

## Analysis and Optimization of College Students' Education and Training Based on Talent Market Demand

Fengfeng Zhang, Noraini Zainal Abidin and Weiwei Tu

EasyChair preprints are intended for rapid dissemination of research results and are integrated with the rest of EasyChair.

# Analysis and optimization of college students' education and training based on talent market demand

Zhang Fengfeng<sup>1</sup>, and NORAINI HJ. ZAINAL ABIDIN<sup>2</sup>, and Tu Weiwei<sup>3\*</sup>

<sup>1, 2</sup> Faculty of Education and Liberal Studies, City University Malaysia, 46100 Petaling Jaya, Selangor, Malaysia.

\*Corresponding author: 15593896989@163.com

### **ABSTRACT**

The research shows that there are regional differences, low professional matching and low employment happiness index in the employment of Chinese college graduates. Therefore, we analyze the deep-seated reasons and propose solutions to the above problems. The purpose of this study is to investigate the correlation between school discipline settings, education methods and employment based on the actual social needs, so as to design a feedback system, optimize the dependent variables through reverse adjustment of independent variables, and finally solve the above employment problems. The samples of this study were collected from the recent graduates of Guangdong Communications vocational and technical college and universities in several nearby cities. The research questionnaire was designed by the researcher himself, printed and distributed to these graduates and school staff, and collected from them. The results show that the regional economic difference has little influence on the employment happiness index of graduates, but the education mode and curriculum have a great influence on the employment happiness index of graduates. These findings have important theoretical, teaching and practical significance.

Keywords: Specialization, Employment happiness index, Curriculum, Teaching methods, Regional economic differences

## INTRODUCTION

The purpose of this study is to investigate the relationship between the degree of employment happiness of Chinese college graduates and the teaching methods and economic regions of their majors. Specifically, it is to investigate the graduates of colleges and universities in many nearby cities led by Guangdong Communications vocational and technical college. After the data collection plan is planned, from the perspective of improving employment, the reform plan is put forward by means of visiting investigation, sampling investigation, problem proposal and problem demonstration, and scientific analysis method, and the feasibility of the reform measures is ensured. Provide colleges and universities with a college talent training program oriented to the needs of social talents, and create a dynamic, timely and accurate training mode through many aspects of education orientation reform and school enterprise cooperation.

In China's talent training system, there is a kind of University whose training goal is above senior high school but below undergraduate. This kind of university is called junior college. Junior college aims to cultivate applied technical talents, which is a solid driving force for the sustainable development of manufacturing in China. Therefore, the cultivation of such talents needs to emphasize the dual combination of theory and practice.

After investigating the situation of junior college graduation in China, the following aspects are obtained:

First, the employment level of students in various economic regions is unbalanced. Due to the constraints of diversified unbalanced factors such as China's natural resource distribution, industrial technology foundation, ecological construction, resource development and construction level, market-oriented operation level and economic policy, China's regional economic development is unbalanced, and the contribution of junior college education to regional employment level is also different.

Second, the structural contradiction formed by the low correlation between specialty setting and jobs. To some extent, the correlation between the work and major of graduates of various majors in junior colleges can reflect whether the trained students of a major can meet the needs of the rapid development of social economy. Based on the above description, as far as the current situation is concerned, the specialty setting of junior colleges and universities is not very suitable for the needs of the actual positions of enterprises, resulting in the frequent mismatch between the contents learned by students and the things used in their jobs.

Third, junior college graduates are less satisfied with the current employment situation. Employment satisfaction is the subjective judgment of junior college graduates on their current employment situation, which plays an important role in enhancing employment stability. The overall employment satisfaction of junior college graduates in 2018 is about 65%. Although the employment situation has improved compared with that of graduates in previous years, there is still room for 35% improvement in satisfaction. According to the above data, the employment satisfaction of Chinese junior college graduates in recent years is low, so the employment stability is not very high.

#### PROBLEM STATEMENT

Based on the above three points, we can find that the employment situation of colleges and universities is unbalanced due to regional economic differences; There are employment errors caused by the lag in the updating of the major setting in Colleges and universities; There are problems of low job satisfaction and low stability caused by the higher employment expectation of graduates than the actual employment environment. In a word, the problems from different aspects surrounding the employment of colleges and universities make the teaching methods and curriculum allocation of colleges and universities urgently need to be optimized.

