

# The Effectiveness of Higher Vocational Education Services in Selected Schools in China, Basis for Enhanced Learning Program

Minghui Jia \*

Department of Education, Adamson University, Manila, CO 0900, Philippines

\* Corresponding author Email: jia120056530@gmail.com

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**Abstract:** According to the tabulated data, 88% were female and 12% were male, in terms of age, descriptive statistics revealed that 68% were 18 years old, 28% were 19 years old, 3% were 20 years old, and only 1% were 21 years old or older. The data revealed that the majority of students are from the liberal arts. The respondents' perceptions of the effectiveness of higher vocational services in terms of employment opportunities, which obtained an overall mean score of 3.30 and a standard deviation of 0.50. This means that they agree that the students broaden their professional knowledge and that the informal training program encourages students to practice and improve their soft skills. Additionally, they concur that the primary goal of the vocational lessons taught is accomplished through work immersion and that the discussion and cooperative learning methods helped them to develop their productivity and teamwork skills. Findings indicate that there is no significant difference in the assessments of the respondents concerning the effectiveness of higher vocational education services when demographic profiles are taken into account. However, there is a significant relationship between respondents' assessments of service effectiveness and factors contributing to its effectiveness. These findings underscore the importance of understanding the multifaceted aspects of higher vocational education services and suggest implications for enhancing the quality of learning programs in vocational education institutions.

**Keywords:** Effectiveness; High Vocational Education Services; Learning Program.

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## 1. Introduction

China's higher vocational education is an essential part of China's higher education system. According to the order from low to high, China's higher education qualifications divide into four levels: junior college, undergraduate, master's, and doctoral students. China's higher vocational education corresponds to a college degree, the lowest higher education degree level in China. The main goal of higher vocational colleges is to train technical talents. The goal is to equip students with practical skills, that is, to cultivate a group of talents with higher education knowledge and specific professional skills, and the teaching of knowledge is practice-based.

With the rapid economic development, China has become a truly world-class manufacturing power. China is currently transitioning from the traditional low-end industry to the emerging high-end industry. The development of industrial transformation has put forward a higher demand for the quantity and quality of high-quality technical talents. Compared with theoretical talents trained by universities, graduates from higher vocational colleges are more suitable for the needs of employers. However, because of the current situation, the number of graduates from higher vocational colleges is far from meeting the needs of all walks of life. At the same time, China's employment structural contradictions are still prominent. The rise of high-end industry, emerging industries, and the rapid development and broad application of intelligent manufacturing put forward higher requirements for the quality of workers. Existing laborer quality had gradually failed to catch up with the unit's needs of choosing and employing persons. Employers and workers hope to improve the technical skill level of workers through skill

training and obtain authoritative skill certification.

In 2019, China's government work report decided for large-scale enrollment expansion of one million people in higher vocational education. The report meets the increasingly urgent demand for technical and skilled talents in industrial upgrading and economic structure adjustment. It takes the development of higher vocational education as a strategic move to alleviate the current employment pressure and solve the shortage of high skilled talents. The main targets of enrollment expansion are veterans, laid-off and unemployed, migrant workers, new professional farmers, and other groups. In 2019, the "One-Million Enrollment Expansion Program" issued by six departments, including the Ministry of education, pointed out that the enrollment expansion must adhere to the principle of "no reduction in standards, diversified models and flexible school system" and walk out a road of high-quality enrollment expansion.

## 2. Background of the Study

The researcher chose higher vocational education for research, firstly because China's vocational education is striving to integrate with the world, and the country is increasingly valuing professional talents. Higher vocational education is a base for cultivating high-level technical talents on the front line, which deserves more attention and research. Secondly, with the development of the times and the optimization of education structure, undergraduate vocational education has become an important part of the education system. In the future, vocational education may be included in the bachelor's degree system, and it will further improve China's degree system. In short, studying higher vocational education is of great significance for the development of China.

