

# *Exploration of the New Business Curriculum System Empowered by the Digital Economy*

**Qingwei Song**

*School of Accounting and Finance, The Open University of Shaanxi, Xi'an, China*

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**Abstract:** In the era of digital economy, deep learning supported by powerful databases poses corresponding challenges to talent cultivation in higher education. Firstly, in the process of talent cultivation, based on the challenge of information inflation, how to impart as comprehensive and rich knowledge as possible in limited classrooms is a test for teachers; Secondly, the rapid development of big data and related technologies has simplified the collection, classification, and summarization of basic knowledge, which to some extent hinders the improvement of students' independent exploration and dialectical thinking abilities; Finally, in the current society, more and more basic and routine work can be completed based on artificial intelligence technology, which will inevitably affect the employment choices of some college graduates. How to explore and judge one's professional ability and existence value in the era of artificial intelligence is a problem that students need to face [1-2].

## **1. Introduction**

Traditional business education takes a single type of subject education as the teaching premise, with the development of student functions as the basic guidance. The business talents cultivated are often specialized talents with a single skill or professional quality. However, with the rapid development of the digital economy, technologies such as big data, artificial intelligence and the Internet have developed rapidly, which has led to changes in the demand for social talents. Business talents urgently need professional skills and management knowledge, as well as keeping up with the times and mastering the digital technologies required for the development of the times. This requires business talents to be compound talents with interdisciplinary knowledge [7].

## **2. The Goal of Cultivating Digital New Business Talents**

The cultivation of new business talents is based on the digital economy and needs to adapt to the requirements of the new era. Practical ability is an important assessment indicator for applied talents, as shown in Table 1. However, traditional business education not only cannot meet the requirements of the digital economy era, but even with the industrial economy as the background, there are still many problems such as lack of systematic practical teaching arrangements, incomplete practical assessment and evaluation systems, and off campus internship bases becoming mere formality. The most important thing is that the results oriented concept has not been truly put

into practical teaching [3].

New business education should focus on cultivating students' critical thinking, expression and thinking abilities, and lifelong learning abilities in the field of business. In terms of specific skills, new business education pays more attention to the cultivation of "non explicit skills", so that they can adapt to both industry needs and rapid socio-economic development.

Table 1: Training Objectives for Digital New Business Talents

Specific ability	categories
Basic abilities	Data thinking
	new business fundamentals
	new business skills
	business methods and tool application abilities
	business practice abilities
	expression and communication abilities
Core competencies	New business thinking
	intelligent office and digital skills
	critical thinking and innovation awareness
	ability to analyze and solve problems
	teamwork ability
	organizational planning ability

### 3. Design Principles of New Business Education Objectives

The development of the digital economy has provided possibilities for personalized learning for students. To effectively design teaching objectives and determine learning objectives that students can achieve and meet their individual needs, the following principles should be followed when determining teaching objectives, as shown in Figure 1[4].

