

DOI:10.18686/ahe.v7i13.8535

# Research on Cultivating Business Data Analysis Talents in Vocational and Technical Colleges

Jianzhen Wei

Jiangxi Tourism and Business Vocational College, Nanchang City, Jiangxi Province 330000

**Abstract:** In order to meet the demand of enterprises for business data analysis talents, the school attaches great importance to the cultivation of students' business data analysis and application abilities. This article elaborates on the current situation of business data analysis talent cultivation in vocational colleges. Through research on the cultivation of business data analysis talents, it is proposed to strengthen the cultivation of data analysis awareness, adhere to the concept of "integrating courses with competitions, promoting learning through competitions, and promoting teaching through competitions", and implement the "1+X" certificate examination system, Deepening the cooperation between schools and enterprises and fostering collaborative education methods.

Keywords: Data analysis; School enterprise cooperation; Personnel training

## 1. The necessity and importance of data analysis ability in cultivating business professionals

Business data analysis has become an indispensable part of future work for enterprises and even other enterprises, and the talent gap in data analysis has become even greater. Data operation is the core content of business majors in the era of big data. Enterprises need a large number of composite data analysis professionals with high comprehensive quality, and data analysis ability has become the core literacy of business students. However, the data analysis abilities of most business students are weak and cannot meet the needs of enterprises for data analysis talents. To meet the demand of enterprises for business data analysis talents, the school will focus on cultivating business data analysis and application talents. Therefore, the cultivation of business data analysis talents will become an important research topic in middle and high education<sup>[1]</sup>.

### 2. Current situation of talent cultivation for business data analysis in vocational colleges

Data analysis theories and methods are widely applied in multiple fields such as product design, precision marketing, logistics management, and customer relationship management. Therefore, business data analysis has become an important means of enterprise development, and the demand for business data analysis talents in society and enterprises is increasing. Therefore, in recent years, many vocational and secondary schools have offered courses on business data analysis and application. However, the cultivation of business data analysis talents in schools is not highly matched with the needs of the industry and enterprises, and cannot meet the talent needs of the industry and enterprises. Through analysis, we have summarized the following three reasons.

#### 2.1 Single course content and teaching mode

The traditional teaching content design mainly analyzes structured business data from the perspective of business operations, using descriptive statistical analysis and other methods. However, in the big data environment, there is a large amount of unstructured data that contains valuable business knowledge, requiring the adoption of new analysis and mining methods and active application in business decision-making. Therefore, in the era of big data, business talents have higher requirements. Business talents not only need to possess knowledge related to business operations, but also have the ability to analyze data. However, most universities only incorporate business data analysis into their business talent training courses. The content of business data analysis and application courses involves disciplines such as e-commerce, management, statistics, computer science, and big data analysis. However, the current theoretical curriculum system has not formed a systematic and complete curriculum system, and has not kept up with the rapid

development of enterprises. On the other hand, traditional teaching syllabi and classroom teaching models are difficult to stimulate students' learning enthusiasm and interest<sup>[2]</sup>.

#### 2.2 Students lack awareness of data analysis and practical application

Vocational and secondary school students generally have a fear of difficulty in data analysis courses. Teachers only focus on cultivating data analysis skills such as statistics, new data analysis tools, and modeling or programming knowledge, neglecting the cultivation of students' awareness of data analysis. This is not conducive to improving students' professional abilities and comprehensive literacy.

#### 2.3 Lack of experienced and excellent teaching staff

At present, most vocational colleges have insufficient teaching staff for data analysis, limited practical training, and a lack of practical training. Business data analysis is a course offered in recent years for business majors. Without experienced teachers in data analysis, students are unable to access the real latest enterprise projects. On the other hand, data analysis tools are diverse and updated quickly, with high requirements for the hardware of the training room. Currently, most vocational colleges still use the new version of Excel software, and the cooperation between enterprises in most vocational colleges is relatively lagging, which cannot achieve good integration between majors and industries, as well as effective integration between teaching and production processes.

