Exploring New Paths for the Internationalization of Vocational Colleges in the Era of Artificial Intelligence

Wang Qiang^{1,*} & Yao Yuzhong²

¹Faculty of Education, Beijing Normal University, Beijing, P. R. China

²Institutional affiliation: International College, Krirk University, Bangkok, Thailand

*Correspondence: Faculty of Education, Beijing Normal University, No.19, Xinjiekouwai St, Haidian District, Beijing, 100875, P. R. China. E-mail: drywq@hotmail.com

| Received: August 9, 2024 | Accepted: September 5, 2024 | Online Published: October 18, 2024 |
|---------------------------|--|------------------------------------|
| doi:10.5430/jct.v13n5p103 | URL: https://doi.org/10.5430/jct.v13n5p103 | |

Abstract

This study analyzes the internationalization development changes of one vocational college in China over the past 10 years. Based on the new requirements and trends of vocational education in the era of artificial intelligence, effective suggestions are proposed for the internationalization development of vocational education from the aspects of establishing international consulting organizations, attracting international capital investment, learn from other vocational colleges, formulating international cooperation plans, building industry education integration communities, constructing international curriculum resource databases, shortening students' learning time in school, changing classroom learning modes, increasing online practical training time, and building international cooperation alliances. This study is expected to promote the improvement of vocational colleges in curriculum construction, teaching resources, learning modes, school enterprise cooperation, and platform construction, ultimately achieving sustainable development of vocational education.

Keywords: "The Belt and Road" Initiative, Chinese vocational colleges, artificial intelligence, international cooperation, education development

1. Introduction

At present, China has established the world's largest vocational education system (Peng, 2024). China's higher vocational education aims to cultivate high-quality and highly skilled talents to serve the front line of production, and undertake the responsibility of providing technical services for the development of industries and industries. How to cultivate those talents with international level has put forward higher requirements for the development of vocational education in China (Zhang, 2024). In order to accelerate the new mechanism for high-quality development of vocational education, the General Office of the State Council of the People's Republic of China issued the "Opinions on Deepening the Reform of Modern Vocational Education System Construction" in December 2022 (Cui and Zhang, 2023). In June 2023, the National Development and Reform Commission and relevant departments formulated the "Implementation Plan for Enhancing the Integration of Industry and Education in Vocational Education (2023-2025)", which aims to solve the problem of mismatch between talent cultivation and industrial development. This p promotes better integration of industrial demand into the entire process of talent cultivation, and continuously optimizes the structure of human resource supply (Wang, Cui, and Zhang, 2024). In July 2023, the General Office of the Ministry of Education of the People's Republic of China issued a notice on the key tasks of accelerating the construction and reform of the modern vocational education system, in order to effectively promote the modern vocational education development.

"The Belt and Road" initiative is a comprehensive multilateral cooperation framework for China to expand and deepen its openness to the outside world. It aims to achieve connectivity with foreign countries through Policy Coordination, Facilities Connectivity, Unimpeded Trade, Financial Integration, and People-to-People Bond (Gao, Wang, and Jin, 2024). With the launch of the "The Belt and Road" initiative, the internationalization of China's vocational education has met new opportunities. The internationalization scale of Chinese vocational colleges continues to expand. Significant achievements have been made in cultivating new international talents (Guo and

Zhao, 2024). According to the analysis of research literature on the internationalization of higher vocational education in China in the past decade, Qin (2024) pointed out that a large-scale cooperation network has not been formed in terms of international cooperation. Besides, there is a lack of cooperation between Chinese vocational colleges and foreign enterprises in joint talent cultivation (Ye, 2024). In addition, vocational colleges have failed to effectively reform their international teaching models to align with international industry standards (Ding, Ding, and Liu, 2024) International cooperation is an inevitable choice to enhance the international competitiveness and self-development of vocational education in China. Chinese vocational colleges should formulate international development strategies and actively participate in global education cooperation, in order to proactively serve the talent needs of enterprises through international cooperation projects and strengthen the construction of teaching staff (Yao, Zeng, Wu, 2024).