### 3. Statement of the Problem

This study determined the effectiveness of higher vocational education services in selected schools in China, with the aim of developing a better learning program for the students pursuing better employability. Specifically, it will answer the following research questions:

1. What is the profile of the respondents in terms of the following:
  - 1.1 Gender
  - 1.2 Age
  - 1.3 Major category
2. What is the assessment of the respondents as regards to the effectiveness of higher vocational education services in relation to:
  - 2.1 Practicality and Relevance
  - 2.2 Employability of learning materials
  - 2.3. Employment opportunities
3. Is there a significant difference in the assessments of the respondents to the effectiveness of the services in higher vocational education when profile is taken as factors?
4. What are the factors that contribute to the effectiveness of the higher vocational education services in relation to:
  - 4.1. curriculum relevance
  - 4.2. teachers' preparation
  - 4.3. work immersion
5. Is there significant relationship between the assessment of the respondents to the effectiveness of services in higher vocational education to the factors that contribute to its effectiveness?
6. Based on the research findings, what output can be proposed to enhance the higher vocational curriculum?

### 4. Scope and Delimitations

The college the researcher researched was in Xiangyang Vocational and Technical College, which is a public full-time ordinary higher vocational college approved by the People's Government of Hebei Province. Established in 2000, the school has a total of 12 teaching units and 50 majors. The school has established a professional group system mainly serving modern agriculture and animal husbandry, advanced manufacturing, big health industry, modern service industry, etc., and has established 15 national key and backbone majors. There are 29 pilot projects for the 1+X certificate system.

The college currently has 1044 full-time teachers, 53 professors, 256 associate professors, 536 master's or above teachers, 20 national and provincial teaching and skill masters, and 17 experts who enjoy subsidies from the State Council, provincial, and municipal governments. 65% of teachers are "double qualified". There are 7 national and provincial teaching teams established. Twenty percent of the students taking higher vocational degree will be purposively selected as respondents in the study.

Xiangyang Vocational and Technical College is now the construction unit of the "High level Vocational School and Specialty Construction Plan with Chinese Characteristics", the excellent construction unit of the national model school, the national high-quality school, the "Top 50" of national vocational colleges and the "Top 50" of Asia Pacific vocational colleges.

## 5. METHODOLOGY

### 5.1. Research Design

This study employs a non-experimental quantitative design which naturally measures the occurrence of variables. Specifically, the descriptive research design and cross-sectional assessments was used to describe the significant relationship between relationship between the assessment of the respondents to the effect of higher vocational education services to the effectiveness of the implementation of the vocational education services. The factors that affect the effectiveness of the higher vocational education services in relation to. curriculum relevance, teachers' preparation and work immersion are also measured.

By definition, descriptive research is non-experimental research used to describe and interpret the current status of individuals, settings, conditions, or events, while the researcher is studying the phenomenon of interests as it exists naturally with no attempt to manipulate any of the variables. And the cross-sectional survey is helpful to examine the possible differences of characteristics among several samples or population measured at one point in time (Mertler, 2016).

A normality test, specifically the Shapiro-Wilk test, was used to determine whether the parametric test will be used to achieve the research objectives. When p-values exceed 0.05, parametric testing is applied. Non-parametric tests will be used if the p-value is less than 0.05.

The investigation's research questions have been reevaluated. As a result, the findings, along with their analysis and interpretation, are presented.

### 5.2. Data Gathering Procedure

Prior to the conduction of the study, the ethical clearance is obtained from the ethical Board.

The researcher will seek the necessary validation of experts to look into the survey questionnaire.

Firstly, the researcher selects participants who fulfil the criteria for the study, they are welcomed, and a rapport is established within the participant. Secondly, the consent form is taken from the participants keeping to all the ethical guidelines and code of conduct. Lastly, participant is also given a brief detailing about the rationale of the study and the procedures and brief introduction about the questionnaires are introduced.

## 6. The Profile of the Respondents

**Table 1.** Frequency and Percentage of Demographic Profile

Sex	Counts	% of Total
Female	563	88 %
Male	79	12 %
Age	Counts	% of Total
18	438	68 %
19	179	28 %
20	20	3 %
over 21	5	1 %
Course	Counts	% of Total
Liberal Arts	422	66 %
Science	220	34 %

## 7. Conclusion

This study, employing a non-experimental quantitative design, sought to investigate the effectiveness of higher vocational education services in selected schools in China and identify factors contributing to enhanced learning programs. The findings revealed two significant conclusions:

Firstly, there is no significant difference in the assessments of the respondents regarding the effectiveness of higher vocational education services when considering various demographic profiles. This suggests that the perceived effectiveness of these services remains consistent across different demographic groups, indicating a level of uniformity in the educational experience within the sampled schools.

