

Research on the Construction of High-quality Talent Training Model in Higher Vocational Education Based on the New Liberal Arts Concept

Zhaoxia Zhang¹

¹ Guangzhou Civil Aviation College, Guangzhou, Guangdong 510403, China

¹Corresponding author. Email: zhangchaoxia@gcac.edu.cn

ABSTRACT

In 2018, the Chinese government explicitly proposed the concept of "four new academic disciplines", including the new liberal arts. The research on "new liberal arts" has shown an upward trend in recent years. And "new liberal arts" has gradually become a guiding principle for the construction of liberal arts majors in Chinese colleges and universities, serving the cultivation of high-quality and high-quality talents for social development and national construction. In the context of vigorously developing vocational education, reconstructing talent cultivation models based on the new liberal arts concept is an important issue for vocational colleges to promote high-quality development. This article conducts research and analysis on the practical significance of high-quality talent training under the empowerment of new liberal arts, as well as the construction path of talent training models, in order to promote the process of new liberal arts construction in vocational colleges.

Keywords: *New liberal arts, Vocational colleges, High-quality talent training model.*

1. INTRODUCTION

In 2018, the Chinese government clearly proposed the concepts of new engineering, new medical science, new agricultural education, and new liberal arts, in order to meet the needs of high-quality development of the society and continuously improve the service capacity and contribution level of the education industry. [1] In November 2020, the Ministry of Education issued the "Declaration on the Construction of New Liberal Arts", encouraging colleges and universities to offer interdisciplinary and interdisciplinary emerging cross disciplinary courses and practical teaching courses to cultivate students' interdisciplinary application and practical abilities. [2]

In December 2021, the Civil Aviation Administration of China proposed in the "Opinions on Promoting the High Quality Development of Direct Affiliated Colleges and Universities of Civil Aviation" to "improve the quality of training and create a high-quality teaching system for colleges and universities". It is explicitly stated that it is necessary to take "compound knowledge, diverse

abilities, civil aviation literacy, and international perspective" as the overall goal of talent training, promote the construction of "new engineering" and "new liberal arts" in general higher education, deepen the integration of production and education in vocational education, reform and innovate talent cultivation models, and continuously improve the quality of talent cultivation.

The new liberal arts, driven by high-tech such as artificial intelligence, blockchain, and big data, qualitatively summarizes and concludes the core concepts and development models of traditional liberal arts. It puts forward fundamental reform requirements for the constraints and bottlenecks of traditional liberal arts development. The value leadership of new liberal arts education has a unique educational function. The implementation of new liberal arts education in vocational education aims to cultivate vocational students into compound international skilled and technical talents with great love, patriotism, and a global perspective. At the same time, the new liberal arts advocate cross-border integration, disciplinary integration, carrying out innovation while protecting the tradition, and collaborative sharing, in order to further promote

the updating and upgrading of traditional liberal arts and better adapt to the needs of economic and social development. The annual frequency of keywords related to new liberal arts, high quality,

talent training, and higher vocational education on the official website of the Ministry of Education, PRC from 2020 to 2023 refers to "Figure 1".

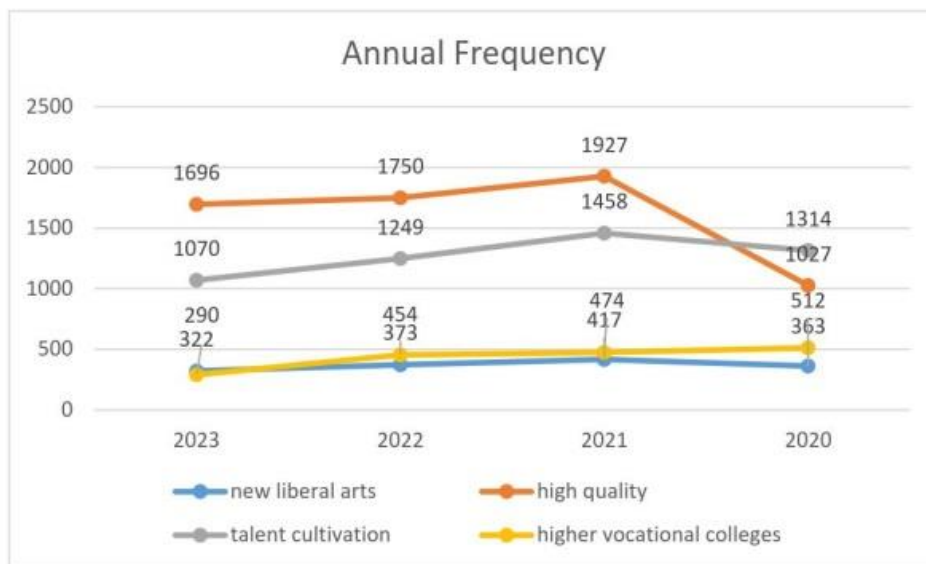


Figure 1 Annual frequency of keywords related to new liberal arts, high quality, talent training, and higher vocational education on the official website of the Ministry of Education from 2020 to 2023.