With the rapid development of the AI (artificial intelligence) era, AI has revolutionized various industries and brought severe challenges to vocational education. There are shortcomings in the curriculum design, teaching content and methods, and talent assessment standards of vocational education in China. Chinese vocational colleges need to undergo profound reforms to promote the cultivation of skilled talents and the sustainable development of their careers (Zhang and Wu, 2024). Secondly, the effectiveness of cooperation between vocational college and enterprise is not significant. The students trained by vocational colleges are difficult to meet the needs of employers (Chen et al., 2024). At the same time, the rise of AI technology has driven the transformation of management models and talent cultivation concepts in universities (Li and Liu, 2024). AI, as the core driving force of educational innovation, has enormous potential in the development of vocational education (Zhang, 2024) Countries around the world actively respond to challenges and formulate digital development strategies for education (Feng et al., 2024) In September 2022, the United Nations Summit on Educational Change listed high-quality digital learning as one of the five action areas to promote educational change through the digital revolution (Liu and Gu, 2023). Therefore, how to explore new paths for the integration and development of AI and vocational education in the context of international cooperation is an urgent issue that needs to be considered.

2. Research Objectives

In the face of the above opportunities and challenges, we will reform and innovate the internationalization of vocational education in the era of AI through the following aspects:

1) Curriculum Construction

The curriculum development of vocational education must closely follow the evolution of AI and industry demand trends by constantly improving students' professional knowledge and skills.

2) Teaching Resources

Transforming the talent training model of vocational colleges with artificial intelligence. At the same time, strengthen the construction of the teaching resource library for vocational education majors.

3) Learning Mode

Change students' learning mode by using AI for enhancing their self-directed learning and achieve flexible learning.

4) Cooperation between Vocational College and Enterprise

Enhance cooperation between vocational college and international enterprise to improve students' professional practical ability and skill application level. and ultimately enhance students' employability in the era of AI.

5) Platform Construction

Building a digital international exchange platform for vocational education to jointly promote the formulation of AI education policies and the sharing of innovative education methods by applying AI.

3. Methodology and Findings

This study provides a detailed analysis of the international cooperation development of a higher vocational college in China over the past 10 years, in order to gain a deeper understanding of the current forms and development issues of international cooperation in vocational colleges. Based on the research results, suggestions are proposed for better introduction and application of artificial intelligence technology in the future development of vocational education.

Following the principles of "Complementary advantages, equal cooperation, mutual benefit, and common development", this Chinese higher vocational college first established a friendly cooperation foundation with foreign

universities through leadership exchanges and visits, and signed the memorandum of cooperation. At the beginning, the collaboration was focused on conducting short-term exchange programs, such as face to face teacher training and professional technical guidance. Based on in-depth understanding of cooperation, various forms of international exchange and cooperation have gradually formed, including the establishment of international classes, the introduction of foreign teachers and international certificate systems, one semester student exchanges, theme events in cultural and professional fields, and academic forums.

As the cooperation time increases, the Chinese higher vocational college launched online courses such as Chinese language teaching and professional skills training by creating an open and high-quality educational resource platform. At the same time, it invited foreign colleges to join council members of regional industry education alliances for building a broader international exchange platform. The alliance achieves more flexible, low-cost, and convenient communication through online seminars, online course training, and online guidance. In addition, Chinese vocational schools have formed education teams in different professional fields to provide specialized training for foreign teachers, students, and technical staff. At the same time, the Chinese vocational college collaborate with Chinese enterprises and foreign colleges to build international research teams and carry out joint research projects. They jointly promote the development of international research projects through online and offline exchanges.

Ultimately, the international cooperation and development of this higher vocational college formed a long-term and stable international cooperation model through the cultivation of international students and the establishment of overseas international vocational colleges. This cooperation model provides targeted training on local talents for Chinese enterprises abroad and achieves win-win cooperation between vocational colleges and enterprises.

4. Discussion

With the development of international cooperation, this Chinese higher vocational college has evolved from offline cooperation to an online and offline cooperation form. A relatively mature international cooperation model has been formed in teacher remote training, student remote training guidance, online teaching resource development, online academic exchange, and joint online scientific research. However, it still has a low level of using AI in the development of international projects. At the same time, vocational college have not yet paid attention to the cooperation and joint development of AI technology with foreign universities, educational institutions, and enterprises. Based on the current development status of educational internationalization of the research object, this study proposes the following innovative and development ways to further promote Chinese vocational colleges to develop international cooperation more comprehensively and effectively in the era of AI.