Secondly, there exists a significant relationship between respondents' assessments of service effectiveness and factors contributing to its effectiveness. This implies that certain aspects or elements within the higher vocational education services play a crucial role in shaping the overall effectiveness of these programs. Identifying and understanding these contributing factors can lead to improvements in the quality of vocational education services and subsequently enhance the learning experience for students.

## 8. Recommendations:

Based on the conclusions drawn from this study, several recommendations are proposed for enhancing the effectiveness of higher vocational education services in selected schools in China:

**Continuous Evaluation and Monitoring:** Implement regular evaluations and monitoring mechanisms to assess the effectiveness of vocational education services. This will help in identifying areas for improvement and ensuring the consistent delivery of high-quality educational programs.

**Focus on Key Contributing Factors:** Pay particular attention to the factors that contribute significantly to the effectiveness of vocational education services. This may include aspects such as curriculum design, teaching methodologies, student support services, and infrastructure facilities.

**Professional Development:** Provide opportunities for professional development and training for educators and staff members involved in vocational education. Equipping them with the necessary skills and knowledge will enable them to deliver more effective educational services.

**Collaboration and Networking:** Foster collaboration and networking among vocational education institutions, industry partners, and relevant stakeholders. This collaboration can facilitate the exchange of best practices, resources, and expertise, ultimately enhancing the quality of vocational education programs.

**Adaptability and Innovation:** Embrace adaptability and innovation in curriculum development and delivery methods to cater to the evolving needs of students and industries. Incorporating emerging technologies and industry trends can make vocational education more relevant and effective.

By implementing these recommendations, vocational education institutions in China can further enhance the effectiveness of their services and better prepare students for the challenges of the modern workforce.

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## References

- [1] Audu, R., Yusri, B., & Farhad, B. (2013). Technical vocational education: as a veritable tool for eradicating youth unemployment.
- [2] Asnawi, R., & Nuarsa, I. G. (2018). Development of visual block programming software for supporting the BASIC programming class in Vocational High School. Proceedings of the International Conference on Indonesian Technical Vocational Education and Association (APTEKINDO 2018). <https://doi.org/10.2991/aptekindo-18.2018.74>.
- [3] Bao, Z., & Chen, L. (2022). Research on high quality construction strategy of curriculum in higher vocational education from the perspective of supply side reform. *BCP Education & Psychology*, 5, 54–59. <https://doi.org/10.54691/bcpep.v5i.1576>.
- [4] Chen, C., & Xu, J. (2021). Research on Talent Training Strategy of Applied Chemical Technology Specialty under the Background of Million Enrollment Expansion in Higher Vocational Colleges. *Modern vocational education*, 38, 42-43. <https://doi.org/CNKI:SUN:XDZJ.0.2021-38-021>.
- [5] Cheng, Q. (2021). The practice research of mixed teaching in flipped classroom in higher vocational colleges under the background of "internet +." 2021 2nd International Conference on Artificial Intelligence and Education (ICAIE). <https://doi.org/10.1109/icaie53562.2021.00091>.
- [6] Dong, X. (2020). Discussion on the strategy of improving professional quality for vocational students in the new era. *Lifelong Education*, 9(6), 93. <https://doi.org/10.18282/le.v9i6.1309>.
- [7] Eun-Sang, C., Ki-Cheon, L., & Soo-Won, K. (2019). A study regarding the development of basic vocational ability of high school student athletes. *Korean Journal of Teacher Education*, 35(1), 57–78. <https://doi.org/10.14333/kjte.2019.35.1.57>.
- [8] Gao, Z. (2023). Discussion on the integration path of professional education and entrepreneurship education in Higher Vocational Colleges. *Journal of Education and Educational Research*, 3(2), 149–152. <https://doi.org/10.54097/jeer.v3i2.9111>.
- [9] Jiang, W., Ye, G., Xie, B., & Chai, C. (2019). Exploration and practice of higher vocational curriculum reform based on Network Learning Space. Proceedings of the 2nd International Workshop on Education Reform and Social Sciences (ERSS 2019). <https://doi.org/10.2991/assehr.k.191206.015>.