#### 3. Training of Business Data Analysis Talents

#### 3.1 Improve the course system and update teaching content

The cultivation of business professionals in vocational and secondary schools should strengthen their ability to analyze data, incorporate "1+X" certificate content into teaching content, optimize the professional curriculum system, and develop a talent cultivation plan that deeply integrates data analysis competitions with "1+X". Firstly, vocational and secondary schools offer courses related to business data analysis in their business majors, such as "Online Store Data Operation", "Data Analysis and Processing, Visualization", "Business Data Analysis Report Writing", and other professional courses and basic courses; Training courses such as "Comprehensive Training on Business Data Analysis" can also be offered. In addition to improving the professional curriculum system, it is also necessary to update the teaching content in a timely manner. The curriculum team can invite industry or enterprise experts to revise the curriculum standards, curriculum resource library, curriculum textbooks, and talent cultivation plans. Professional certificate teachers need to restructure the curriculum system of the textbooks to adapt to the development of the enterprise. At the same time, we adhere to the concept of "integrating courses and competitions, promoting teaching through competitions, and promoting learning through competitions" in the teaching process, and encourage students to participate in vocational college skills competitions such as "Business Data Analysis and Application" and "Business Digitalization Ability Competition", in order to improve students' awareness of data analysis and practical operation skills. Teachers integrate the standards and procedures of skill competitions into the teaching content, integrate the concept of "promoting teaching through competitions," promoting learning through competitions." into the teaching of courses, and combine it with the actual needs of enterprise positions, allowing students to participate in actual competition projects and enterprise projects<sup>[3]</sup>.

On the other hand, The "1+X" certificate system effectively integrates ideological and political elements such as socialist core values, safety awareness, honesty and trustworthiness principles, and unity spirit into daily teaching and certificate assessment. It not only comprehensively improves students' professional skills and literacy, but also implements the fundamental task of cultivating morality and talent in vocational colleges.

#### 3.2 Cultivate students' awareness of data-driven operations

In the past, the cultivation of business talents focused more on production and operation, marketing, logistics business, and other aspects, neglecting the cultivation of data analysis ability. In the teaching process, teachers should pay more attention to cultivating awareness of data analysis, guiding students to explore the connections between data, and using cooperative exploration to enhance students' learning interest. They should strengthen training and constantly strengthen their data analysis thinking. When organizing and implementing teaching, teachers should apply new media information technology teaching models and methods to improve students' data analysis and innovative thinking abilities.

#### 3.3 Strengthening the construction of teaching staff

Strengthening the construction of the teaching staff not only enhances the professional abilities of full-time teachers, but also hopes to join frontline experts from enterprises in the teaching team. Focusing on professional teachers, through school enterprise cooperation, the two-way flow of talents between schools and enterprises is carried out, allowing frontline experts from enterprises to

come to the school for lectures or lectures, allowing students to be exposed to the cutting-edge knowledge, skills, and development trends of frontline data analysis positions in enterprises<sup>[4]</sup>.

#### 3.4 School enterprise cooperation and collaborative education

Vocational and technical colleges need to strengthen cooperation between schools and enterprises, introduce real enterprise projects in teaching practice, achieve precise and effective integration between majors and industries, teaching processes and production processes [5], cooperate with enterprises to build training bases, connect between on and off campus, combine on-the-job internships, build training bases on campus, transport high-quality students to enterprise data analysis positions for practical operations, continuously deepen school enterprise cooperation, and achieve integration from courses to certificates. And integrate the needs of enterprises into the cultivation of data analysis talents, and cultivate skilled talents that meet the needs of enterprises through collaborative education<sup>[5]</sup>.

#### 4. Conclusion

In order to meet the requirements of the rapid development of industries and enterprises for students' various professional qualities, the ability to analyze business data is an important skill that students majoring in business in vocational colleges need to master. To meet the talent needs of enterprises, vocational colleges need to attach importance to cultivating students' awareness and ability of data analysis, focusing on cultivating students' ability to apply data analysis, and improving employment levels. Combining the "1+X" certificate system pilot and business data analysis competition, optimize the curriculum system and teaching content, develop a talent training plan for business data analysis, integrate ideological and political elements into the curriculum, and help students establish good ideological and moral qualities and correct values. At the same time, deepen school enterprise cooperation, promote collaborative education, and cultivate composite applied talents for society.

#### **References:**

- [1] Yang Tianhong. Research on the Current Situation and Training Strategies of Data Analysis Ability of E-commerce Professional Talents under the Background of Big Data [J]. Science and Technology Information, 2019,17 (16): 213+217
- [2] Zhao Need, Liu Pei, Li Ting, et al. Reconstruction of the Course System of "Introduction to E-commerce" in Universities Driven by the Demand for Innovative and Entrepreneurial Talents: Based on a Survey of 985 Universities [J] E-commerce, 2019 (5): 83-85
- [3] Wan Xiaoyun. Analysis of Employment Oriented Business Data Analysis and Application Professional Construction [J]. Industrial Innovation Research, 2023, (03): 181-183
- [4] Chen Yue. Research on Strategies for Cultivating Data Analysis Ability of E-commerce Majors [J]. Industry and Technology Forum, 2020,19 (6): 207-208
- [5] Wang Mingyan Research on the Training Path of E-commerce Data Analysis Talents in Vocational Colleges [J] Technological Innovation and Productivity, 2022 (5): 3