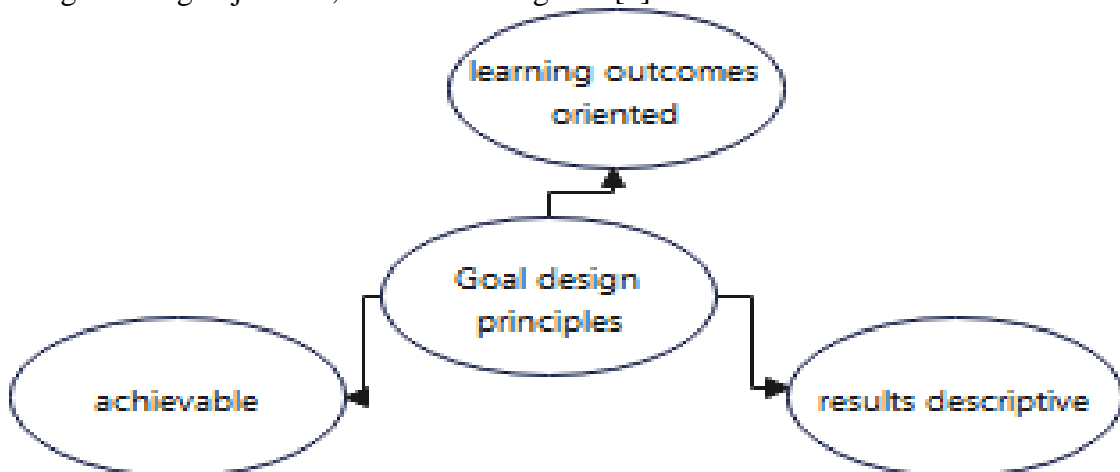


Figure 1: Principles for designing new business education objectives

#### 3.1 Learning Outcome Orientation

When designing teaching objectives, a reasonable positioning should be based on learning outcomes. Teaching objectives should correspond to learning outcomes in the dimension of ability, that is, the learning outcomes that students can achieve after a period of learning. This mutual correspondence does not require strict correspondence between teaching objectives and learning

outcomes. In practical situations, there may be a phenomenon where one goal corresponds to multiple learning outcomes or multiple goals correspond to one learning success.

### **3.2 The Teaching Objectives are Achievable**

Once teaching objectives are set, there should be corresponding course content or teaching methods to support them, and to a certain extent, they should be corresponding, so that teaching objectives can be implemented and achieved through teaching activities. The entire teaching process should be student-centered and revolve around the learning outcomes of students.

### **3.3 Teaching Objectives Can Be Described in Terms of Results**

In the design of teaching objectives, the expression of teaching objectives should be clear and truthful, and should be a result oriented description. The specific requirements include: first, to clarify what the learning outcomes of students are after a period of learning, to provide a result oriented description, and to tell students what they can do; Secondly, the description of the goal should be clear and detailed, and measurable, using more specific words; Thirdly, the teaching objectives must be specific and detailed, including the objectives of the course, unit, and each learning task. These three objectives are both related and independent of each other.

## **4. Pain Points in Designing the Curriculum System for Cultivating Digital New Business Talents**

The curriculum system is an important component that supports training objectives, and the rationality of curriculum system design is a prerequisite for curriculum system construction. Based on the demand for industrial digital transformation, various universities are gradually strengthening the application or upgrading of business-related majors based on their own advantages in economics and management disciplines. However, from the perspective of curriculum system design, there are several pain points in the current professional construction, including the following:

### **4.1 The Design of the Curriculum System Cannot Keep Up With the Times**

In universities, once the curriculum system is determined, it is fixed for a certain period of time and generally remains unchanged for many years. It cannot adapt well to the rapidly developing digital technology and digital economy environment, which makes the existing curriculum system relatively outdated. Even if some universities discover this problem, it is often difficult to make timely adjustments in the short term due to limited resources.

### **4.2 The Curriculum System Did Not Consider the Characteristics of Industrial Digital Transformation**

Modern services are mainly supported by information technology, establishing new business models, service methods, and management methods, which is an upgrade to the existing service industry. This is consistent with the logic of industrial digitization improving industrial efficiency through digitization. Therefore, after graduation, business students need to be exposed to the modern service industry upon entering society, which puts forward higher requirements for the cultivation of business talents. Traditional business education can no longer meet these requirements, such as not integrating service characteristics into the curriculum system and not considering how to integrate digital technology and management knowledge architecture to provide

support for the realization of service functions [6].

### **4.3 The Integration Path of the Curriculum System Is Unclear**

Because the core of industrial digitization is to use digital elements to upgrade existing industries, the digital collection, screening, and analysis abilities of the required composite talents are instrumental abilities, while decision-making ability is the underlying logical ability. It is obvious that without underlying logical abilities, decision-making and judgment cannot be made, but without instrumental abilities, analytical basis cannot be obtained. The two complement each other and are indispensable. In the context of industrial digitization, in the curriculum system of business majors, digital technology courses should provide tools for observing, analyzing, and solving problems, while business management courses should provide the underlying logical abilities for professional talents to observe, analyze, and solve problems. Therefore, in the design of the curriculum system, it is necessary to clarify the rationality of the embedding and integration of these two courses. But the existing curriculum system is not clear and accurate enough in terms of design direction, making it difficult to consider the connectivity and integration path of these two types of courses.