- [10] Hamzah, I. (2021). The development of Python's BASIC programming material for Vocational High School students. *International Journal of Social Science and Human Research*, 04(04). <https://doi.org/10.47191/ijsshr/v4-i4-25>.
- [11] Hopkin, D. (2010). Education, Education, education: The end of an era? *Local Economy: The Journal of the Local Economy Policy Unit*, 25(2), 87–90. <https://doi.org/10.1080/02690941003741036>.
- [12] Huang, C. (2022). Research on curriculum system construction of innovation and entrepreneurship education in Higher Vocational Colleges. *Learning & Education*, 10(7), 149. <https://doi.org/10.18282/l-e.v10i7.2985>.
- [13] Huang, J. (2023). The inevitability, main difficulties and countermeasures of high quality development of higher vocational colleges in the new era. *Research and Advances in Education*, 2(4), 42–47. <https://doi.org/10.56397/rae.2023.04.04>.
- [14] Irianti, A. H. (2019). Affected Analysis Factors for Vocational Education “Basic Development Policies of Vocational Education.” <https://doi.org/10.31227/osf.io/r5k9z>.
- [15] Lin, X. (2021). Teaching reform of Chinese as a foreign language in higher vocational colleges under the background of the belt and road initiative. *Creativity and Innovation*, 5(5), 41–45. <https://doi.org/10.47297/wspciwsp2516-252704.20210505>.
- [16] Ozturk-Akar, E. (2022). State-based curriculum making in Turkey: Curriculum Modernization Initiative and the latest science curriculum. *The Curriculum Journal*, 34(2), 298–314. <https://doi.org/10.1002/curj.192>.
- [17] Pengju, L. (2023). Research on the educational logic and high-quality development of vocational education theory in the new era. *International Journal of Science and Engineering Applications*, 87–88. <https://doi.org/10.7753/ijsea1203.1031>.
- [18] Rahmi, A., & Sutantie, S. (2018). Development of talking chips basic learning model in a vocational high school (SMK) in Medan. *Proceedings of the International Conference on Indonesian Technical Vocational Education and Association (APTEKINDO 2018)*. <https://doi.org/10.2991/aptekindo-18.2018.51>.
- [19] SEUNGMIN SONG. (2019). Comparative analysis of the Core Competencies and achievement standards of the Practical Arts and career and vocational subjects in the 2015 revised special education basic curriculum. *Journal of Special Education for Curriculum and Instruction*, 12(4), 1–25. <https://doi.org/10.24005/seci.2019.12.4.1>.
- [20] Silaban, R. A., & Rizal, F. (2020). The development of Program Logic Control (PLC) Trainer Media in vocational high schools. *Journal of Education Research and Evaluation*, 4(2), 121. <https://doi.org/10.23887/jere.v4i2.24606>.
- [21] Smith, B. (2023). Curriculum as invader: Normalising white place in the Australian curriculum. *The Curriculum Journal*. <https://doi.org/10.1002/curj.215>.
- [22] SUN, K. (2021). On cultivating language service talents in higher vocational colleges under the background of “one belt and one road” construction. *2021 INTERNATIONAL CONFERENCE ON ADVANCED EDUCATION AND INFORMATION MANAGEMENT (AEIM 2021)*. <https://doi.org/10.12783/dtssehs/acim2021/35965>.
- [23] Wang, Y. (2022). Research on the integration of digital literacy into English classroom teaching in higher vocational colleges under the background of educational digitalization. *Journal of Higher Education Research*, 3(4), 385. <https://doi.org/10.32629/jher.v3i4.1018>.
- [24] Widayana, G., & Mukhadis, A. (2018). Development of vocational education as demands revitalization of Vocational High School in dual skills program. *International Journal of Research and Engineering*, 4(12), 278–282. <https://doi.org/10.21276/ijre.2017.4.12.1>.
- [25] Xiao, W. (2022). Discussion on the integration of curriculum ideological and political education into higher vocational English teaching. *Advances in Vocational and Technical Education*, 4(5). <https://doi.org/10.23977/avte.2022.040508>.
- [26] Yang, F., Chao, L., & Yang, Z. (2021). Research on the construction of teaching staff in higher vocational colleges under the background of enrollment expansion. *Education Study*, 3(2), 202–206. <https://doi.org/10.35534/es.0302032>.