## LITERATURE REVIEW

## **An Overview of Literature Review**

Based on the research on the articles of Xiaolin Zhang. (2021), Xinhua Li (2021) and Zhijun Zhao (2020), the following points are obtained. With the continuous progress and development of our country's social economy, the demand for high-quality skilled talents in all walks of life in our country is also increasing. Therefore, colleges and universities should adapt to the changes in the current employment situation, actively innovate the concept of education management, and aim at delivering excellent and qualified vocational talents to the society as the ultimate training goal. Based on this, this paper first analyzes the problems existing in the management concept of higher vocational education, and then focuses on the innovation path of higher vocational education management concept based on employment orientation. So as to continuously improve the quality of personnel training in higher vocational colleges in my country.

## **Analytical Features of a Literature Review**

This paper focuses on studying the employment situation of college graduates and finding problems from it. This research can better solve the problems of high employment difficulty and low employment stability.

The cited articles have something in common with the points I have studied, such as:

- For the promotion of education system.

- Develop the training system of colleges and universities with demand as motivation and guidance.
- For the poor quality of talents and how to improve the quality of graduates

These are the points that can help me study, but the purpose of my research is not only to find out where the problem lies, but also to give a reasonable plan on the basis of the above. Based on the above research results, combined with the system, talents, market information, college teaching direction, teaching content, teaching methods and other factors, a system that can be iterated in time is proposed.

## **Innovation of employment system**

Xinhua Li (2021) emphasized the importance of stable employment in his work the setting of high-quality employment system, and emphasized that talents should serve the modernization construction. More is from the system level, trying to change the employment orientation of higher vocational graduates from the system. The discussion on employment results only focuses on the stability of employment, lacks the perspective of students, and lacks the analysis of job satisfaction and students' happiness. For high-quality employment, it only focuses on improving students' personal abilities, and does not give how to accurately match talents with the market.

"To meet the demand of higher quality and fuller employment, employment oriented higher vocational education can improve the vocational skills of students, enhance their employment and entrepreneurship ability, improve the adaptability and job transfer ability of workers, and promote the reasonable flow of labor force to a greater extent. The continuous change of industrial economic structure makes the structure of employment talents change constantly. As a form of higher education closest to the market, It can respond to the adjustment of the economic structure at the fastest speed. High quality employment needs scientific system guarantee. Through empirical analysis and system analysis of the employment quality of higher vocational graduates, this paper explores the construction of a system coordination system to achieve high-quality employment of higher vocational graduates and promote economic development. Xinhua Li.(2021)

The above viewpoints should be expanded to look at problems, not only from the high-level system, but also from the perspective of students. In order to solve the problem of employment stability, it is essential to improve students' liking and recognition of their posts.

### The importance of demand orientation

The starting point of Zhijun Zhao (2020) in the employment oriented talent training mode is basically the same as my research direction. The author conducts research from the market demand, and updates the actual market demand in a detailed and timely manner, so as to guide the courses and majors of colleges and universities in a reverse direction based on the actual demand, and especially give suggestions on the employment direction and employment policy of students. However, my research plan is to establish a real-time update mechanism of market demand based on the research path. There is a Chinese proverb "it is better to teach people to fish than to teach people to fish", which means that it is better to teach the parties how to solve the problems than to solve the current problems.

In higher vocational colleges, higher vocational education should take employment as the guide, take improving the employment rate of students as the educational goal, meet the needs of society for talents, and establish an education system that conforms to society. Talent training mode and implementation methods are the contents that the education industry and higher vocational schools should pay attention to at this stage. The education department should take the social and employment needs as the guidance and innovate the methods of talent training in higher vocational colleges. In this way, the employment rate of students can be improved and students can develop better. In short, higher vocational colleges should constantly innovate employment oriented talent training methods, take improving students' quality as the direction of education, take the social demand for talents as the driving force, and effectively reform the methods of talent training. In this way, we can improve the quality of talent training and improve the employment rate of students after graduation. Zhijun Zhao.(2020)

#### ICSSBR 2023

### International Conference for Social Science and Business Research

The improvement of employment quality is not only related to the number and accuracy of employment. To fundamentally improve the quality of employment, we need to put forward a set of mechanisms that meet the common interests of the three parties from the three directions of schools, enterprises and students to promote the implementation of the reform plan.