### **4.4 Unclear Direction in Curriculum System Design**

Industrial digitization and digital industrialization are two important aspects of the digital economy. Industrial digitization is the upgrading of existing industries in terms of digitization, networking, and efficiency. Therefore, the talent cultivation goals serving the digital upgrading of industries are different from those serving the development of digital industrialization, and different training goals should be supported by different curriculum systems. The current curriculum system, on the other hand, is mainly a simple superposition of courses in economics and management and digital technology, resulting in the entire curriculum system becoming a patchwork of courses in economics and digital technology. There is a situation where the design and actual setting of the curriculum system are separated. Under this curriculum system, the cultivation of students is not oriented towards composite talents, but rather forms a situation where students learn courses in two majors simultaneously. Some new teachers typically go from university to university, lacking professional work experience or limited experience, with strong theoretical knowledge and weak practical operation. Although there is certification in skills such as obtaining vocational skills certificates in the field of management, the overall trend of the "dual teacher" teaching team in terms of professional skills is showing a weak state [3].

## **5. Exploration of the New Business Curriculum System under Digital Empowerment**

In the era of digital economy, the training plan for business talents should be dynamically and timely adjusted. On the one hand, modern information technology tools should be used to timely understand national policies and guidelines, and new ideas and methods provided by national policies should be used to continuously optimize and adjust talent training plans; On the other hand, keep an eye on changes in the professional ability requirements of enterprises for business talents, adjust talent training goals, and so on. In this process, a systematic thinking approach should be applied to optimize talent cultivation plans from multiple dimensions such as curriculum design, practical system, and interdisciplinary talent cultivation in business talent cultivation, so that the cultivation of business talents in universities can truly meet the needs of social employment. The specific dynamic cultivation mechanism is shown in Figure 2.

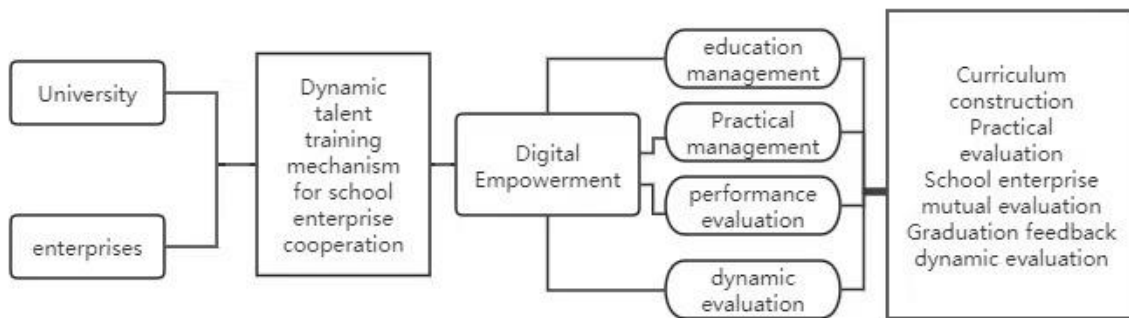


Figure 2: Problems in the Integration of Industry and Education

### 5.1 Building a Gradual Ability Development Curriculum System

In the process of cultivating students' new business data thinking and data analysis abilities, it is not only necessary to help them master the "Dao" of data analysis, but also to guide them to proficiently master the "technique" of data analysis. "Dao" refers to the ideas and strategies of student data analysis; "Shu" refers to the use of data analysis tools.

Under the premise of clear teaching objectives, the design of course content should always be student-centered and adhere to the principle of "emphasizing application and strengthening abilities". On the one hand, emphasis is placed on cultivating students' ability to apply professional knowledge to practice. On the other hand, it cultivates students' ability to analyze and solve problems, while teaching them to abide by professional ethics and norms. In order to better cope with the challenges brought by big data, teachers should timely track cutting-edge knowledge, technologies, and theories in relevant fields in their education and teaching, dynamically supplement and update teaching content, stimulate students' enthusiasm for learning, cultivate their data analysis thinking, and improve their practical abilities, as shown in Table 2. Therefore, teaching design should focus on the following aspects: firstly, integrating common data analysis scenarios of enterprises into corresponding learning content, and developing diversified teaching resources that match the teaching content. Add some advanced content to promote the integration and development of education and career, based on practicality, adequacy, and usability. Strengthen the cultivation of students' ability to use data analysis software and write statistical reports. In addition, it is necessary to fully utilize practical training bases, renowned teacher forums, and various competitions to enhance students' practical operation abilities [5].

