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Research on cultivating innovative ability of MBA students under the background of new business

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Abstract: This article proposes a theoretical framework and conducts empirical research on the current problem of weak innovation ability of MBA students. Under the new business background, society has put forward higher requirements for the innovative ability of MBA students. However, due to conditional constraints, the existing teaching model cannot well adapt to the requirements of economic development in the new era. Based on this reason, this article first analyzes the current research status at home and abroad. This article Summarize and propose a theoretical framework to solve the problem of insufficient cultivation of innovation ability. The theoretical framework includes the integration of new business and traditional MBA education theories, the integration of modern information technology and MBA curriculum system, the innovation of MBA teacher training methods, and the innovation of experimental methods in the new business era, the new model of school-enterprise cooperation and the quantitative evaluation of MBA graduates' innovation capabilities are presented in six aspects. In order to verify the actual effect of the established theoretical framework, this article takes the actual teaching of the *Introduction to Big Data* course as an example to illustrate the practical application of the teaching reform plan. The teaching effect of the *Introduction to Big Data* course shows the feasibility and effectiveness of the theoretical framework established. The research results can provide theoretical and practical reference for the cultivation of MBA students' innovative ability.

1. Introduction

The Master of Business Administration (MBA) is a postgraduate degree education course for managers with work experience. The quality of MBA education will directly affect the efficient operation of corporate economic work. In recent years, with the widespread application of new information technologies which represented by big data, artificial intelligence, blockchain, etc. in the business field, business administration education has ushered in a new business era. New Business Science is an interdisciplinary subject, which is characterized by the integration of new information technology and traditional MBA education, and the realization of an interdisciplinary training model through innovative training methods such as interdisciplinary and multi-dimensional collaboration. There are huge differences between new business education and traditional education, which are specifically reflected in different research objects, different knowledge structures, different

methodologies, different practice orientations, different educational goals, and different education models. In order to adapt to the requirements of new business education, it is particularly important to strengthen the cultivation of innovation ability. However, due to the influence of traditional teaching models and knowledge systems, current MBA students generally lack innovation.

This article aims at the problem of insufficient innovation of current MBA students and plans to improve the innovative ability of MBA graduates through theoretical construction, curriculum system reform, school-enterprise cooperation and other measures. Specific measures are to take business administration graduate students from local universities as the research object. By integrating new business concepts and information theories such as big data, artificial intelligence, and blockchain, we will build a training system that is suitable for the Internet era, and propose implementation plans and evaluation system, and strive to cultivate innovative senior MBA talents that meet the needs of the times.

2. Research status

The analysis of the current research status mainly summarizes the review of domestic and foreign innovation ability cultivation of Master of Business Administration (MBA), the application of modern information technology in innovation ability cultivation, and the teaching reform practice in the new business context.

2.1. Research on Cultivation of Innovation Ability of Master of Business Administration

The main literature on current cultivation of innovation ability includes: Zong Yunzhang revised the training program based on the characteristics of MBA majors [1]. Yang Huaizhen cultivated college students' innovative practical ability and team spirit through the practice system [2]. Li Yuxin pays attention to the cultivation of personality and professional skills [3]. Ou Shaohua carried out training model reform [4]. Li Yong proposed a plan for innovative capability practice[5]. Yang Yimin carried out curriculum system reform[6]. Zhang Li proposed to transform the mentor guidance method [7]. Li Bo supports the offline and online teaching model [8]. Yu Jiali analyzed the influencing factors of innovation from a macro-system perspective [9]. Wang Li emphasized the importance of innovation capabilities from the perspective of local economic development [10]. In summary, the current research results mainly study the intrinsic mechanism of ability training from the macro level.

2.2. Research on the application of modern information technology in cultivating innovative capabilities

Current relevant research results include: Zhang Yumin conducted a feasible paths for cultivating innovative capabilities[11]. Liu Guoli emphasized the importance of vocational education [12]. Hou Xilin evaluated innovation capabilities[13]. Li Huaqing conducted research on innovation training paths [14]. Li Hongyi proposed a new assessment and evaluation system [15]. Qian Li promotes ability development by participating in competitions [16]. Duan Hongling emphasized the importance of mathematics [17]. Dai Jun carried out educational reform [18]. Li Hui emphasized the importance of data literacy [19]. In summary, current research results mainly describe the application status from a micro perspective.

