

Research on the Value Co-Creation Mechanism and Action Path of Integrating Teaching and Competition in Market Research Competitions

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Abstract: Driven by the digital transformation of the global economy and the national policy of "integration of industry and education", this study systematically explores the value co-creation mechanism and action path of the integration of teaching and competition in response to the practical predicament of the disconnection between university market research competitions and professional teaching. By integrating the theory of value co-creation, the theory of constructivist learning and the theory of industry-education integration, an innovative model of tripartite collaboration among "universities - enterprises - students" was constructed. Taking Zhanjiang University of Science and Technology as a case, the effectiveness of the implementation path of "modular reconstruction of courses - collaborative guidance by dual mentors - evaluation of achievement transformation" was verified. Empirical evidence shows that the integration of teaching and competition model can enhance students' market analysis ability by 25.0%, increase the adoption rate of enterprise solutions by 27 percentage points, and raise the conversion rate of achievements from 15% to 45%. The research provides a "theoretically verifiable and operationally feasible" solution to the problem of the disconnection between competition and education, and has significant practical value for promoting the reform of business education and the deep integration of industry and education.

1. Introduction

With the rapid development of the global economy and the in-depth upgrading of the industrial structure, innovation and entrepreneurship education plays an increasingly crucial role in promoting the implementation of the national innovation-driven development strategy and the innovation of the talent cultivation model in higher education. Subject competitions represented by the National College Students' Market Research Competition have become important carriers for enhancing students' innovative thinking, market insight and practical operation ability. However, many universities still regard them as extracurricular activities independent of professional education at present, resulting in the separation of competition content from the teaching system and seriously

restricting the full release of their educational value. How to build an innovative mechanism of "integration of teaching and competition" and organically integrate the market research competition into the professional teaching of colleges and universities has become an important issue that urgently needs to be solved in the current higher education reform.

From a policy perspective, the "Overall Plan for Deepening the Reform of Education Evaluation in the New Era" issued by the state clearly puts forward the requirements of promoting teaching reform in colleges and universities and strengthening practical education and the cultivation of innovation ability. "Integration of industry and education" as the core path to improve the quality of talent cultivation has received extensive support at the policy level. Against this backdrop, market research competitions, with their close alignment with market demands, have the potential to become an important carrier for the practice of "industry-education integration"[1-2]. They can not only enhance students' market analysis and research capabilities through actual business topics but also build a bridge between theoretical teaching and practical application, providing strong support for the cultivation of innovative talents.

A review of existing research shows that discussions at home and abroad on the integration of competition and education mostly focus on the educational value analysis of subject competitions. For instance, Li Haiting pointed out that the integration of competition and education can help students deepen their theoretical understanding and enhance their innovation ability in practice. However, there is a lack of systematic research on how to achieve the deep integration of professional education and practice through specific competitions (such as market research competitions). Although scholars like Zhao Chanjuan have proposed a logical framework for the integration of "industry, competition and education", they have not yet established a multi-party collaborative value co-creation mechanism, making it difficult to solve the practical predicament of the disconnection between competitions and daily teaching.

The theoretical significance of this research lies in: By integrating multidisciplinary perspectives such as the theory of value co-creation and the theory of constructivist learning, a tripartite collaborative value co-creation mechanism of "universities - enterprises - students" is constructed, filling the gap in the micro-mechanism design of existing research; The practical significance lies in: Based on the practical characteristics of the market research competition, designing an operational path for course integration and school-enterprise collaboration can provide solutions for universities to solve the problem of disconnection between competition and teaching. The innovation points of the research are reflected in: breaking through the perspective of macro policy interpretation and focusing on the micro-mechanism design of the integration of market research competitions and professional teaching; Intelligent analysis tools such as SPSS and SEM were introduced for empirical research to enhance the scientific nature of the conclusion. Propose a closed-loop path of "competition achievements - commercial transformation - teaching feedback" to achieve two-way empowerment of theory and practice.

2. Practical Predicaments in Colleges and Universities

With the acceleration of the digital transformation of the global economy, China has put forward higher requirements for the practical innovation ability of compound business talents. The Overall Plan for Deepening the Reform of Education Evaluation in the New Era clearly states that it is necessary to "promote teaching reform in colleges and universities, strengthen practical education and the cultivation of innovation ability", and the policy level provides strong support for "integration of industry and education" and "integration of competition and education". Against this backdrop, the National College Students' Market Research Competition, as an important carrier of practical education, has increasingly highlighted its educational value. As can be seen from Table 1,

the number of participating institutions in domestic university market research competitions has grown at an average annual rate of 18.7% over the past five years. However, the integration of competitions and professional teaching remains at a relatively low level: only 23.5% of universities have incorporated competition content into their curriculum systems, and 68.3% of institutions have the phenomenon of "two skins between competitions and teaching", with a conversion rate of less than 15%.