## Talent distribution involves both supply and demand sides

Xiaoling Zhang (2020) focuses on the discussion of high-quality skilled talents in the article employment oriented higher vocational education concept, focusing on how to focus on resources and cultivate high-quality graduates from the perspective of students. The training and employment of high-quality graduates is also part of my research direction, which can be used for reference. However, the problem of difficult employment involves all aspects of the education system, not just the problem under the quality of students. It is a one-sided view to blame the problem of difficult employment on the quality of students. We should look at the problem from a better perspective. We should not blindly focus on the ability of students. Employment is the result of cooperation between the supply and demand sides, not just one-sided reasons. What we need to solve is not only to connect excellent talents to excellent enterprises, but also to provide all graduates with a more reasonable job. It is the focus of my research to put forward a plan to better allocate talents.

With the continuous advancement of China's social modernization situation, the demand for high-quality skilled talents in all sectors of our society has always been in a state of scarcity. Therefore, it is essential to continuously improve the management of higher vocational education and cultivate more high-quality skilled talents for China's development. However, there are still some problems with the management concept of Higher Vocational Education Based on employment orientation in China, which makes many graduates of higher vocational schools unable to adapt to some new jobs in modern society. In order to cultivate more high-quality skilled talents, it is necessary to constantly innovate the management concept of higher vocational education, and build a bridge between Higher Vocational Colleges and modern enterprises based on the employment orientation, so as to cultivate students into talents required by enterprises. Based on this, this paper first analyzes the problems existing in the management concept of Higher Vocational Education under the employment orientation, and then focuses on Four Innovation Paths of the management concept of Higher Vocational Education Based on the employment orientation. This is for communication and reference only. Xiaolin Zhang.(2021)

### **METHODOLOGY**

Collect the required data through questionnaires, literature inquiries and in-depth interviews, and obtain key information such as job satisfaction and talent development from in-depth interviews. We obtained data such as the degree of professional matching through literature query, and obtained the differences of college graduates in economic regions through questionnaire survey. Then summarize and analyze the data. The proportion of factors influencing job happiness index.

## Research Design

This study mainly adopts the methods of questionnaire and in-depth interview. The questionnaire is used to collect professional counterpart data. Descriptive research is defined as a research method that describes the characteristics of the population or phenomenon being studied. Through in-depth interviews, key information such as job satisfaction, personal career development and personal ability improvement path can be obtained.

## **Population and Sampling**

The samples of this study were collected from the recent graduation of Guangdong Communications vocational and technical college and universities in several nearby cities.

## **Data Collection**

The research questionnaire was designed by the researcher himself, printed and distributed to these graduates and school staff, and collected from them.

## **RESULTS**

Supported by the following three research data, the index category classification and weight distribution were carried out, and finally a comprehensive evaluation system was obtained. The evaluation system is used to evaluate the research object and obtain the desired results. The greatest significance of the evaluation system of this qualitative study is to point out the direction of reform for the follow-up reform plan in the article.

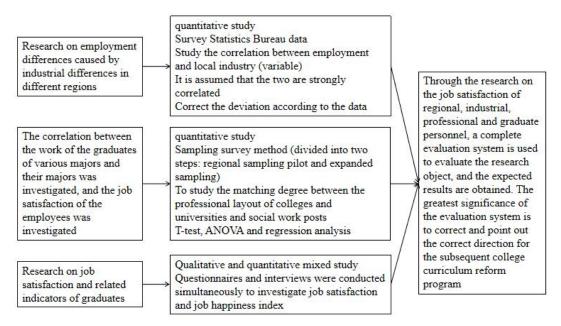


Figure 1. Research Element Design Model

First of all, based on the issues raised in this paper, the relationship between regional industrial differences and employment differences is studied.

Secondly, on the basis of studying the relationship between regional economic and industrial differences and employment, investigate the matching ratio between practitioners of various majors and their majors.

