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School Factory Education in Optometry Towards Employability

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Abstract

In recent years, social problems such as "difficult employment" and "shortage of skilled workers" have troubled the development of vocational education. The Chinese Ministry of Education focuses on the areas where technical skills are in short supply, this study will find out the possible employability of the school factory education in optometry. The methodology of the study employed a descriptive research design to determine the assessment of school-factory education in Higher Vocational Colleges for Optometry Majors in J Vocational and Technical College in China. This study used survey questionnaire as the primary source of data to be interpreted with the use of statistical analysis. According to student respondents, school-factory education enabled them to acquire skills, however, few disagreements on the aspect of knowledge and attitudes should be taken to an account.Also, as perceived by the school leader respondents, learning environment has a great impact in the employability of the students in a school-factory education. The study also found that student respondents have relatively the same perceptions of school-factory education in terms of knowledge, skills and attitudes regardless of their age and sex but vary when it comes to their grade level. Grade 3 student respondents have much agreed on school-factory education in terms of attitudes, skills and knowledge compare to grade 2 student respondents. School leader respondents have relatively the same perception of school-factory education in terms of learning environment and trainings regardless of their age, sex and educational attainment. However, school leaders who have bachelor's degree much agree on school-factory education in terms of trainings compare to other school leaders with different educational attainment.

Keywords

School Factory Education; Employability; Optometry.

1. Introduction

With the rapid development of China's national economy into a new era of high-quality development, high-quality economic development needs high-quality vocational talents, and high-quality vocational talents need to be trained by high-level vocational colleges. Therefore, the state has issued a series of policies to attach importance to the training of vocational talents.

On 24th of January 2019, The State Council issued the Implementation Plan for The Reform of National Vocational Education, proposing to launch the construction plan of high-level higher vocational schools and majors with Chinese characteristics, and build a number of world-class higher vocational schools and majors (groups) that support development and lead reform with Chinese characteristics.

The Ministry of Education invests more than 2 billion yuan every year to build 50 high-level vocational schools and 150 high-level professional groups. It focuses on the areas where technical skills are in short supply, such as modern service industry, modern agriculture, advanced manufacturing and strategic emerging industries. But in recent years, social problems such as "difficult employment" and "shortage of skilled workers" have troubled the development of vocational education. On the other hand, many graduates of vocational schools

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are having difficulty finding suitable jobs. For this reason, this study will find out the possible employability of the school factory education in optometry.

1.1. Aim of the Study

To improve on the delivery of school- factory optometry educational instructions.

1.2. Research Problems

The study answered the following research questions: What is the profile of the student respondents in terms of: age, sex, grade level?; What is the profile of the school leader respondents in terms of age, sex, educational attainment?; What is the assessment of the student respondents of school-factory education in terms of: knowledge, skills, and attitudes? What is the assessment of the school leader respondents in terms of: learning environment and training?; Is there a significant difference in the assessment of student respondents when they are grouped according to their profile?; Is there a significant difference in the assessment of school leader respondents when they are grouped according to their profile?; and what input can be derived from the result of the study that can be used to improve the delivery of the School Factory education in Optometry?

1.3. Objectives of the Study

The "school-in-factory" cooperation has been carried out for a long time and in-depth projects in the school-enterprise cooperation in the integration of industry and education. The continuous reform of the curriculum integration of industry and education in the "school-in-factory" has achieved good results.

2. Methodology

This study employed a descriptive research design to determine the assessment of school-factory education in Higher Vocational Colleges for Optometry Majors in J Vocational and Technical College in China. This study used survey questionnaire as the primary source of data to be interpreted with the use of statistical analysis.

The participants in this study identified the school-factory education in J Vocational and Technical College particularly in Optometry Department.

There was a total of 60 student respondents and 20 school leader respondents for a total of 80 respondents of the study.

The method of gathering the data was a researcher-made survey questionnaire. The researcher asked the experts in Education and School Management to validate the instrument. After the instrument has been validated by the experts, the researcher asked the Director of College of Optometry for the approval of the gathering of data.

The following statistical treatment was used upon return of the survey. Frequency and Percentage was used for the profile of the student and teacher respondents. Mean was used for the degree of assessment. Pearson's r was used to get the relationship of the assessment of the respondents and their demographic profile. Statistical Package for the Social Sciences or SPSS was used for computational purposes.