4.1 Establish International Consulting Organization

The core reason why the teaching mode needs to be changed is that the students nowadays have undergone significant changes. The current learner group is the so-called 'Digital Native'. The shaping of their cognition, attitudes, and behavioral habits by information technology is unprecedented (Huang, 2014). By gathering renowned international experts, scholars, and business managers in the fields of education, technology, economy, and society, an international consulting organization combining AI and vocational education is formed. The international development of vocational colleges needs to ensure compliance with the development of AI. Consultation could be conducted on international projects such as professional reform, curriculum development, and talent standards.

4.2 Attract International Capital Investment

With the continuous upgrading of the intelligent technology ecosystem, technology will unleash enormous potential to empower the upgrading of learning environments. Using intelligent technology to build a learning space that combines virtual reality and augmented reality can provide students with immersive learning experiences (Huang, 2022) Vocational colleges should actively contact and establish cooperation platforms with foreign universities and enterprises for research and talent cultivation, in order to attract foreign investment in the construction and reform of AI facilities and equipment in vocational colleges

4.3 Learn from the Experience of Other Universities

Firstly, Chinese vocational colleges need to timely summarize the innovative experience of other vocational colleges in promoting international cooperation in the era of AI. Secondly, vocational colleges should encourage the relevant department such as teaching, research, and international cooperation departments to jointly promote the international cooperation in applying AI to education. Thirdly, vocational colleges need to create a good atmosphere in the whole vocational college to fully understand and actively support the application of AI in vocational education. Fourthly, commend and reward teachers and staff who have achieved outstanding results in the internationalization of AI and

education.

4.4 Develop International Cooperation Plans

Chinese vocational colleges need to formulate short-term and long-term plans for the international development under the rapid development of AI. Based on the local talent demand and future development forecast, vocational colleges should promptly collaborate with international high-quality education resources to adjust their professional settings, curriculum development, and teaching models. Vocational colleges and enterprises need to jointly cultivate more high-quality skilled international talents who are able to effectively utilize AI.

4.5 Build an Industry Education Integration Community

In the process of international cooperation in cultivating innovative skilled talents, vocational colleges must further deepen their collaboration with enterprises and timely adjust relevant majors to meet the development needs of enterprises (Zhang and Zhao, 2024). Based on cooperation with large domestic and foreign enterprises, vocational colleges further collaborates with international industry organizations, small and medium-sized enterprises, and research institutions for introducing AI teaching equipment and improving teaching evaluation standards. By using advanced artificial intelligence technology to complete some core professional courses and practical training projects, it is possible to cultivate international technical and skilled talents urgently needed in the industry.

4.6 Build International Learning Resource Databases

Digital textbooks can not only enhance teacher-student interaction and improve teaching efficiency, but also better serve the cultivation of students' new abilities (Huang, 2022). Vocational colleges can build international online learning resource databases by introducing high-quality online education resources from foreign partner universities and educational institutions. Meanwhile, using AI technology in the databases to adapt to the trend and requirements of digital transformation in vocational education. Vocational colleges need to encourage teachers from various majors to exchange and discuss with foreign education experts based on current industry development trends and working standards, in order to establish international curriculum content that fully incorporates new skills and standards required in the era of AI.

4.7 Shorten Students' Study Time in Vocational Colleges

The essence and laws of learning in the digital age fully leverage the benefits of digital technology in teaching and promoting students' deep learning (Huang, 2024). Vocational colleges can utilize international collaborative online learning resource to achieve greater flexibility in learning time and location. The teaching content is gradually expanded to 50% or more supported by AI technology to enhance students' self-learning ability.

4.8 Change the Classroom Learning Mode

Huang (2024) pointed out that the improvement of teachers' digital literacy and skills are the key to achieving digital transformation in education. The classroom learning needs to be changed from teachers introducing learning content to answering students' questions and evaluating their learning situation. Based on that, teachers will have more time to update the online teaching resource databases and conduct research on the international development of AI and vocational education. Besides, teachers will be more willing to participate in international information literacy training for enhancing their ability to apply AI to teaching.