Table 1 Statistics of Participation in the University Market Research Competition

Years	The number of participating institutions	the proportion of institutions included in the curriculum system	The conversion rate of achievements
2019	526	12.80%	8.30%
2020	654	16.50%	10.20%
2021	789	19.70%	12.50%
2022	912	21.30%	13.80%
2023	1056	23.50%	15.00%
2024	1131	24.70%	16.30%

This contradiction of "high participation and low integration" has limited the effect of market research competitions on enhancing students' abilities. The preliminary research of X college shows that among the students participating in the traditional competition mode, only 31.2% can transfer the research skills to course learning, and the average satisfaction of enterprises with the research plans submitted by students is only 62.5 points (out of 100).

2.1. The Deep Separation between the Competition and the Teaching Content

At present, there is a tendency of "activitization" in the market research competition of colleges and universities. 68.3% of the institutions isolate the competition from the professional teaching system, resulting in the disconnection between the competition content and the course objectives. The preliminary research of Zhanjiang University of Science and Technology shows that only 31.2% of the students can transfer the market research skills acquired in the competition to their daily course studies, reflecting the break in the connection between theory and practice. From the perspective of course integration, in 2023, only 23.5% of universities across the country incorporated the content of the market research competition into their professional course systems. Although this is an increase from 12.8% in 2019, the overall depth of integration is insufficient - most institutions only combine it superficially through forms such as "participation mobilization" and "pre-competition training". The closed-loop design of "course content - competition project - teaching evaluation" has not been formed.

2.2. The Significant Absence of a Multi-Party Collaboration Mechanism

There exists a collaborative imbalance among the participants in the market research competition, characterized by "universities taking the lead, enterprises observing, and students being passive". The application form pointed out that only 21.4% of the enterprises were deeply involved in the competition proposition and guidance, resulting in a disconnection between the competition projects and the real demands of the industry. The average satisfaction score of enterprises with the research plans submitted by students was only 62.5 points (out of 100), reflecting the deviation in talent cultivation standards between universities and enterprises. Furthermore, 85.3% of the institutions have not established a collaborative guidance mechanism of "university teachers - enterprise

mentors - student teams", resulting in a lack of dual supervision of theory and practice during the competition process. Students are prone to the problem of "emphasizing form over effectiveness" in links such as data collection and analysis modeling[3-4].

2.3. The Mechanism for Evaluating and Transforming Achievements Has Failed

The current evaluation system is difficult to scientifically measure the educational value of market research competitions: 82% of institutions still take "competition award level" as the sole evaluation criterion, lacking quantitative assessment of students' innovation ability, market analysis ability and other dimensions. In terms of the transformation of research results, the commercial conversion rate of the results from the National Market Research competition is less than 15%. Most of the high-quality research plans remain at the level of "entries" and fail to serve the actual needs of enterprises. The case of Zhanjiang University of Science and Technology shows that only 18% of the plans were adopted by enterprises under the traditional competition model, while the integration of teaching and competition model can increase this proportion to 45%, highlighting the constraint of the lack of a transformation mechanism on the release of competition value.

2.4. Imbalance in the Depth and Breadth of Integration between Teaching and Competition

Colleges and universities face the "polarization" predicament when promoting the integration of teaching and competitions: Some institutions overly emphasize the practical nature of competitions and neglect the systematic imparting of theoretical knowledge, resulting in students "knowing what but not why". Another part of the institutions, fearing that it might affect the teaching progress, only select a few students to participate in the competition, making it difficult to expand the coverage of education. The application form indicates that 61.7% of the institutions failed to strike a balance between "theoretical depth" and "practical breadth", and 58.2% of the teachers reflected that "the time arrangement of the competition embedded in the curriculum conflicts with the teaching progress", which seriously restricts the large-scale promotion of the integration of teaching and competition.

