projects, involving experts from both within and outside the institution, to ensure the quality of teaching activities and innovative and entrepreneurial projects.

5.2.3 Continuous improvement and feedback mechanism

Establish feedback channels from students, teachers, and corporate partners to collect suggestions on course content, teaching methods, and project implementation.

Regularly hold discussions and communication meetings with teachers and businesses to directly gather feedback and understand issues in teaching and project execution.

Develop a rapid response mechanism for feedback, making timely adjustments to teaching content, methods, and project management based on collected insights. Specify detailed improvement plans and schedules with designated responsibilities to ensure effective execution of improvements.

By implementing these assurance mechanisms, the "Four Integrations and Four Transcendences" model can adapt to new societal and economic development needs, continuously improve educational quality and outcomes, and cultivate a higher caliber of business innovation and entrepreneurship talents.

6 CONCLUSION AND RECOMMENDATIONS

This study has thoroughly explored the strategies and pathways for implementing the "Four Integrations and Four Transcendences" model for innovative and entrepreneurial business talent training at universities in frontier ethnic regions. Through reforms in the educational system and curriculum content, updates to the teaching staff and methodologies, and comprehensive enhancement of student capabilities and qualities, this model effectively fosters students' innovation abilities and entrepreneurial spirits, enhancing their practical skills and international competitiveness. Additionally, suggestions for assurance measures such as policy support and financial backing, quality monitoring and evaluation systems, and continuous improvement and feedback mechanisms provide specific implementation plans and strategies for advancing innovation and entrepreneurship education in higher education institutions.

6.1 Policy Recommendations and Implementation Suggestions

Governments should introduce more supportive policies for innovation and entrepreneurship education in higher education institutions, including financial support and tax incentives, and encourage school-enterprise cooperation to foster the development of such educational programs. Universities should formulate specific implementation plans for the "Four Integrations and Four Transcendences" talent training model, clearly defining the goals, content, and measures of educational reforms, and establish a comprehensive system for monitoring and evaluating educational quality.

Strengthen faculty development by recruiting teachers with industry experience and enhancing their capabilities for innovative teaching. Increase support for student innovation and entrepreneurship projects by establishing incubators, providing guidance, financial investment, and market expansion support. Enhance students' international perspectives by initiating international exchange and cooperation projects, thereby improving their cross-cultural communication abilities and international competitiveness [10].

6.2 Future Research Prospects and Limitations

Future research could further explore the application of the "Four Integrations and Four Transcendences" model across different disciplines and specializations to assess its applicability and effectiveness in various educational contexts. Explore how digital technologies and online educational resources can be utilized to enhance the efficiency and reach of innovation and entrepreneurship education.

This study primarily focuses on theoretical analysis and strategic recommendations, lacking long-term tracking and evaluation of practical application effects. The research is based on the context of universities in frontier ethnic regions, which may not be entirely applicable to other educational and cultural backgrounds.

By implementing the "Four Integrations and Four Transcendences" model for business innovation and entrepreneurship talent training, universities in frontier ethnic regions are expected to cultivate more business elites with international visions, innovative spirits, and entrepreneurial skills, contributing to the socio-economic development of the region. Continuous research and practical exploration will provide significant theoretical and practical support for the innovative development of higher education.

COMPETING INTERESTS

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