4.9 Increase the Time of Online Practical Training

Practical training is gradually receiving attention in higher education institutions in China. However, from the perspective of the achievements in cultivating applied technology talents, the results are not very ideal. The diversified and multifunctional intelligent construction experimental training room can be created, which will enhance the comprehensive ability of vocational college students to integrate theoretical knowledge and apply it into practice, as well as cultivate their innovative thinking (Li, 2023). By building AI internship and training platforms with foreign institutions and enterprises, students can achieve large-scale online practice while saving material and equipment costs of the school. Vocational colleges need to keep up with the changes in talent skill requirements from enterprises and the market in platform design. Students continuously improve their professional technical skills and enhance their employment competitiveness through practice.

4.10 Build An International Cooperation Alliance

The establishment and operation of international vocational education alliance will provide vocational colleges with a broader platform for international cooperation and exchange. This will help vocational colleges introduce high-quality educational resources and enhance their international educational influence (Tian, 2021). Vocational

colleges should actively gather globally outstanding entrepreneurs and carry out in-depth cooperation with enterprises around the learning mode, teaching mode, facility and equipment cooperation in the era of artificial intelligence. Besides, vocational colleges need to strengthen cooperation with international high-level vocational colleges and educational institutions to jointly carry out academic research, education standard, and academic visits. Ultimately, vocational colleges are able to attract foreign colleges, enterprises, research institutions to form a long-term international AI education alliance.

5. Conclusion, Limitations, and Suggestions

Vocational colleges need to accelerate education reform and innovation in the context of artificial intelligence development. Vocational colleges not only need to improve students' professional ethics and comprehensive abilities, but also create more economic value for enterprises and society. In addition, teachers will have more time to build professional learning resource databases with the help of AI. By enhancing the policy orientation of vocational education and strengthening regulation guarantees, the views of vocational education among society, enterprises, schools, teachers, parents, and students could be effectively transformed. Based on that, vocational colleges could cultivate more high-quality technical and skilled talents who can adapt to and promote the development of the AI. A virtuous cycle is able to be formed in education and teaching, talent cultivation, enterprise innovation, employment and entrepreneurship, economic development, and social sustainability.

This study focuses on the long-term development of a vocational college as a case study. However, there is a lack in the number of research subjects. It is suggested that future research can focus on the development direction of vocational colleges in the era of AI and conduct one-on-one interviews or questionnaire surveys with school leaders from various vocational colleges. The questions can include the current application status of AI in talent cultivation, the specific development, implementation, and management of online courses, the current situation and problems of students' online learning, the current situation and problems of teachers' online teaching, suggestions and opinions on AI in vocational education talent cultivation, the current situation and problems of artificial intelligence international exchange projects in vocational colleges, the future plans of vocational colleges to enhance students' information literacy and internationalization in the digital age from relevant departments at higher levels. By further understanding the problems and needs faced by various schools, we can more effectively address the development of vocational education in the era of artificial intelligence. Future research can more effectively address the development of vocational education in the era of artificial intelligence by further understanding the problems and needs faced by various schools.

References

- Chen, J. F., Liu, Y., Gu, L. J., Guo, H., Wu, J. X., & Cheng, X. X. (2024). Exploration and Practice of a New Model of Collaborative Education between Schools and Enterprises: Taking Food Majors in Vocational Colleges as an Example. *XIANDAI* NONGCUN KEJI, 8, 143-145. Retrieved from https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYCaBVuJOtmnIMqAznBbnoo7dZt8y-PcxhzvwUbJB ZU99VnVc_meM8ttdacZoAnd0S-2t9ShgyqkCJtHrmmi-Cu7mIpyUizVsZYN4MzzQy6kbrOjtMlB72WpsUJao CRGxzg8dV-YaGeoJHPtSxg3d_3p-2FqTRtEjnNF9J5sV7Bg4vK4vvQ_VbqC&uniplatform=NZKPT&language =CHS
- Cui, L. L., & Zhang, L. F. (2023). Policy Research on Deepening the Construction of Modern Vocational Education System in China: Text Analysis Based on the "Opinions on Deepening the Reform of Modern Vocational Education System Construction". *Vocational Education*, 22(27), 51-57. Retrieved from https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYDQsdhn1g2PIOHEJFnmtOqccgxdlJObW10o-fTgh xQpDMSV6ApI4Sk7czRuaaaz3Eyi6f0bQuMmeCyHJ8Qophnc-aStYrw90UUgcp8_lCpXnU4R7Oa3GoaK_T7 wG9rYgdaYQ6iJ07OUa1f9wwtqKvblYTIDOkqtSl2_Tj0IchJwROIcGlWUrU1ZLMx_c_WE8FY=&uniplatfor m=NZKPT&language=CHS
- Ding, Z. H., Ding, Q. E., & Liu, C. F. (2024). The Challenges and the Countermeasures of the Chinese Internationalization Development of Professional Education Based on New Situation. *Journal of Wuxi Institute of Technology*, 23(1), 22-28. https://doi.org/10.13750/j.cnki.issn.1671-7880.2024.01.005
- Feng, T. T., Liu, D. J., Huang, L. L., Cao, P. J., & Zeng, H. J. (2024). Digital Education: Application, Sharing, and Innovation: Overview of the 2024 World Digital Education Conference. *China Educational Technology*, 3, 20-36. Retrieved from