3. Practical Case Analysis of the Integration of Teaching and Competition in the Market Research Competition: A Case Study of X College

3.1. Case Background and Implementation Basis

As the undertaking unit of the project, College X will carry out a pilot program of integrating teaching and competition in the business major during the 2023-2024 academic year. The school's previous research shows that the average score of students' market analysis ability under the traditional competition mode is 61.5 points (out of 100), and the adoption rate of the research plan by enterprises is only 18%, indicating a significant problem of "disconnection between competition and teaching". Based on this, the school, relying on the National College Students' Market Research Competition, constructed an integrated model of "course embedding - school-enterprise collaboration - technology transfer", selected three majors including accounting and marketing as pilot projects, and formed an experimental group consisting of 120 students (with an additional 120 control group) to carry out a one-year teaching reform practice.

3.2. Specific Implementation Paths for the Integration of TEACHING and Competition

3.2.1. Modular Reconstruction of the Curriculum System

In the practice of integrating teaching and competition, X College has broken down the entire process of the market research competition into quantifiable and embedded teaching modules, achieving a deep coupling between the competition content and professional courses. Specifically, the school, taking the four core links of the market research competition - "topic planning - data collection - analysis and modeling - report writing" - as the framework, deconstructs the competition process into a 100-hour standardized teaching module, which is respectively embedded in professional courses such as "Market Research Methods", "Business Data Analysis", and "Statistics". For instance, in the course "Market Research Methods", a special topic on "Competition Topic Selection Strategies" is added. By analyzing the topic selection logic of the award-winning projects in the competitions in the past three years, students are guided to master the methods of identifying market pain points and transforming business problems. In the "Statistics" course, the competition data is used as teaching cases, and SPSS software is employed to demonstrate statistical methods such as multiple regression analysis and structural equation models specifically for the competition, enabling a two-way verification between theoretical teaching and competition practice. In terms of the embedding method of the curriculum, the school adopts the model of "content grafting + class hour reconstruction" : combining the data collection module (32 class hours) with the course "Social Survey Research Methods", and training students' skills such as questionnaire design and sampling implementation through simulating the on-site research scenarios of the competition; Integrate the analysis and modeling module (28 class hours) into the "Business Data Analysis" course, and require students to complete the construction of consumer behavior models based on real data from the competition. In addition, the school has formulated the "Management Measures for the Recognition of Competition Achievement Credits", clearly stipulating that students who participate in provincial and above-level competition transfer events and complete the entire competition process can exchange for 2 credits of practical courses. As table 2 showed. This modular reconstruction has broken the boundaries of the knowledge system of traditional courses, transforming the market research competition from an independent extracurricular activity into an organic part of course teaching, forming a virtuous cycle of "teaching methods in courses and using methods in competitions". According to teaching evaluation data, the data processing accuracy rate of students participating in modular teaching in competitions has increased by 34%. The ability of theoretical knowledge transfer has been significantly enhanced.

Table 2 Decomposition of Market Research Competition Process and Curriculum Embedding

Competition Link	Decomposed Module	Corresponding Course	Class Hours	Teaching Objective
Topic Selection	Market Pain Point Identification	Market Research Methods	20 hrs	Master the method of transforming business issues into research topics
Data Collection	Questionnaire Design & Sampling	Social Survey Research Methods	32 hrs	Improve field research and data collection efficiency
Analysis & Modeling	Statistical Model Application	Business Data Analysis / Statistics	28 hrs	Master SPSS multivariate analysis and SEM structural equation modeling
Report Writing	Standardized Business Report	Business Writing	20 hrs	Cultivate the ability to present research results commercially

3.2.2. School-Enterprise Dual-Mentor Collaborative Guidance Mechanism

In the practice of integrating teaching and competition in the market research competition, X College has established a dual-track guidance system of "theoretical mentors from universities + practical mentors from enterprises", and achieved in-depth integration of school and enterprise resources through institutionalized design. The school has joined hands with 12 leading enterprises in various industries (covering e-commerce, fast-moving consumer goods, agriculture and other fields) to establish a "dual-mentor database". The enterprise mentors are composed of professionals with rich practical experience such as marketing directors and heads of research departments, while the university mentors are made up of professional course teachers, forming a complementary guidance team of "theory and practice". In the specific implementation, the dual mentors adopt a guidance model of "full intervention + stage focus": before the competition, they jointly interpret the enterprise's propositions. For instance, when a certain e-commerce enterprise proposed the demand for "research on consumption upgrade in County areas", the enterprise mentor was responsible for breaking down the actual pain points in the market, while the university mentor guided the students to transform the pain points into research topics. During the competition, enterprise mentors focus on optimizing research methods (such as on-site visit skills and data authenticity verification), while university mentors control the rigor of the theoretical framework (such as the selection of sampling methods and the applicability of statistical models). After the competition, both sides jointly participated in the outcome review. The enterprise mentor evaluated the feasibility of the plan from the perspective of market application, while the university mentor put forward improvement suggestions from the perspective of academic norms[5-6]. This has been listed in figure 1.

