

Study on Employability of Vocational College Graduates from the Perspective of Industrial Upgrading: An Empirical Analysis based on Vocational College in Suzhou

Lei Cheng*, Lin Lu

Suzhou Vocational Institute of Industrial Technology, Suzhou, Jiangsu, 215104, China

*Email: 8730657@qq.com

Abstract

In the current context of industrial upgrading, we refer to relevant literature at home and abroad, design a questionnaire based on the requirements of enterprises for the employability of vocational college graduates, and conduct a questionnaire survey on enterprises in Jiangsu Province that hire vocational college graduates. By analyzing the current situation and influencing factors in the process of cultivating students' employability in Suzhou vocational colleges, an evaluation system for cultivating employability from four dimensions: knowledge acquisition ability, general skills, personal traits, and professional attitude has been constructed.

Keywords

Vocational Colleges; Graduates; Employability; Empirical Analysis.

1. Introduction

In order to promote the smooth implementation of the National Vocational Education Reform Plan and address the enrollment work of vocational colleges, the General Office of the Ministry of Education issued a notice in 2021, stating that the development of vocational education is an important foundation for popularizing high school education and a prerequisite for building a modern vocational education system with Chinese characteristics. It is necessary to maintain a reasonable level of vocational education ratio in high school. After several years of significant enrollment expansion in vocational colleges, the number of graduates employed has also increased significantly, and the employment problem of vocational college graduates has become increasingly prominent. Especially in areas with strong manufacturing industries such as Suzhou, the overall employment competition for vocational college graduates is relatively fierce. How to cultivate and enhance the employability of vocational college students, and form a scientifically sound employability training system that is suitable for the needs of the talent market, is a problem that Suzhou vocational education should consider at this stage.

Employability is a core competency for vocational college graduates in terms of employment. Research based on core competencies has different interpretations of their concepts due to different perspectives of researchers. Zhiyuan Xie believes that employability refers to a comprehensive vocational ability acquired by college graduates through learning during their time in school, that is, the ability to engage in a certain profession[1]. Junkai Li conducted a questionnaire survey and analysis on 2570 graduates from different types of universities, and believed that college students' employability mainly consists of four abilities: professional ability, interpersonal influence, analytical thinking, and career identity[2]. Through the review of literature on employability, most researchers both domestically and internationally analyze and understand employability from the perspective of schools. This article mainly conducts a large-scale questionnaire survey on enterprises in Jiangsu Province that employ vocational

college graduates, and analyzes the Employability of vocational college graduates from the perspective of industry and talent demand.

2. Questionnaire Survey

Based on the reading and analysis of literature on the Employability of graduates both domestically and internationally, combined with the "2022 Annual Report on the Employment Quality of Graduates" from 17 vocational colleges (colleges) in the Suzhou region, and interviews with some enterprises in Jiangsu Province that employ vocational graduates, this article adjusts the observation factors of the Employability of vocational graduates. Based on the opinions of enterprise personnel recruitment experts, indicators that are not conducive to the understanding of the respondents were expressed in a simplified and neutral manner. Indicators that are generally believed to have similar basic element content by the respondents were merged, and corresponding survey questionnaires were designed. Then, a scale survey was conducted on 328 units recruiting Suzhou 2022 vocational college graduates, with the main survey subjects being human resource supervisors, marketing salespeople, research and development engineers, and frontline production workers from small and medium-sized enterprises. A total of 302 samples were collected, with the primary industry accounting for 4.5%, the secondary industry accounting for 62.5%, and the tertiary industry accounting for 30.2%. After excluding 14 invalid samples, the effective rate was 87.8%.

We use SPSS18.0 analysis software to conduct statistical analysis on effective questionnaires and extract common factors for the components of employability. Before analyzing the constituent factors of vocational college students' employability, the correlation between the indicators in the scale should be tested. Factor analysis is a method of concentrating data by studying the correlation between multiple variables, identifying the key factors that play a decisive role, and using a few factors to reflect the main information of the original variables. We determine the factors that constitute the basic factors of vocational college students' employability as knowledge acquisition ability, general skills, personal characteristics, and professional attitude.

3. Empirical Analysis

Table 1. Evaluation System for Cultivating Employability of Vocational College Students

Four dimensions of evaluation	Specific indicators	Reliability coefficient	Approximation error
The ability to master knowledge	Comprehensive application of general knowledge, comprehensive application of professional knowledge, foreign language application, and computer application	0.726	0.041
Common Skills	Ideal beliefs, hands-on operation, written expression, personal communication, analysis and judgment, problem-solving, teamwork, organizational management, innovation and entrepreneurship, "1+X" certificate	0.849	0.067
Individuality	Scientific thinking, self-directed learning, application analysis, creative innovation, communication and coordination, stress resistance and resilience	0.938	0.062
Professional attitude	Adaptability, sense of responsibility, loyalty, dedication, self-management	0.887	0.038

Based on the existing Employability indicators of domestic and foreign scholars, combined with the factors and competency models in employer recruitment, and taking into account the employment characteristics of vocational college students, a system of Employability indicators for vocational college students from the perspective of industrial demand has been constructed, as shown in Table 1. Using exploratory factor analysis method, obtain the initial factor (43 indicators) load matrix, eliminate 18 items such as job application ability, negotiation ability, and appearance with a contribution rate of less than 10%, and then obtain the rotating factor load matrix through orthogonal rotation. Based on the above analysis results and theoretical classification, the evaluation indicators are divided into four dimensions: knowledge acquisition ability, general skills, personal traits, and professional attitude, with 25 items.