2.3. Current status of teaching reform practice under the new business background

Corresponding research results on education reform include: BARAKHSANOVA E A. proposed to teach innovation [20]. VARLOTTA L. sugested to integrate information teaching methods [21].

MULLAN F. recommended innovative education guidance for strengthening medical education in sub-Saharan Africa [22]. GETTO G. emphasized the important of scientific research projects[23]. LIANG KJJOIE, VOL D. analysised the new liberal arts of British and American literature courses [24]. In summary, the existing research results in the new business era are innovative research on existing educational concepts.

2.4. Overview of research status at home and abroad

Based on the above research status at home and abroad, it can be known that the current MBA innovation education at home and abroad mainly focuses on theoretical research and school-enterprise joint training. Research on the application of modern information technology in the innovation training process focuses on integrating traditional statistics Theoretically relevant econometric models are used to cultivate data analysis capabilities. In the new business era, interdisciplinary integration theory discussions are mainly conducted abroad. Although there are currently useful explorations into the innovative abilities of graduate students, there is a lack of systematic research and application, and there is a lack of applied research on curriculum, teacher knowledge systems, student quality, and practical activities in the context of new business disciplines. Therefore, this article aims at the shortcomings of current research, from the integration of new business and traditional MBA education theory, the integration of modern information technology and MBA curriculum system , the innovation of MBA teacher training methods in the new business era, the innovation of experimental methods in the new business era, the new model of school-enterprise cooperation, MBA research on six aspects of quantitative assessment of graduate students' innovation ability, analyze practical application cases, and finally put forward practical suggestions.

3. Propose Strategies

The research goal of this article is to analyze the current status of research on the innovative ability of MBA graduates at home and abroad, discover the key reasons that affect the cultivation of innovative ability, and construct a new system for cultivating the innovative ability of MBA students in the new business era, and evaluating the training effects, to ultimately achieve the purpose of improving the innovative ability of MBA students.

3.1. Integration practice of new business and traditional MBA education theories

Through theoretical research, the concept, connotation and extension of new business subjects in MBA education are analyzed. New business is essentially an interdisciplinary subject that integrates business, engineering and traditional business. New business is mainly about the specific application of new information technology, such as the Internet, artificial intelligence, and big data in traditional business. The best way to integrate new business MBA education and traditional business MBA education theory is through interdisciplinary settings.

3.2. Integration practice of modern information technology and MBA curriculum system

The modern information technology (such as the Internet, artificial intelligence, big data and blockchain technology, etc.) with traditional courses, such as integrating Internet technology with human resource management theory, integrating artificial intelligence technology with marketing courses, accounting combining academic theory with blockchain, etc., and integrating new technologies into the teaching system of MBA courses.

3.3. Innovative practice of MBA teacher training methods in the new business era

According to the teaching needs of new business courses, teachers from different disciplines are integrated and reorganized, such as cross-training and learning between traditional business teachers and physics, systems science and computer science teachers, and integrating modern information technologies into specific disciplines through joint discussions.

3.4. Innovative practice of experimental methods in the new business era

In practice, teachers combine traditional business experiment platforms, such as human resources, enterprise resource management, corporate strategy simulation sandbox and other experimental platforms with big data experiment platforms. By adding big data variables, we can observe the impact of the Internet environment on business experiment conclusions or draw new conclusions. The results lay a good foundation for future practical applications.

3.5. Carry out the practice of new models of school-enterprise cooperation

Research on the integration of practical innovation capabilities is mainly realized through the integration of schools and enterprises. The ultimate goal of new business teaching is to solve the problems encountered by enterprises in practice through improving the innovative ability of MBA students. Therefore, the most effective way is to participate in corporate practices. Students discover and solve problems through practice. At the same time, schools can establish a corporate mentor system and form joint mentors between schools and enterprises. By guiding students to conduct innovative research, we ultimately achieve the goal of improving students' innovative abilities.

3.6. Quantitative Assessment Practice of MBA Graduates' Innovation Ability

In order to examine the effect of cultivating the innovative ability of MBA graduates, it is necessary to conduct corresponding effect evaluation. The specific method is to first construct an innovation ability evaluation index system according to the training outline, and then use the question survey method. Quantitatively analyze the key indicators that affect students' innovation ability, thereby providing objective reference materials for improving the teaching process.

