Universe Scientific Publishing

ORIGINAL ARTICLE

Research on the Training of Prefabricated Construction Technology Talents in Higher Vocational Colleges under the Environment of Big Data

Yang Li

Henan College of Transportation, Zhengzhou 451460, Henan, China.

Fund Project: Scientific Research Project of Henan Communications Vocational and Technical College: Construction of Assembled Architectural Decoration Professional Group under the Background of Carbon Neutralization (Project No.: 2021-YJXM-011).

***Abstract*:** With the development of Internet technology in China, the era of big data has come. Through big data, there are more development opportunities for all walks of life in China, so that industries can provide more accurate decisions through digital data. For the education industry, the same is true. Big data can be used to improve the quality of education, so that higher vocational education can cultivate more professional and reliable prefabricated construction technicians. However, at present, there is no definite strategy and idea on how to cultivate high-quality prefabricated construction technical talents in the environment of big data. In this regard, this paper will study the contents in this regard. First, we should understand the relevant theories of big data and prefabricated building, put forward the social demand of higher vocational prefabricated building technical talents in the big data environment, and finally think about the training ideas of advanced prefabricated building technical talents in the big data environment.

***Keywords*:** Big Data; Prefabricated Buildings; Higher Vocational Technical Talents; Research on Talent Training

1. Introduction

In the context of social development, the progress is not only science and technology, but also the continuous innovation of the construction industry. For example, prefabricated architecture is the emerging representative of the new era, which is concerned and loved by most people at present. Now more and more higher vocational colleges are also cultivating technical talents about prefabricated buildings, so that the industry can develop effectively and realize the purpose of talent output of higher vocational colleges. Therefore, the research on the contents related to the prefabricated construction technology talents not only has a vital impact on China's construction industry and can promote the development of the industry, but also for the education industry, the training of talents in the development of prefabricated construction technology is also very important, because the research on the relevant contents can provide more ideas for education.

2. Related theories

2.1 Big data

The so-called big data actually refers to some databases that will exceed the collection, storage, management and analysis capabilities of conventional database tools. Therefore, from the perspective of Chinese scholars, we summarize the characteristics of big data in four aspects: volume, variety, value and velocity. The meanings are: ① Large amount of data. The starting units of big data are generally P, E and Z. It refers to one thousand T, one million T or one billion T respectively; ② There are many kinds of big data, and the data content of big data is not limited. It can be audio or video. Pictures, geographical locations and values can be used as one of the types of big data; ③ The value density is low. Although the data content of big data is massive, and the individual

doi: 10.18686/ahe.v5i11.4217

value of each data is relatively low. Therefore, it is necessary to purify the data through reasonable big data algorithm; ④ High timeliness requirements. Big data is different from traditional data. The most significant feature is that the algorithm processing speed of big data is higher, and the data has a certain timeliness.

2.2 Prefabricated building

Prefabricated architecture refers to a construction method of architecture. Compared with the traditional construction method, prefabricated architecture will make the complex house construction process become as fast as building blocks. The specific assembly process is to complete the prefabrication by a special factory, and then use a large crane to assemble at a reasonable building location. After the assembly, the building can be used. Therefore, compared with traditional buildings, prefabricated buildings have the following characteristics: ① The design is more standardized, because the modular design of the building structure will be carried out in the design stage of prefabricated buildings, which is more convenient for subsequent assembly, so the design idea is more standard; ② The production process is industrialized. The traditional building method is to complete the building structure through on-site construction in the building site, but the prefabricated building is assembled in the building site after factory production, so this kind of industrialized production can uniformly control the building quality; ③ Effective management can be carried out through informatization, because prefabricated buildings can form a unified whole regardless of their construction mode, design mode or production mode, and can accurately predict the installation procedures, installation location, number of construction personnel, etc., required for the construction of the building. Therefore, information management can be used to optimize the installation scheme to realize the role of big data.