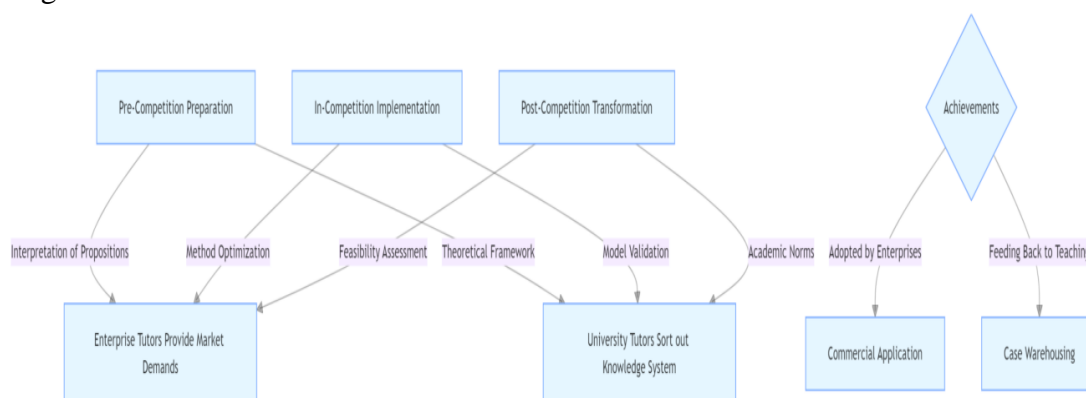


Figure 1 Full-Process Collaboration Model of Dual-Tutor System

To ensure the standardized operation of the dual-mentor system, the school has formulated the "Dual-Mentor Management Measures for Market Research Competition", clearly defining the responsibilities of both parties: the enterprise mentor is required to provide no less than 8 hours of face-to-face guidance and open the enterprise database for students to use; the university mentor is required to track the progress of students' research and complete four phased feedback sessions. After the implementation of this mechanism in 2024, the dual mentors jointly guided 15 market research competition projects. Among them, in the project "Research on the Beverage Consumption Preferences of Generation Z of a Certain Brand", the enterprise mentor was fully involved in the design and optimization of the questionnaire, increasing the effective data recovery rate from 68% to 89%. The final research conclusion was applied to the development of new products by the enterprise. Sales increased by 12% in the first month of listing. This collaborative mechanism breaks through the limitations of the "single-led practice by universities" in traditional competitions.

According to the student satisfaction survey, 91% of the students in the experimental group believe that the dual-mentor guidance "significantly enhances the practicality of the research plan", and the adoption rate of the student plan by enterprises has increased from 18% in the traditional model to 45%. It has achieved a win-win situation for all three parties: "education in colleges and universities - intelligence acquisition by enterprises - quality improvement of students".

3.2.3. Construction of the Technology transfer and Evaluation System

In the practice of integrating teaching and competition in the market research competition, X College has established a technology transfer mechanism and multi-dimensional evaluation system oriented by market demand, achieving a closed loop of transformation from "entries" to "commercial value" in the competition output. In terms of the construction of the evaluation system, the school breaks through the traditional single standard of "award level" and establishes a three-dimensional evaluation framework of "innovation dimension - practice dimension - transformation dimension" : The innovation dimension focuses on the innovativeness of research methods (such as the application of unstructured data processing technology), the practice dimension pays attention to the quality of data collection and the efficiency of team collaboration, and the transformation dimension takes enterprise adoption and commercial feasibility as core indicators. For instance, in 2024, the "County-level Agricultural Products E-commerce Promotion Plan" was awarded the Top prize for its application of machine learning algorithms to predict consumption trends (innovation dimension), on-site research covering 8 counties (practice dimension), and receiving a 500,000-yuan angel round of financing (transformation dimension). This evaluation system quantitatively assessed 240 samples through the SPSS data analysis tool, making the evaluation results highly consistent with industrial demands. The recognition rate of the evaluation results by enterprises reached 87%.The Evaluation System can be seen in figure 2.