Table 2: Construction of a comprehensive ability cultivation teaching system

Teaching mode	learning project	evaluation ability
Laboratory interactive teaching	Excel data processing	Practical operational ability
Situational teaching	Leadership development	Management ability and literacy
Exhibition of practical achievements	Innovation and Entrepreneurship Thinking Training	Thinking simulation and experience
Writing skills	Text organization and expression	Comprehensive writing ability

## **5.2 Integrating Ideological and Political Education into the Curriculum and Strengthening the Cultivation of Professional Ethics**

Starting from the content, logic, methods, and environment, teachers should recognize that teaching and educating students is also the purpose of ideological and political education in the curriculum. They should fully recognize the value of ideological and political education in the curriculum, that is, from personal confidence to cultural confidence, from personal sentiment to patriotism; The elements of ideological and political education in the curriculum should be standardized in order to meet the growth needs of students; Teachers should establish "four consciousnesses," "four confidences," and "two safeguards," and become good teachers and guides for teaching and educating students. In terms of logic, teachers should make it clear that ideological and political courses and ideological and political courses are in the same direction and go hand in hand. Teaching and educating people are to cultivate virtue and nurture people, and the two complement each other. In terms of methods, teachers should strive for diversified teaching, use the finishing touch of teaching to construct a case library of ideological and political education in courses, carry out thematic embedded teaching, and persuade students to focus on their studies, seize the day, and live up to their youth; Integrating ideological and political education into the curriculum should guide students to pay attention to national affairs and cultivate their cultural confidence; Carry out penetrating teaching of ideological and political education in the curriculum, give full play to the exemplary role of teachers, organically combine professional knowledge and humanistic literacy, and form a series of chain reactions; Teachers should also strictly demand that students improve their moral cultivation and abide by classroom discipline, achieving the integration of morality in teaching, morality in teaching, and entertainment in teaching. At the same time, in the use of Internet space, we should use professional knowledge to identify bad information and understand the essence of things [8].

## **5.3 Strengthening the Practical Links in Theoretical Teaching**

In the process of cultivating students' data thinking, data analysis abilities, etc., it is necessary to pay attention to practicality. Practical teaching is the most fundamental aspect of teaching. In theoretical teaching, enhance students' scientific experimental abilities. Encourage students to participate in various professional competitions and academic research, such as the Enterprise Management Simulation Sand Table Competition, Innovation and Entrepreneurship Competition, Accounting Practice Competition, Industry Finance and Tax Integration Big Data Application Competition, etc. Through various methods such as student forums, social research, and social practice, cultivates students' ability to analyze and apply information.

## **5.4 Deepening the Integration of Industry and Education and Jointly Building a Talent Training Model**

Universities and enterprises jointly develop practical training platforms. Through the training on the platform, students can feel the real environment of industrial demand in their school studies, and have a firsthand experience of the business abilities that business talents should possess. At the same time, they can learn how to use data analysis methods to conduct business analysis, make existing data play a greater role, generate commercial value that can be productized, and ultimately form feasible and executable solutions [9]. The schematic diagram is shown in Figure 3:

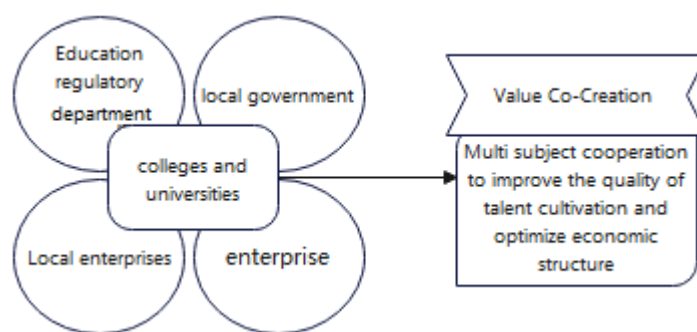


Figure 3: Diagram of deep cooperation between schools and enterprises

### 5.5 Establishing a Multi-Dimensional Assessment and Evaluation Mechanism

The knowledge objective mainly assesses the main theoretical knowledge that students need to learn and master in this lesson, including concepts, principles, and definitions, which should be able to meet the needs of guiding students in practical operations. For the learning evaluation of the knowledge section, the principle of quantitative evaluation should be adopted, and the mastery of students should be quantitatively assessed through tests, inspections, and other methods. This part of the content should be uniformly evaluated by teachers and corresponding evaluation results should be provided.

The ability objective mainly assesses the student's mastery of the professional abilities in the department, mainly focusing on mastering relevant vocational skills. The evaluation of teaching objectives in this section mainly focuses on the correctness of skill operations and the completion of practical training tasks. The evaluation of ability objectives should adopt a "qualitative+quantitative" model. The qualitative evaluation indicators can be completed by student independent evaluation and group evaluation, while the quantitative evaluation indicators are suggested to be completed by student independent evaluation and teacher evaluation to promote the improvement of student independent evaluation ability, as shown in Table 3.

Table 3: The relationship between teaching objectives and teaching evaluation

Teaching objectives	Teaching evaluation	Student self-evaluation	Group evaluation	Teacher evaluation
knowledge objectives	Quantitative evaluation			○
ability objectives	Qualitative+quantitative evaluation Qualitative	○	○	○
quality objectives	evaluation		○	○

### 5.6 Construction of a Three-Dimensional Competition System for New Business Subjects

Competition is an important measure to test the effectiveness of teaching and promote the improvement of students' abilities. Therefore, it is necessary to actively encourage students to participate in innovation and entrepreneurship competitions, allowing teachers and students to participate in various course competitions, promoting teaching, learning, practical training, and teaching reform through various competitions. Due to the complexity and interdisciplinary requirements of the new business field, supporting practical abilities through a competition system in the training process is also one of the categories of industry education integration. In the new business three-dimensional competition system, various competitions should be integrated with regular teaching, and the school skills competition should be reasonably designed, such as

competition rules, reward standards, etc., to establish a sound and normalized team of vocational skills competition guidance teachers, making the school skills competition routine and systematic. Pay attention to establishing various guarantees for the competition system, such as laboratory guarantees, funding guarantees, and institutional measures. Finally, it is important to pay attention to the post competition summary and revise the next competition plan. Through various competitions, students can enhance and enhance their comprehensive professional abilities, achieve the goal of promoting their abilities through competitions, and obtain corresponding certificates to provide support for their future internships, employment, and career transformation [10].

## 5.7 Construction of Digital Service Platform

With the development of digital technology, the original production, trading, and distribution models have been changed, forming new business models. This new business model requires increasingly high resources such as information, talent, and technology. The original model of integrating resources cannot meet the needs of all parties in the market. Therefore, establishing specialized institutions responsible for organizing, publishing, and managing relevant information and other services can minimize information costs. Such organizations are digital service platforms. This type of organization requires digital network technologies such as blockchain and big data to accurately collect information related to school enterprise cooperation, greatly improving the probability of regional school enterprise cooperation project docking and implementation. The components of such platforms are difficult to be completed by individual regions in the market. Therefore, by gathering services from commercial associations, information from enterprises, and knowledge and technology from financial and economic institutions, multi enterprise alliances can be established to build industry education integration portal websites and provincial-level industry education integration information service platforms.

## 6. Conclusion

The above path design is based on the requirements of the new business talent training goals for industry education integration and the reconstruction of the talent training system in the context of the digital economy. Different path designs are proposed from both internal and external dimensions, and corresponding evaluation feedback systems are provided. This closed-loop logic can be continuously adjusted with the changes of various elements in the new business industry education integration system, ensuring the long-term adaptability of the new business industry education integration and industrial development.

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