7D 11 4 D	1	4 .	1		•
Table 1. Res	search on	work re	levance of	t various	maiors

Research on work relevance of various majors							
disciplines		Subdivided specialized	Proportion of graduates engaged in their majors				
philosophy	Philosophy class	philosophy	41%				
		logic	60%				
		religion	71%				
economics	Economics class	economics	49%				
		Economic statistics	69%				
	Finance class	finance	46%				
		taxation	78%				
	Finance class	finance	56%				
		Financial engineering	33%				
		insurance	47%				

		investment	30%
	Economics and Trade	International Economics and trade	46%
		Trade and economic	70%
	Class of law	A law	60%
	Political science class	Science of Political Science and Administration	50%
		International political	47%
		diplomacy	35%
A law	Sociology class	sociology	78%
Alaw		Social work	77%
	A class of ethnology	ethnology	40%
	Marxist theory class	Socialism of science	57%
		History of the Communist Party of China	75%
		Ideological and political education	72%
•••			•••

Finally, the degree of satisfaction and recognition of graduates from different industries and positions is obtained as an indicator to measure the quality of social employment.

### DISCUSSION

Firstly, the importance of higher education training direction and higher education education model optimization oriented to social talent demand was summarized through research and conclusion.

Secondly, through literature research, interviews with employees after graduation, interviews with human resources of enterprises and questionnaire surveys, the overall data of current employment quality are listed and preliminary data analysis is conducted. From this, regional contradictions, structural contradictions, and employment stability of college employment can be derived. In order to explore and analyze these problems, we will dig into the causes and sources of the problems, which will help us find the direction of optimization.

Thirdly, based on the four steps of situation investigation, data analysis, problem interpretation and source tracing, we can basically determine the training direction and education model optimization measures, which mainly focus on the following aspects.

- 1. The configuration of theory and practice courses should be improved, the relevance of theory and practice should be strengthened, and the ratio of theory and practice composition should be set reasonably.
- 2. The practical training courses should simulate the actual operation process of enterprises to the maximum extent, correlate them with the actual workflow of enterprises, and use the real operation scenes of enterprises to improve the practice effect.
- 3. School-enterprise cooperation is undoubtedly the most important education method and link. It is necessary to use school-enterprise cooperation to discover the real talent needs of enterprises to the maximum extent, so as to adjust the training direction and training methods of schools in a targeted and timely manner.
- 4. Establish a system for school teachers to go to enterprises for attachment and exercise, so that teachers can understand real business scenarios more clearly, which is conducive to the authenticity and accuracy of cases in the teaching process. Accordingly, school teachers and students should pay attention to activities to strengthen the seminars and experience exchange between enterprises and schools, especially to interpret the talent demand plan from enterprises' perspective.

#### ICSSBR 2023

#### International Conference for Social Science and Business Research

- 5. Enterprises and schools should cooperate deeply and establish a system of mentor-apprentice relationship between enterprise employees and students to expose students to real work scenarios, develop students' teamwork ability and individual work ability in specific positions, and also help students improve their emotional intelligence in the work process.
- 6. Giving students enough opportunities for job rotation in school-enterprise cooperation gives students the opportunity to discover their own abilities and identify their strengths early, which helps the school to develop in the direction of strengths.
- 7. Improve students' awareness of their own abilities and self-direction, learn to combine self-employment and small-scale entrepreneurship, give them some free platform and capital to play, and develop their overall operational skills in advance.

### **CONCLUSION AND IMPLICATIONS**

Through situation investigation, problem raising, problem demonstration and implementation of reform measures, we will provide a college talent training program oriented to the needs of social talents, and create a dynamic, timely and accurate training mode through many aspects of education orientation focused reform and school enterprise cooperation. So as to improve the accuracy of employment, the satisfaction of employees and the benign employment structure, and finally achieve the harmonious setting of talents and the maximum value.

### **ACKNOWLEDGEMENT**

We would like to thank City University Malaysia for the financial assistance through research grants with CTY202200212.