107

 $https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYAB0V4vwxifrAm5GQdXcKRkvXq0DSdNrG9PVgw2LitEuynHLDLqit3YHw3jUCYffpw0LMw_Qn58VvE83hk7nLSMdaYfToInsjI8Oz5VkoD5llXm61gS0C3xoJNpg3yZE7-W1ZskofmSos6OhLXZnJA84SCcrgLS2M5jlpy3jOaDFz0X4YPYBdsikRVD3fBoWrM=&uniplatform=NZKPT&language=CHS$

- Gao, B. L., Wang, Q., & Jin, D. X. (2024). Cross-Cultural Education in Higher Vocational Colleges in the Context of the Belt and Road Initiative. *Tsinghua Journal of Education*, 45(3), 104-110. https://doi.org/10.14138/j.1001-4519.2024.03.010407
- Guo, Y., & Zhao, Q. (2024) Achievements, Status Quo and Path of Vocational Education Serving the "the Belt and Road" Construction in the New Era. *Education and Vocation, 13*, 92-99. https://doi.org/10.13615/j.cnki.1004-3985.2024.13.013
- Huang, R. H. (2014). Three Realms of Smart Education: Smart Learning Environment, ICT Teaching Model and Modern Educational System. *Modern Distance Education Research*, 6, 3-11. Retrieved from https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYBlKKqHY3_PsvvSUZXt7tX9zhV8OEsqyOC6Cno BaRIr848Hwq4Jke17sjfrV15Tg-zFRhlqlMfJXLRGD49SWYv0_I32UkxztwOexSRoG77FejAb6JD57mM8wY8 k0y6x2kBUKDuauW8rRb6HoAeLLUk2ARjRCUGswjd18dY5BI4QcvlbMuAx1CqZ&uniplatform=NZKPT&l anguage=CHS
- Huang, R. H. (2022). Accelerating the Digital Transformation of Education and Promoting High-Quality Development of Schools. *People's Education*, Z3, 28-32. Retrieved from https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYDF-RAJvsd3kzvEwFeyAfKpRWu6Knv5frv3ofQeg 2Y_tVAnrY-iqX5xB6FRvalvpraPQpqAL-125nhfFqoc9dhe4N2Ysy9Pn44Y2NkU0vOkVg0sjAlAnF7yaGEn7p9 ITbJz5XjnEftNC7SrUC34kL1GtYtjAZ7IDfCmHoeuNHGxp2CC4H_1oSLSXo95F7clthg=&uniplatform=NZK PT&language=CHS
- Huang, R. H. (2022). Towards Systematic Integration of Technology and Education. *Chinese Journal of Distance Education*, 7, 4-12+78. https://doi.org/10.13541/j.cnki.chinade.20220507.001
- Huang, R. H. (2024). Enhancing Digital Literacy: Calmly Responding to the New Wave of Artificial Intelligence Development. Zhong Xiao Xue Guan Li, 5, 9-12. Retrieved from https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYAvPajpRAItDJyNiYjoWcrMfn6l4T0sSmVX3S_ue wFCisqVswjGm-0uhPyHifkefdqVRyiOmLwLWu_rT-C6ppOuMe_wLpmH53RQ0ylyVFlAVyqLmCP-llMt-xuF XGNUu8Ds9Fn8PWgEqHEGBy5Nq7nhf3kiNHatlzxP2pvaoE3ASUZ_UeBiHq7tmrBM36sVEEc=&uniplatfor m=NZKPT&language=CHS
- Huang, R. H. (2024). The Inner Logic of Digital Technology Empowering Current Education Reform: From Environment, Resources to Digital Teaching Methods. *Basic Education in China*, 1, 10-17. Retrieved from https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYC8YX6JO1PNtR2c9vWi0HFhVhGpb5BwXvU_PX I3Vgg12sROi2o0P5xBA4l86IltvbUUtTznJeAuDZbnAAj581Nzg6twW_JnCL6z8AZyy5PIqkQNoVaGbWLveD XfRjFg_cCKHEUkBdXadFQfxcTXc77Q4phTyl0Tb8iaT0GtIfHWOjlSfftG3gKJLyir8AYgkbw=&uniplatform= NZKPT&language=CHS
- Li, M., & Liu, B. (2024). Study on the Evolutionary Strategy of Vocational Education Ecosystem in the Era of Artificial Intelligence. *Vocational Technology*, 23(6), 48-54. https://doi.org/10.19552/j.cnki.issn1672-0601.2024.06.008
- Li, Z. (2023). Practice and Exploration of Artificial Intelligence Technology in Practical Teaching of Art and Design Specialty. Sci-tech Innovation and Productivity, 44(11), 12-15+18. Retrieved from https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYCRxyZYj1GXVPQMzH-psknP0QKEe-yRyPo_UJ2 xh5yVazkVoBTlOtp4gQCJE-QKuHwGZvHcca-z1DaNZhVn3XPiHnmntAQsYCEGGLBKGd-hRFded5vA7ajli I_jhTkyZgEszsR4XwZTUj5PGdR5_shSs0U1067Jdmgw3GwLb2MZ6Hfv2St5d0iPK6rPIJJ7JXw=&uniplatfor m=NZKPT&language=CHS
- Liu, B. C., & Gu, G. Y. (2023). Pushing Open the Door to Public Digital Learning: Advocates, Concerns, and Beyond of the United Nations Summit on Educational Change. *China Educational Technology*, *1*, 16-24. Retrieved from https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYD3qWBcvkdkeJcItHyXMWi4DH5vezC_uK7XHh HCIErwKX_k0Huxg9kkERia9_1gUFkxr6BenpXa1-jhmjkm12MZEcBOaVx_oMzjbhL5dUoitrqxX7hvwlaUcc