3. Literature References

3.1. The Teaching Mode of "School-in-Factory"

Li, and Wen (2015) studied the connotation and significance of the teaching model, and believed that the production scale and jobs of enterprises could not meet the needs of teaching, teaching and production would be mismatched, and the level of teachers in enterprises was uneven, all of which affected the significance of the existence of "school-in-factory."[1]

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Sun Cheng (2019) believes that the innovation of teaching mode in higher vocational education should be carried out from the aspects of cultural construction, skill competition, innovation ability cultivation, teacher training and management optimization. By innovating the teaching mode of "school-in-factory", the operation efficiency of "school-in-factory" can be improved fundamentally and the quality of talent training can be improved. [2]

3.2. Talent Training Mode of School-In-Factory

According to Hidayat, H. (2017). How to use a product-based learning method and a participatory action learning system in higher education to deploy technology science for entrepreneurship. The use of a product-based learning strategy, the use of a participatory action learning system, training and problem-solving, apprenticeships in partner industries, mentoring and technology support, start-up businesses, and tenant supervision implementing an entrepreneurship training program can equip students with new skills that will enable them to survive in the community, as well as develop self-potential in entrepreneurship and provide work opportunities. [3]

Greetham, M., & Ippolito, K. (2018). States that by using a team-based learning technique to educate students for working in project teams and instilling collaborative and reflective practice in engineers, to demonstrate how the well-known TBL approach can be used in a creative way as a prelude to a group project to increase learning outcomes The TBL was designed to ensure that pre-reading was done, to instill a sense of subject matter mastery, to allow students to discuss complicated subjects, and to encourage collaborative and inclusive behavior. These abilities and knowledge were required to complete the follow-up group project successfully, as well as to succeed in their future employment. When working on a group assignment, students' end-of-module reflective statements revealed that they constructively collaborated and communicated. [4]

3.3. Related Studies on “School-In-Factory”

According to Xueping, Wu & Yiqun (2018), education is one of the most important and honorable pursuits. It has been described as "an engine of social progress," "a purifier of human harmony," and "an expression of culture" as a social component. Without education, humanity's prospects would be poor, and universal prosperity would be a pipe dream. China must learn from the experiences, achievements, research, and experiments of other countries in order to sustain progress, without discounting her own achievements and peculiarities in the process. Chinese educational development will play an essential part in the global educational system due to its distinct Chinese characteristics. As part of China's overall growth, setting up and managing a contemporary education system capable of responding to the difficulties it encounters necessitates its own efforts, insight, and ingenuity. [5]

In addition, according to Zhuang-Wen Wu & Liang-Rong Zhu (2021), to integrate theoretical learning and hands-on experience, as well as increased curriculum development, the innovation education platform proposes wide training results from multiple viewpoints Because of the increasing adaptability and multi-level compounded requirements of academic and applied individuals, intelligent manufacturing (IM) talent development is becoming increasingly important. Higher education's actions and direction are critical for IM society since it serves as the primary promoter of IM talent education. However, existing engineering training programs lack a clear framework for determining the major breakthroughs of IM to facilitate theoretical education and career abilities. As a result, this study proposes a systematic reference training approach for IM formation in a very student-centered interpretation. [6]

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4. Conclusion

School-factory education enabled them to acquire skills which includes defining the meaning of different eye conditions and aided them to do research to support their initial findings of the patient's condition. However, few disagreements on the aspect of knowledge and attitudes should be taken to an account. In addition, learning environment has a great impact in the employability of the students in a school-factory education. Major findings include that the ambiance of the school is important which sets the mood into learning. Learning earning environment also includes the activities that enhances student's learning skills which is perceived as very evident. However, school leader respondents disagree on the few statements which implicates to skills. Students have relatively the same perceptions of school-factory education in terms of knowledge, skills and attitudes regardless of their age and sex but vary when it comes to their grade level. School leaders have relatively the same perception of school-factory education in terms of learning environment and training regardless of their age, sex and educational attainment. However, school leaders who have bachelor's degree much agree on school-factory education in terms of training compare to other school leaders with different educational attainment.

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