

# Research on the Core Competency Cultivation of Application-Oriented Economics and Management Talents under the Background of Industry-Education Integration

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**Abstract:** Industry-education integration represents a critical pathway for the transformation and development of application-oriented undergraduate programs in economics and management. Currently, talent cultivation in these fields faces a structural mismatch between competency supply and industrial demand. The underlying causes include the lack of precise anchoring of training objectives, insufficient knowledge integration in curriculum systems, the absence of authentic contexts in practical teaching, and the lag in developing dual-qualified faculty capabilities. By examining the policy logic of industry-education integration, this paper proposes a coordinated reform approach from three dimensions: demand anchoring, competency generation, and ecological support. Through reshaping training objectives, restructuring curriculum systems, activating contextualized teaching, building dual-qualified faculty teams, and improving diversified evaluation mechanisms, a closed-loop system for competency cultivation can be established. This provides an actionable framework for cultivating application-oriented talents in economics and management under the industry-education integration paradigm.

**Keywords:** Industry-education integration, Economics and management programs, Application-oriented talents, Competency cultivation, Collaborative education.

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## 1. Introduction

Industry-education integration has been established as a fundamental institutional arrangement for the transformation of application-oriented undergraduate institutions. Following the release of the "pinions of the General Office of the State Council on Deepening Industry-Education Integration" in 2017, industry-education integration has gradually evolved from policy advocacy to institutional practice, becoming a core mechanism that connects the educational chain, talent chain, and industrial chain. [1] For economics and management programs, the significance of industry-education integration is particularly prominent, as the quality of talent cultivation in these fields ultimately must withstand the test of the market and employer expectations.

However, a persistent contradiction deserves attention. On one hand, many graduates in economics and management face employment pressure and struggle to find positions that match their majors or career aspirations. On the other hand, numerous enterprises report difficulties in recruiting qualified talents with practical operational capabilities and strong professional competencies. This contradiction indicates a clear misalignment between the "talent specifications" produced by university cultivation systems and the "competency structures" actually required by industries.

The reasons for this misalignment are multifaceted, yet one core issue stands out: in many universities, the practice of industry-education integration has not truly reached the core of talent cultivation. Some institutions limit their industry-education cooperation to superficial activities such as signing agreements and establishing internship bases, without extending into key areas including the formulation of training objectives, the organization of curriculum content, the reform of teaching methods, and the adjustment of evaluation

approaches. Therefore, a pressing question is: through what mechanisms and in what ways can industry-education integration genuinely enhance the core competencies of students in economics and management?

## 2. Realistic Dilemmas in Competency Cultivation

### 2.1. Disconnection between Training Objectives and Job Competencies

An examination of current training plans in application-oriented economics and management programs reveals that the articulation of training objectives tends to be overly broad. Phrases such as "high-quality application-oriented talents" and "possessing strong practical abilities and innovative spirit" appear frequently, yet clear answers are lacking regarding specific questions such as "which positions graduates are qualified to hold" and "what knowledge structures and competency combinations these positions require" [2]. This ambiguity deprives the design of training plans of a clear target: curricula lack direction regarding which competencies to serve, teaching lacks orientation toward which scenarios to emulate, and students lack clarity about what they will be capable of upon graduation.

Concurrently, the digital economy is profoundly reshaping the competency requirements for economics and management positions. The importance of emerging competencies such as data analysis capabilities, digital tool proficiency, and cross-functional coordination skills is rapidly increasing, while the demand for traditional, narrowly defined skills such as accounting and document processing is declining. If training objectives fail to respond dynamically to these changes, industry-education integration will lack strategic guidance at the macro level.

## **2.2. Insufficient Knowledge Integration in Curriculum Systems**

In response to digital and intelligent trends, many institutions have introduced new content such as data analytics and digital marketing alongside traditional courses. However, the effectiveness of this approach has been less than ideal—new content lacks organic integration with existing courses, and students struggle to form cohesive cognitive structures from knowledge acquired across disparate courses.