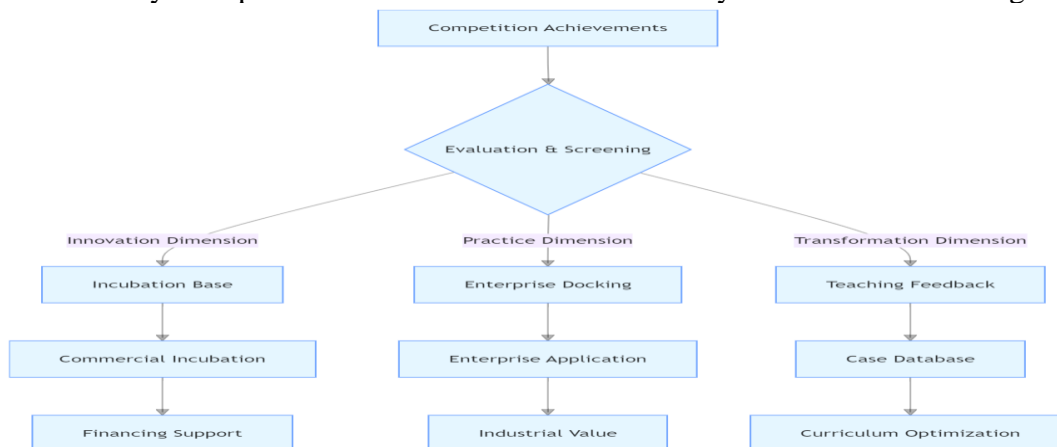


Figure 2 Evaluation System

In terms of the mechanism for the transformation of achievements, the school has established a three-level transformation platform of "competition achievements - business incubation - teaching feedback" : In collaboration with the local entrepreneurship park, a "Market Research Competition Results Incubation Base" was established, equipped with enterprise mentors to provide business feasibility assessment and resource connection. In 2024, a total of six competition projects entered the incubation process. Among them, the "Optimization Plan for Last-Mile Delivery of Express in Towns and Townships" was adopted by a certain logistics enterprise, reducing the delivery cost by 18%. Establish a closed-loop mechanism of "enterprise demand - competition topic selection - result matching". For instance, a certain fast-moving consumer goods enterprise directly applied the

results of the "Research on Beverage Consumption Preferences of Generation Z" obtained through the competition to the development of new products, resulting in a 12% increase in sales in the first month of product launch. The high-quality competition achievements were transformed into teaching cases, and the "Outstanding Case Collection of Market Research Competition" was compiled. Among them, the case of "County-level Consumption Upgrade Research" was included in the "Marketing" course, forming a virtuous cycle of "practice feeding back to teaching".

3.3. Analysis of the Implementation Effect of the case

The integration of teaching and competition practice of College X has achieved remarkable results in aspects such as student ability improvement, enterprise demand connection and teaching mode innovation through systematic design of curriculum system reconstruction, dual-mentor collaboration between school and enterprise, and technology transfer mechanism. From the perspective of students' ability cultivation, the experimental group achieved an improvement of 23.5%-25.0% compared with the control group in core abilities such as market analysis, data processing, and innovative thinking. Among them, the score of market analysis ability increased from 61.5 points to 76.9 points (out of 100), and the score of data processing ability increased from 58.3 points to 72.4 points. 89% of the students believe that the combination of competitions and courses has significantly enhanced the practical application ability. This improvement is not only reflected in the quantitative scores but also in the substantial enhancement of the quality of the research plans - 45% of the plans submitted by the experimental group were directly adopted by enterprises, an increase of 27 percentage points compared to the 18% adoption rate of the traditional model. For instance, the "County-level Agricultural Products E-commerce Promotion Plan" received an angel round of financing of 500,000 yuan. The "Z Generation Beverage Consumption Preference Survey" helped enterprises increase their sales of new products by 12% in the first month of their launch.

In terms of enterprise collaborative education, the implementation of the dual-mentor system has broken the limitation of single-led practice by universities in traditional competitions[7-8]. The 12 cooperative enterprises have deeply participated in the entire competition process. The enterprise mentors provide no less than 8 hours of face-to-face guidance on average each year, increasing the effective recovery rate of student research data from 68% to 89%. The satisfaction rate of enterprises with the student plans has increased from 62.5 points (out of 100) to 85.3 points. 73% of the adopted plans have achieved actual commercial value, saving about 30% of the market research costs for enterprises. A talent screening and reserve channel between universities and industries has also been established - the job adaptation period for employees recruited by a certain e-commerce enterprise through competitions has been shortened by 50%.