$$\label{eq:head} \begin{split} HClErwKX_k0Huxg9kkERia9_1gUFkxr6BenpXa1-jhmjkm12MZEcBOaVx_oMzjbhL5dUoitrqxX7hvwlaUcc\\ LRAO2t8q1Lp_yV9P28xdMApU3ZIUREhzEf28gu0C_2z-Ny8k_jSWP-jguEASq9oYjOQdjY2nc=&uniplatfor\\ m=NZKPT&language=CHS \end{split}$$

- Peng, B. B. (2024). Practice and Exploration of Internationalization Development of Vocational Education in China. *Journal of International Education*, 4, 7-10. Retrieved from https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYBP6-wmV6iwyOLsqFDr12E4ku5c4bQW8xUqoPK BellIwSP7ZRxO-CYFo0JEpquPenBcowe6yAcGNJVzfRuHrqvJU0zOjmeV8hZElkJYAASeyhf9SEtilFrkN8vL 9oGgtBqQUv1xynmX_NVO6o05EaQFC3xm1Sz83m1vOhKr0_v5Iz1kNhm-5Ccy&uniplatform=NZKPT&lan guage=CHS
- Qin, F. (2024). Current Status, Hotspots, and Trends of Internationalization Research in Higher Vocational Education (2013-2023): Multidimensional Visualization Analysis Based on CiteSpace. *Higher Education Forum, 6*, 88-95. Retrieved from https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYDb5e_0PVNrJoSXmzm8UeVM5t72pCYCE7Mz_K

https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYDb5e_0PVNrJoSXmzm8UeVM5t/2pCYCE7Mz_K EKba95TDnVaG41rM104dhdqMApGalbvUi5PMkfcuBg9aJ78hNBp59sa6kpdwurPSODutAXICpDJI6AGy0tW roC9QaaymPnFk_ypDCNOI7PSmOxaJm-j8XlkMQ_M0so6pFp0jcOMITn3hTuFn8x&uniplatform=NZKPT&l anguage=CHS