2. THE PRACTICAL SIGNIFICANCE OF HIGH-QUALITY TALENT TRAINING IN HIGHER VOCATIONAL EDUCATION BASED ON THE CONCEPT OF NEW LIBERAL ARTS

The practical significance of high-quality talent training in higher vocational education based on the concept of new liberal arts is reflected in the following three aspects:

2.1 Providing Compound and High Skilled Applied Talents for the Construction of an Education Power

In the new journey towards the second centenary goal, cultivating compound high skilled applied talents has become one of the primary tasks for China's vocational education to embark on a fast track, and is also an important issue faced in the process of building new liberal arts. The construction and development of the humanities has significant strategic value, and its functions are mainly reflected in the following two aspects: the first is to enable the educated to have higher cultivation and moral qualities in the field of philosophy and social sciences, and to improve

their personality; The second is to cultivate outstanding talents in the new era with interdisciplinary perspectives and innovative cooperation capabilities through interdisciplinary integration,[4] providing technical and skilled talent support and intellectual security for enhancing the country's meta strength[5] and the influence of Chinese culture.

2.2 Meeting the Complex and Diverse Needs of International Economic and Cultural Exchanges

Since the reform and opening up, China's economic strength has been continuously improving, but the cultural discourse power is still weak. Many foreigners do not understand Chinese culture and have stereotypes about the Chinese people. In the face of this situation, it is necessary to strengthen Chinese cultural heritage and increase the cultural radiation to the outside world, in order to further enhance Chinese people's cultural pride and stimulate their spirit of perseverance. At the same time, the complex and ever-changing international political landscape also requires a firm Chinese voice and a credible Chinese image. Based on this, each vocational college should combine its own professional characteristics and strive to

cultivate humanities talents in the new era, continuously constructing and improving the education and teaching system of new liberal arts that can showcase China's style and industry image.

Taking China's civil aviation industry as an example, it is the pioneer of the "the Belt and Road Initiative", and a pillar industry that highlights the country's power. After the epidemic, the Chinese and international passenger throughput of China's civil aviation industry quickly recovered to the level before the epidemic, and the business volume of international routes showed a steady growth trend, which led to the requirements for various civil aviation colleges to continuously cultivate and transport compound applied high-quality talents to meet the needs of China's civil aviation for international cooperation and exchange.

2.3 Adapting to the New Demand of Industrial Upgrading and Transformation for Talent Training

With the rapid development of the social economy, emerging technologies such as big data and artificial intelligence are widely applied in various industries, effectively promoting industrial transformation and upgrading, which is manifested as various industries moving towards intelligence and digitization. The rapid development of digitalization in various industries and fields has exacerbated the structural contradiction between the supply and demand of higher education. The overall situation of talent training lags behind the development needs of the industry, which prompts a shift in the research paradigm of traditional humanities and social sciences, promotes innovation in teaching concepts, teaching methods, and teaching content in liberal arts education, and requires continuously improving students' compound and diverse abilities, as well as their job adaptability, competence, and social competitiveness, so as to meet the new demand for talent training in emerging industries.

3. THE CONSTRUCTION PATH OF HIGH-QUALITY TALENT TRAINING MODEL IN HIGHER VOCATIONAL COLLEGES UNDER THE CONCEPT OF NEW LIBERAL ARTS

This paper attempts to explore the construction path of high-quality talent training model in higher

vocational colleges under the concept of new liberal arts from the following four aspects:

3.1 Innovative Talent Training System

Taking the Public English discipline of Guangzhou Civil Aviation Vocational and Technical College as an example, and taking the "compound knowledge, diverse abilities, civil aviation literacy, and international perspective" proposed by the Civil Aviation Administration as the overall goal of talent training [3], through in-depth implementation of the English education and teaching quality improvement project, in professional talent education and training, it is necessary to highlight the concept of "thickening basic knowledge, emphasizing on practical ability, strengthening comprehensive literacy, and cultivating innovative thinking", and build a trinity of "digital theoretical teaching, grassroots internship practice, and normalization of innovation and entrepreneurship" innovative talent training mode. The schools should promote the construction of "new liberal arts", strengthen collaborative innovation between schools, within schools, between schools and enterprises, and between schools and the local, and carry out the cultivation of interdisciplinary, cross-major, and cross-college compound applied skilled talents [6]. It is also necessary to integrate "language knowledge" into the three types of compound knowledge of "professional knowledge, IT knowledge, and management knowledge" for high-quality talent training [3], and integrate the four core competencies of "foreign communication in the workplace, multicultural communication, language thinking improvement, and independent learning improvement" in the English subject [7] into the three types of professional abilities of "vocational skills, engineering skills, and innovative thinking" [3], as well as integrate "telling the Chinese story well and enhancing cultural confidence" into three types of professional qualities — "safety awareness, service awareness, and civil aviation spirit". And there will be a necessity to deepen the integration of production and education in vocational education, strengthen practical teaching of public English subject, and effectively enhance the industry adaptability and vocational skills of talents. In senior majors and high-level majors dedicated to undergraduate level vocational education, large-scale "1+X" certification should be carried out to shift the public English discipline towards vocational English. The schools need to continuously deepen the teaching reform of "on-

the-job course certification competition", widely carry out English skill competitions for students at all levels and types, and promote the empowerment of English competitions. Through the construction of digital course platforms, the construction of course resources, and the cultivation of "golden courses", it is aimed to improve the quality of the first classroom, broaden channels, innovate models, enrich the second and third classrooms, promote the construction of campus English culture, broaden the social practice stage for students, carry out practical ideological and political work, and open up an innovative talent cultivation pattern that integrates the "five educations".