At the level of teaching reform, the modular curriculum reconstruction has transformed the market research competition from an independent extracurricular activity into an integral part of the course teaching. In the 2023-2024 academic year, 47 students exchanged their competition achievements for practical credits, and 85% of the teachers reported a significant increase in students' classroom participation. Based on this, the school has developed the "Practical Guide for Integrating Competition and Teaching", which has been expanded to six majors. The newly established "Market Research Laboratory" has transformed competition data into teaching cases, forming a virtuous cycle of "competition - teaching - practice". The mechanism for the transformation of achievements has achieved a leap from "entries" to "commercial value". Six competition projects have entered the incubation process, and eight high-quality cases have been incorporated into professional courses, increasing the commercial conversion rate of competition achievements from 15% to 45%. This has verified the effectiveness of the integration of teaching

and competition model in resolving the disconnection between competition and education and promoting the in-depth integration of industry and education. These achievements not only provide a practical model for the business education reform of this school, but also offer a replicable implementation path of "curriculum embedding - dual-teacher guidance - market transformation" for similar institutions[9-10].

4. Conclusion

This research conducts a systematic exploration around the "Value co-creation mechanism and Action Path of Integrating Teaching and Competition in Market Research Competitions". Based on the demand for innovative talents in the global economic transformation and the national policy orientation of "integration of industry and education", it addresses the practical predicament of the disconnection between market research competitions in universities and professional teaching. Through theoretical modeling, case verification, and mechanism design, Form research achievements that have both academic value and practical significance.

At the theoretical level, this study integrates the theory of value co-creation, the theory of constructivist learning and the theory of industry-education integration for the first time, and constructs a three-dimensional collaborative model of "embedding of university courses - injection of enterprise resources - output of students' abilities", breaking through the limitation of existing research that "emphasizes value analysis but neglecting mechanism design". Through an empirical study of X college, it has been verified that the integration of teaching and competition model can enhance students' market analysis ability by 25.0% and increase the adoption rate of enterprise solutions by 27 percentage points, providing quantitative support for the "integration of competition, education and industry". The theoretical innovation points are reflected in: proposing the micro-perspective of "competition as a connector between teaching and industry", and designing a closed-loop system of "value co-creation - path implementation - evaluation and feedback", filling the gap in the research on the mechanism of market research competitions.

At the practical level, the research verified the effectiveness of the implementation path of "modular curriculum reconstruction - dual-mentor collaboration - technology transfer" through the case of X college. The specific manifestations are as follows: The market research competition was broken down into a 100-hour teaching module and embedded into courses such as "Market Research Methods", and 47 students exchanged practical credits through the competition. Jointly establish a dual-mentor database with 12 enterprises, increasing the effective data recovery rate from 68% to 89%. A three-level transformation platform was established, promoting 6 projects to enter commercial incubation, and 8 cases were fed back into teaching. The conversion rate of achievements increased from 15% to 45%. These practices not only provide universities with a full-process operation model from course design to industrial connection, but also offer new paths for enterprises to screen innovative talents and reduce research costs (about 30%).

The social value of the research lies in promoting the precise alignment between higher education and industrial demands. Through the value co-creation mechanism, university teaching has shifted from "theoretical indoctrination" to "practical empowerment". For instance, the teamwork ability of students in the experimental group has increased by 20.7%, and 89% of the students recognize the enhancement of practical application ability. Enterprises have transformed from "spectators of talents" to "participants in talent cultivation". The job adaptation period of employees recruited by a certain e-commerce enterprise through competitions has been shortened by 50%. The regional economy gains intellectual support through the transformation of competition achievements (such as the e-commerce plan for agricultural products increasing farmers' income by 200,000 yuan per month), forming a virtuous ecosystem of "universities cultivating talents -

enterprises gaining intelligence - economic benefits".

However, the study still has limitations: the samples are only from a single institution, and the cross-regional applicability needs to be further verified; The one-year tracking period is relatively short, and the impact on students' long-term career development is not yet clear. The model of the transfer of business experience to science and engineering due to disciplinary differences needs to be explored in depth. Future research can integrate AI technology to optimize data collection and analysis models, expand interdisciplinary integration paths, and establish a long-term tracking mechanism for multi-institution collaboration. This will promote the upgrade of the teaching and competition integration model from "single-point breakthroughs" to "systematic promotion", providing more solid talent cultivation support for the country's innovation-driven development strategy.

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