3. Demanding for prefabricated construction technicians in higher vocational colleges under the big data environment

As one of the largest industries in China, the construction industry has huge scale and space, but the traditional construction process, whether from design, raw material production or final construction, is very complex, which is difficult to help the rapid development of the construction industry. The emergence of prefabricated building mode has an impact on the traditional building mode. However, due to the huge development scale and space of the construction industry, there is a shortage of relevant talents. In addition, the prefabricated building mode of factory production is completely different from the traditional building mode, and there is no special standard to control the quality of factory manufacturing. This leads to the fact that although the prefabricated building has given a new reform direction to enter the industry, due to the limitation of technology, the prefabricated building can not get its due development.

Therefore, at present, the social demand for prefabricated building technical talents is very large. Moreover, due to the rapid development and outstanding advantages of prefabricated building, many large enterprises are carrying out the pilot reform of prefabricated building, including China Railway, China Railway Construction, China Construction and other large central enterprises. For some domestic small and medium-sized construction enterprises, it is in urgent need of prefabricated construction professionals. It is hoped that through professional prefabricated construction talents, small and medium-sized enterprises can occupy a certain market in this construction reform and develop in the direction of large enterprises.

Generally speaking, in the big data environment, the social demand for prefabricated construction technical talents in higher vocational colleges is very large, and there is an obvious talent gap in this regard. Therefore, when cultivating prefabricated construction technical talents, higher vocational colleges should focus on cultivating technical and practical talents to meet the needs of the society.

4. Thoughts on the training of prefabricated construction technology talents in higher vocational colleges under the environment of big data

4.1 Analyzing talent training quality through big data

In order to improve the training quality of prefabricated construction technical talents, higher vocational colleges can use some big data platforms to analyze the talent training mode of prefabricated construction specialty in the school, and determine through specific values how to optimize the talent training ideas in higher vocational colleges to improve the quality of talent training. For example, McKinsey Company of the United States has specially developed a big data analysis platform for talent training quality. The platform comprehensively feeds back the talent training effect and training quality given by higher vocational colleges by analyzing key data such as talent training resource allocation and talent training teachers. At the same time, each platform can also feedback the shortcomings of higher vocational colleges in the process of training talents, so that higher vocational colleges can

optimize the existing talent training quality.

4.2 Obtaining talent training plan through big data

When higher vocational colleges train prefabricated construction technical talents, if they want to improve the training quality of talents, they can obtain excellent talent training schemes of other colleges with the help of big data platform. By constantly optimizing their own talent training schemes with the help of excellent higher vocational colleges, they can reasonably realize through big data analysis and improve the effect of talent training quality.

4.3 Integrating big data into talent training

The role of big data analysis is not only to evaluate the quality of talent training, but also to obtain the talent training programs of other colleges and universities, and integrate it into the whole process of talent training. For example, in the process of training prefabricated construction technology talents. Internet resources can be used for auxiliary teaching, and these Internet resources can be introduced and counted through the big data platform. On the one hand, it is to expand the number of Internet resources in the classroom and enrich the educational resources that talents can have when they receive training; On the other hand, teachers and higher vocational colleges can obtain the actual development of students through the big data platform, so as to optimize the talent training scheme according to the actual situation of students in real time.

4.4 Using big data to analysis dynamic employment

The main purpose of training prefabricated construction technical talents in higher vocational colleges is to output high-quality assembly to the society. It is construction technical talents that enable China's construction industry to get full development in prefabricated construction. Therefore, higher vocational colleges can also use the big data platform to obtain the dynamic employment situation and make dynamic employment analysis, so as to help the talents trained by higher vocational colleges find the most suitable jobs. In addition, and higher vocational colleges can also use the big data platform to predict the future employment quality of students majoring in prefabricated architecture, so as to comprehensively analyze how to adjust the teaching content in the subsequent training of students majoring in prefabricated architecture, and make the trained talents more meet the needs of the society for prefabricated architecture talents.

5. Conclusion

In general, through the research related to the training of prefabricated construction talents based on the big data environment, it can be found that the main training idea of using big data to train prefabricated construction talents should first evaluate the talent training quality, optimize the talent training plan, and run the content of big data through the whole process of talent training, as well as the dynamic analysis of talent employment.

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