A deeper issue lies in the misalignment of knowledge organization. Traditional curriculum systems organize knowledge according to disciplinary logic—marketing, financial management, and human resource management each form independent systems. Yet real-world business practice never operates along disciplinary boundaries. A complete business project simultaneously involves market analysis, cost estimation, team coordination, and effectiveness evaluation, requiring the mobilization of diverse knowledge reserves. Students who only learn fragmented knowledge points within separate courses will find it difficult to develop the capacity to solve comprehensive problems.

## **2.3. Absence of Authentic Contexts in Practical Teaching**

Practical teaching serves as a critical link between academia and the workplace, as well as an important vehicle for industry-education integration. However, practical teaching in most economics and management programs currently takes simulated training as its primary form—students complete preset operational steps in laboratory settings [3]. While this training model helps students become familiar with basic business processes, it falls short in cultivating the capacity to handle authentic work scenarios.

## **2.4. Lag in Faculty Competency Transformation**

The majority of faculty members in application-oriented economics and management programs are academic doctorates who have followed a "from school to school" trajectory, lacking industry work experience. Facing digital and intelligent transformation, many faculty members themselves encounter pressure to update their knowledge. Faculty who have not participated in real business projects find it difficult to design effective project-based learning tasks; those unfamiliar with cutting-edge industry tools struggle to guide students' practical training effectively.

These dilemmas are interrelated and mutually reinforcing, constituting a systemic lock-in that impedes substantive improvement in competency cultivation.

# **3. The "Demand-Competency-Ecology" Three-Dimensional Framework**

Based on the analysis of the above dilemmas, this paper constructs a "Demand-Competency-Ecology" three-dimensional analytical framework to elucidate the internal logic of competency cultivation within the context of industry-education integration.

## **3.1. Demand Anchoring as the Logical Starting Point of Competency Cultivation**

A core value of industry-education integration lies in

breaking the self-enclosed nature of school education by introducing industrial demand information into the decision-making process of talent cultivation. Universities should establish institutionalized communication mechanisms with employers, regularly analyze changes in competency requirements for target job clusters, and translate industrial demands into actionable training objectives. This demand anchoring is not a one-time research activity but an ongoing process of institutionalized iteration.

## **3.2. Contextualized Learning as the Key Condition for Competency Generation**

The formation of competencies requires a practice field. The advantage of industry-education integration lies in its capacity to provide diverse learning contexts—enterprise visits, project collaborations, internships, business competitions—that enable students to apply knowledge and develop skills in authentic or near-authentic environments. The essence of contextualized learning is a shift from the "teacher lectures, student listens" model to the "student does, teacher guides" model, allowing students to achieve substantive competency enhancement through solving real-world problems.

## **3.3. Ecological Construction as the Institutional Guarantee for Competency Cultivation**

Both precise demand anchoring and effective contextualized learning depend on deep cooperation between universities and enterprises. Such cooperation should move beyond the project level to the institutional level—through establishing joint program advisory committees, collaboratively developing curriculum resources, and implementing joint teaching evaluations to form stable collaborative education mechanisms.

Demand anchoring, contextualized learning, and ecological construction mutually support one another: demand anchoring provides direction for competency cultivation, contextualized learning provides the practice field for competency generation, and ecological construction provides the institutional foundation for the sustained operation of both.

# **4. Pathways for Breakthrough in Competency Cultivation**

Based on the three-dimensional theoretical framework, substantive breakthroughs in the cultivation of application-oriented economics and management talents under industry-education integration require systematic reconstruction across the following five dimensions.

## **4.1. Reshaping Training Objectives through Job Competency Analysis**

Application-oriented economics and management programs should collaborate with industry partners to conduct systematic analyses of core positions within relevant regional industrial sectors, clarifying the specific requirements of each position in terms of professional knowledge mastery, tool and method application, and comprehensive quality performance. These requirements should then be translated into a clear, measurable, and evaluable training objective system. [4] The key to this endeavor is to shift from generalized objective descriptions to specific competency indicators, enabling

training objectives to genuinely guide curriculum design, teaching implementation, and quality assessment.