Subsequently, we used confirmatory factor analysis to verify the reliability and structural validity of the employability indicator system. Regarding the reliability coefficient, scholar Hansen believes that a coefficient between 0.70 and 0.80 is sufficient in designing predictive questionnaires or verifying a design pilot study. The larger the reliability coefficient, the higher the reliability and stability of the prediction[3]. The reliability coefficients in Table 1 are all above 0.70. Regarding the number of items, the total number of tables in this study is 328. The root mean square error of the approximation is between 0.041 and 0.067, both of which are less than 0.08, indicating a good fitting condition. This indicates that the evaluation system for cultivating vocational college students' employability we have constructed is stable and reliable.

4. Results and Discussion

4.1. There are Differences in the Cultivation of Employability in Vocational Colleges.

Vocational colleges attach great importance to the cultivation of students' professional attitudes, knowledge, and abilities, with the lowest level of cultivation for general skills. This indicates that the current talent cultivation in vocational colleges focuses more on moral character and knowledge, while the cultivation of general skills, especially hands-on operations, is clearly insufficient. Currently, Suzhou's regional industries demand high-quality technical and skilled talents in modern urban agriculture, high-end manufacturing, modern service industry, and strategic emerging industries. Vocational colleges should attach importance to the cultivation of students' comprehensive abilities and enhance their employment competitiveness.

4.2. Extracurricular Practice Plays a Prominent Role in Cultivating Employability.

Vocational college students have extensive exposure to society through extracurricular practice, which plays a very important role in consolidating professional knowledge, forming ideological character, improving humanistic literacy, enhancing innovation and entrepreneurship, and promoting physical and mental health. Research has shown that vocational college graduates have poor adaptability to society and job competence, and there is a positive correlation between extracurricular practice and Employability. That is, the richer extracurricular practice experience, the stronger Employability. Therefore, vocational colleges should continuously strengthen the guidance of extracurricular practice, and attach great importance to extracurricular knowledge expansion, skill training center project practice, club organization activities, enterprise job recognition, internship, and other extracurricular practical activities.

4.3. The Integration of Ideological and Political Education into the Cultivation of Employability in the Curriculum is Relatively Weak.

Establishing morality and cultivating talents is the fundamental task of vocational education. For a long time, the ideological value and guidance of ideals and beliefs in vocational education have mainly been borne by ideological and political courses, while professional courses mainly focus on knowledge transmission and skill development. The decoupling of moral and ability education is relatively common. Research has found that the core of curriculum ideological and political education is to vigorously promote the teaching reform of professional courses, deeply tap into the ideological and political resources contained in the subject, play the educational function of each course and the educational responsibility of teachers, and effectively integrate moral education into the entire teaching process, laying a solid ideological and political foundation for the cultivation of students' Employability.

4.4. The Integration of the "1+X Certificate" into the Cultivation of Employability Needs to Be Implemented.

The combination of the "1" academic certificate and the "X" vocational skill level certificate in the "20 Articles of Vocational Education" is not only an important reform deployment, but also a major innovation measure. Vocational colleges should focus on students, deepen the reform of talent cultivation and training models and vocational skill level evaluation models, improve the quality of talent cultivation, and expand employment and entrepreneurship creation skills. Research has found that 17 vocational (vocational) colleges in the Suzhou region have not yet been fully implemented, and even some colleges have just started. Therefore, vocational colleges should start from the following aspects: firstly, strengthen contact with leading enterprises in the industry, select relevant vocational skill level certificates, and determine the majors or professional groups to participate in the "1+X certificate" pilot project. The second is to integrate vocational certificate training content and related requirements into professional talent cultivation plans, optimize the curriculum system and teaching content, and select excellent teaching teams to participate in relevant training. The third is to organize training for students and members of society, and cooperate with training evaluation enterprises (organizations) to implement certificate assessment.

5. Conclusion

This article studies the current situation and influencing factors of Employability cultivation of students in Suzhou vocational colleges through a questionnaire survey, and constructs a four dimensional evaluation system for Employability cultivation. The conclusion of this article has a certain guiding role in cultivating the Employability of vocational college graduates.

Acknowledgments

This work is supported by the Education Reform Research Project on "Integration of Industry and Education, School Enterprise Cooperation" of Suzhou Vocational College in 2022 (Project No.: 2022SZJG113).

References

- [1] Xie Zhiyuan. Research on Cultivating Entrepreneurship and Innovation Talents for New Technology Application in Vocational Colleges [J]. Education Research, 2016,37 (11): 107-112.
- [2] Li Junkai, Zhou Kedi. The Establishment of Socialist Core Values and the Scientific Employment Concept of College Students [J]. Journal of College Counselors, 2014,6 (06): 48-51. DOI: 10.13585/j.cnki.gxfdyxk.2014.06.013.

- [3] Zhang Huaxin, Liu Haiying. Determinants and Predictions of Financial Asset Prices: Review of the 2013 Nobel Prize in Economics [J]. Reform, 2014 (02): 141-147.