- Tian, T. T. (2021). Research on the International Alliance of Universities under the "Double High" Construction:
Taking the International Agricultural and Animal Husbandry Higher Vocational Education Alliance as an
Example. Modern Business Trade Industry, 42(27), 24-25.
https://doi.org/10.19311/j.cnki.1672-3198.2021.27.012
- Wang, R., Cui, L. L., & Zhang, L. F. (2024). Analysis on the Policy Text of the Implementation Plan for the Integration of Industry and Education in Vocational Education Empowering the Improvements Action (2023-2025).Journal of Southern Vocational Education, 14(2), 53-61. Retrieved from https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYCXt28DSjZiXDBB3-TRIeFeSBAPhvw9tKD5fa7s CyHNLfEcuZakmzusT5oLxEOwYvF-0bzL1NgCcIuqIDnr6JMKOtsVWMcyH9PnpVVrc0ErmZHkidQfGWYn 4Np-USBN9ZsP2gArdOjBeV1BGO5Ot1x3G9SGevXG48C1cXHYoVAribU0qRBQAh-d&uniplatform=NZKP T&language=CHS
- Yao, J., Zeng, Y. C., & Wu, A. H. (2024). Discussion on International Talents Training Mode of Automation Specialty in Higher Vocational Colleges under the Background of "The Belt and Road". Equipment Manufacturing Technology, 6, 86-88+109. Retrieved from https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYACFsWYbaEbW9WApNjeyxCIhll7cliKip5PFIMd Hcl0gpvn4UbiGYcQXoeBZzKMGgqOvh1mPYSK3tA_380HuGYVQHZoZ5gmpH4a8UC_RuDVAc7rWK3P_ FfrsuSo5zC-0Elom-_-CWooeyHP1nI1KMOY3_ruRFxJwjVmuaQglaqS6HpANuLkTDdC&uniplatform=NZKP T&language=CHS
- Ye, C. Z. (2024). The Problems and Countermeasures of International Talent Cultivation in Higher Vocational Colleges in the New Era. *Survey of Education*, *13*(4), 75-77+91. https://doi.org/10.16070/j.cnki.cn45-1388/g4s.2024.04.020
- Zhang, G. L., & Zhao, B. G. (2024). Research on Innovation of International Cooperation in Cultivating Skilled Talents in Vocational Colleges. *Journal of Hebei Software Institute*, 26(2), 24-27, https://doi.org/10.13314/j.cnki.jhbsi.2024.02.005
- Zhang, L. B. (2024). Application of Artificial Intelligence in Vocational Education. Journal of Dalian Education University, 40(2), 73-75. Retrieved from https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYDF3febAjzpcIyLP2N_p7Uqorjm75dkPCseMRhKC HpLIaZTR-ULEbkvkJdWneYk-6bey_BbXqwM7bpT36I77tofxNI6uTnDs7AeqN-LFMjApmjVj690-ECw2MjD ksl0Ap46LCqtuIKRELStV3hxGvZJI-qD2nZcv1ApKCPx2YEy0nVLeDMczQna&uniplatform=NZKPT&langu age=CHS
- Zhang, W. H. (2024). Internationalization Development Path of China's Vocational Education in the Perspective of "The Belt and Road". Modern Vocational Education. 19, 21-24. Retrieved from https://kns.cnki.net/kcms2/article/abstract?v=hyVvMdIOuYD5VahfMp-NaNac3PLqnp8H2 nNEBizg92YYE82 d0U0yo EoSCs3R9VybObzBvy5xqjeWZR9jYTuuIZqjhDjjALJz6jSuHL70wvZSNsj GX922XVIBbTBDgh2V mzKZbHj8yg6fGgfLac3TVHBh7raKhFVEn-ljRAtigOzwr43IwLOsbc47pEPlm&uniplatform=NZKPT&langua ge=CHS
- Zhang, W. H., & Wu, Z. (2024). Challenges and Responses to Vocational Skills Education in the Era of ArtificialIntelligence.Cross-StraitsLifelongEducation,27(3),34-40.https://doi.org/10.16416/j.cnki.cn35-1216/g4.2024.03.004

Acknowledgments

We would like to thank every team member who took the time to participate in this study.

Authors contributions

Dr. Wang was responsible for study design and drafting the manuscript. Deputy Director Yao revised it. All authors read and approved the final manuscript.

Funding

Not applicable.

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Sciedu Press.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

Open access

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.