## **4.2. Restructuring Curriculum Content through Knowledge Integration**

Curriculum reform should shift from an additive mindset to an integrative mindset. Rather than simply adding new content alongside traditional courses, the approach should embed new knowledge modules organically into existing courses—incorporating data analysis methods into marketing courses and intelligent tool applications into finance courses. [5] Simultaneously, interdisciplinary and cross-domain comprehensive teaching modules should be designed, using real business problems as learning vehicles to help students naturally achieve the integration and application of multidisciplinary knowledge in the process of solving practical problems.

## **4.3. Activating Teaching Methods through Project-Based Learning**

The real business needs of enterprises should be transformed into student learning projects. Throughout the process of project participation, students experience the complete cycle of problem definition, solution design, implementation, and effectiveness evaluation, naturally mobilizing and applying diverse knowledge reserves. The core advantage of project-based learning lies in its contextual authenticity—only when students confront real constraints and uncertainties can they truly develop the capacity to handle actual work situations. The teacher's role should evolve from knowledge lecturer to project facilitator, providing directional guidance rather than standard answers.

## **4.4. Building Faculty Teams through Dual-Tutor Collaboration**

Institutionalized channels for faculty engagement in enterprise practice should be established, with regular arrangements for specialized faculty to work in partner enterprises or participate in project operations to accumulate practical experience. Simultaneously, senior industry professionals should be recruited to participate in teaching, serving as instructors for practical courses or project supervisors. The collaborative teaching of on-campus faculty and industry mentors can ensure both the systematic nature of theoretical instruction and the professionalism of practical guidance. Corresponding faculty evaluation systems should also be adjusted to include contributions to industry-education integration in the assessment framework, creating incentive mechanisms that guide faculty toward proactive transformation.

## **4.5. Improving Evaluation Methods through Competency Evidence**

The traditional evaluation model dominated by final written examinations should be replaced with a diversified evaluation system centered on learning processes and practical outcomes. The weight of project reports, program designs, case analyses, and similar components should be increased in course assessments; enterprise mentor evaluations of students should be incorporated into internship assessments; and graduation projects should encourage practice-oriented topics addressing real business problems.

External evaluation information should also be obtained through graduate employment quality tracking surveys and employer feedback surveys, serving as the basis for continuous improvement of training programs.

These five dimensions of reform require holistic advancement and mutual coordination. The reshaping of training objectives guides the direction of reform in curriculum, teaching, faculty, and evaluation; the optimization of curriculum content provides the vehicle for innovation in teaching methods; the transformation of teaching methods imposes new demands on faculty capabilities and drives changes in evaluation approaches; and the feedback from evaluation results tests and calibrates the rationality of training objectives. These five interconnected dimensions constitute a complete closed loop from objective setting to effect verification, collectively propelling the substantive transformation of application-oriented economics and management talent cultivation from knowledge transmission to competency development.

## **5. Conclusion**

Industry-education integration provides important institutional conditions for the reform of application-oriented economics and management talent cultivation. However, policy advocacy alone does not automatically translate into improved educational quality. The effectiveness of reform depends on whether universities can truly engage with the core dimensions of talent cultivation within the cooperative framework. The three dimensions proposed in this paper—demand anchoring, competency generation, and ecological construction—along with the five corresponding reform pathways targeting training objectives, curriculum content, teaching methods, faculty teams, and evaluation mechanisms, aim to provide a systematic framework for moving industry-education integration from formal cooperation to substantive practice. Only by achieving substantive breakthroughs in the core issue of competency cultivation can industry-education integration truly realize its expected goal of promoting the organic connection among the educational chain, talent chain, and industrial chain.

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