### **REFERENCES**

- Chen, Z.-X., & Tan, K. H. (2011). The perceived impact of JIT implementation on operations performance: Evidence from Chinese firms. *Journal of Advances in Management Research*, 8(2), 213-235. doi:10.1108/09727981111175957
- Chen Xiaoli.(2020). Wang Huanliang. The sense of gain of college students' career planning curriculum: concept, content and inspiration [J] Shandong Higher Education Yu. page60-66
- Dali Yu.(2019).Research on employment oriented talent training mode of Higher Vocational Colleges.Heilongjiang Science.Page11.
- Hou Peng.(2017).Research on Elements of Employment Curriculum System Centered on Career Development [J]. Heilongjiang Higher Education Research.page171-1
- Kulwinder Singh. (2011). International Journal of Educational Planning & Administration. ISSN 2249-3093 Volume 1, Number 2 (2011), pp. 161-171.
- Kong Xiameng.(2013).Research on Career Education Curriculum in Colleges and Universities [D] Southwest University.
- Liu Xiao.(2019). Liu Jianghua, Tang Likun Practical exploration of integrating ideological and political elements into employment guidance courses [J] School Party building and thinking Want to educate, page 55-56
- Linli Li. (2015). A study on the causes and Countermeasures of "lack of motivation" of college students with English learning difficulties in private colleges Scientific and technological outlook, 430223 page 268-269.
- Luo Xuerong.(2018).Research on the construction of career planning and employment guidance teaching system from the perspective of precision employment [J] Guangdong Light Industry Occupation Journal of Technical College, page61-66
- Li Huixian.(2011).Li Songlin. Analysis on the Course of "Career Development and Employment Guidance for College Students" [J] Education and Occupation, page133-135.

#### ICSSBR 2023

### International Conference for Social Science and Business Research

- Liu Meiyue.(2020). Yao Mo Research on the construction of college students' career development and employment guidance curriculum system [J] Journal of Higher Education, page60-62+66.
- Renfu Chen.(2020). Analysis on the innovation path of higher vocational education management concept based on employment orientation. Journal of Juamjusi Education Institute. Page 222-223.
- Wu Yan.(2018). Building China's "Golden Course" [J] China University Teaching. Page 4-9.
- Wang Pan.(2007)Research on Career Planning and Management of College Students in Hebei Province [D] Tianjin University.
- Wang Yan.(2019). Chen Jiangchun An Analysis of the Reform of the Course of Career Development and Employment Guidance for College Students [J] Western Quality Education.page166-167.
- Xianhui Dong.(2019). The ecological function of vocational education and its development path. Research on the development of Vocational Education. Page 31-35
- Xinhua Li.(2021). System Analysis and Construction of High Quality Employment about Higher Vocational Education and Economy. Research and exploration. page 39-46.
- Xiaolin Zhang.(2021).Innovation path of higher vocational education management concept based on employment orientation.BUSINESS CULTURE.page132-133.
- Xiang Xin.(2008). Current situation and countermeasures of college students' career planning education [J] Modern Education Science, page 39-43.
- Yun Ren.(2018). Analysis on the innovation path of higher vocational education management concept under the Employment Perspective. Labor security world. Page 68.
- Yiwen Wu.(2020). Strengthening the construction of vocational education and training system to deal with the structural contradiction of employment. Higher education in China. Page 64-65.
- YangJin.(2020).Reflections on the sustainable development of employment guidance for characteristic majors in higher vocational colleges [J] Science and Technology Horizon, page 92-94
- Yin Zhaohua(2012). Han Jing Reflections on Enhancing the Effectiveness of the Course "Career Development and Employment Guidance for College Students" [J] Chinese higher education.page 42-44.
- Yin Zhaohua.(2019). Exploration and Practice of Career Planning and Employment Guidance Course Construction [J] China University Teaching.page 88-92.
- Zhijun Zhao.(2020). Analysis of employment oriented talent training mode in higher vocational education. Higher education.page 50.
- Zhao Yong.(2015). Employment? Entrepreneurship? -- Trends of World Education from the Lost of American Education Reform [M]. Beijing: Education Science Press. Page 2
- Zhai Ying.(2014). Research on Career Planning Education of College Students in China [D] Dalian Maritime University.
- Zhang Jing.(2020).Liu Xiaojie. The Application of Flipped Classroom in Employment Guidance Course [J]. China University Student Employment.page 41-44+58