4. Study case

In order to test the effectiveness of the theoretical framework for cultivating innovation capabilities in the new business context proposed in this article, this article uses the *Introduction to Big Data*[29], which is one of the MBA courses as an example to conduct curriculum reform practice.

4.1. Basic concept teaching

The basic concepts of big data taught in the course *Introduction to Big Data* are: (1) Big data. (2) Cloud computing. (3) Big data security[25]. When teaching these basic concepts in class, focus on the principle of combining concept explanations with examples. By listing specific cases encountered in life and study, students can quickly understand the essential attributes of the concepts, thereby laying a good foundation for subsequent course teaching. At the same time, students are guided to make full use of generative artificial intelligence APP during the learning process and gradually become familiar with the use of AI APP, thereby improving learning efficiency.

4.2. Data collection method

The data collection part includes data collection, data cleaning, data transformation, data integration, and data reduction [25]. Data collection can be divided into two parts: data download and data preprocessing. Data downloading is the first step of data collection. According to the availability of big data, big data can be divided into confidential big data and free big data. Such as financial institution data, demographic characteristics data are confidential data and cannot be browsed and downloaded by the public. Free big data is open to the public. This type of big data is also the main data source used in teaching this course. The main sources of free big data include: (1) Search engine big data. (2) News big data. (3) Book big data. (4) Social media big data.

4.3. Data analysis theory

According to the students' knowledge structure and foundation, the main content of data analysis theory in this course is: (1) Econometric theory. (2) Intelligent algorithm theory. (3) Text topic mining theory. (4)Data calculation software. By using professional software calculations, calculation efficiency can be improved and data visualization can be achieved.

4.4. Big data industry applications

Big data industry application is an important teaching content of the *Introduction to Big Data* course. The purpose of this course is to apply what you have learned. In the industry application cases, the application of big data in tourism and medicine is mainly introduced. The specific case of tourism is tourism forecasting teaching. The research object is the prediction of the number of tourists in Jiuzhaigou. An example of the application of big data in the medical field is the impact of the spread of the COVID-19 epidemic on society. In the specific teaching process, the method of calculation while practicing is adopted, so that students can observe the whole process of calculation in real time, improve the sense of on-site teaching, and provide specific templates for specific applications.

4.5. Practical results

In order to test the effect of the teaching reform, the semester assessment method is to write course papers. After a semester of teaching practice and recycling course papers, it was found that students have basically mastered the basic principles of big data. The contents of student papers can be classified into three categories: one is literature review, the other is search engine big data applications, and the third is social media data applications. After systematic analysis of student papers, it is believed that the academic level of student papers has met the requirements of the syllabus and achieved the teaching reform goals set by the curriculum. The innovation ability of MBA students has been effectively improved.

5. Conclusion

The study focusing on the curriculum, faculty professional knowledge system, and student knowledge in the context of new commercial industries. Theoretical construction and empirical research were conducted on aspects such as structure, innovative consciousness and way of thinking, and students' experimental practice activities. The practical results show that the theoretical framework constructed in this article is feasible and effective. The theoretical framework for innovation training proposed in this article has been proven through practice to effectively improve the knowledge integration and innovation abilities of MBA students. The research conclusions of this

article have theoretical and practical value.

5.1. Theoretical value

The research result is enrich and develop relevant theoretical knowledge on the cultivation of innovative abilities of MBA graduates. By combining new business education concepts with traditional business education, and integrating modern information technologies (Internet, artificial intelligence, big data, blockchain, etc.), the MBA training syllabus is updated and the new liberal arts characteristics of the curriculum system are realized, thus providing a basis for training MBAs. The research conclusion of this article provide solid theoretical support for the innovative ability of graduate students.

5.2. Practical value

The purpose of practicing the construction of new business disciplines advocated by the country and cultivating high-quality graduate students adapted to the digital economy era. By integrating modern information and new technologies, the transformation and upgrading of the traditional business teaching model is achieved. By improving the innovative ability of MBA graduate students, we provide graduate students with comprehensive qualities, thereby improving students' competitiveness and service levels.

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