3.2 Promoting Digital Teaching Reform

The first is to enhance the deep integration of curriculum system construction and information technology. To promote the new technology empowerment, it is necessary to introduce new technologies such as artificial intelligence and blockchain into teaching modules such as basic general education, professional characteristic education, and practical education [8], continuously update curriculum standards and improve talent cultivation plans, thereby promoting the upgrading of new liberal arts talent training models and promoting the cultivation of students' compound and diverse abilities. The second is to promote the reform of intelligent teaching. It is a must to actively promote the construction of an integrated intelligent teaching ecological platform that is "informationized, networked, digitized, intelligent, and personalized" in line with the schools' high-quality development strategic goals and educational needs, so as to further promote the reform of online and offline blended teaching, and build an open, cooperative, and mutually beneficial ubiquitous intelligent teaching environment. The teachers need to emphasize student-centered, strengthen students' adaptive learning, and promote individualized teaching. Students should continuously improve their personal information literacy, professional literacy, and critical thinking skills through group collaborative learning and adaptive learning. The third is to strengthen the digital construction of teaching content. By jointly building new educational infrastructure with schools and enterprises, it is aimed to build a digital foundation and strengthen basic support. At the same time, it will be a necessity to strengthen the digitization and intelligent construction of teaching content and resources, and promote the integration, innovation,

and intelligent construction of information technology and education.

3.3 Innovating Practical Teaching Mode

First, it is to establish a multi-subject collaborative practice and education mechanism of "government, school, industry, enterprise, and the local", further improve professional skills training programs, and build diverse practical learning platforms and opportunities for students. Second, it is to improve the practical course system, achieve integrated design inside and outside the class, and ensure the credit arrangement of practical teaching hours. For traditional liberal arts, such as public English, it is necessary to highlight the orientation of practical education, increase the proportion of practical teaching, and carry out multi-dimensional educational and teaching activities that integrate theoretical teaching and practical training. Third, it is to deepen school-enterprise cooperation, jointly build and share talent training practice platforms, construct a universal extracurricular practical teaching base for college students, and systematically carry out practical activities such as enterprise observation, training, and on-the-job internships. In addition, educational practice experience bases aimed at improving students' comprehensive literacy need to be established in enterprises, communities, rural areas, and the military. Through activities such as innovation and entrepreneurship, volunteer service, etc., there is a must to cultivate students' empathy, service awareness, and volunteer spirit, expand their horizons and talents in social practice, and serve the practical needs of the people with professional knowledge and innovative practices. Fourth, it is to improve the evaluation mechanism of practical teaching. Vocational colleges should carry out full process and chain management of practical teaching, and improve the construction of a system for assessing, evaluating, and recognizing practical achievements.

3.4 Improving the Teaching Evaluation Mechanism

The first is to establish a quality evaluation system for the cultivation of innovative talents in the new liberal arts, covering various elements such as talent cultivation plan formulation, curriculum construction, teaching management, teaching assessment, internship training, social practice, and service evaluation. The second is to carry out multi-subject "three comprehensive education, five

education integration". There will be a must to adhere to the student-centered and output-oriented concept of cultivating outstanding talents in the new liberal arts, optimize the teaching evaluation mechanism, and conduct three-dimensional evaluation from the knowledge, skill, and emotional goals of teaching activities. In addition to teachers and students, parents, academic affairs departments, communities, corporate mentors and other entities in the teaching chain fully participate in teaching evaluation, effectively promoting the three comprehensive education, and promoting the comprehensive development of students' morality, intelligence, physical education, art, and labor. The third is to establish a teaching evaluation data center to collect and conduct in-depth analysis and mining of the entire scene and process data of "teaching", "learning", "practice", "training", "examination", and "evaluation", thus forming a teaching quality evaluation and feedback mechanism. It is necessary to timely provide teachers' teaching data and students' process evaluation reports, assist teachers in effectively regulating the teaching system to continuously optimize and innovate, and improve the quality of classroom teaching, as well as optimize personalized teaching and improve the level of teaching governance (see "Figure 2"). The fourth is

to strengthen the evaluation of enterprise teaching and carry out joint talent cultivation between schools and enterprises. The enterprises should irregularly provide business and skills training for school teachers, and send business and technical backbone and experts to the schools for lectures, teaching, practical training, etc. based on the needs of the school's professional construction, to achieve the sharing of talent resources between both parties. Cooperation between schools and enterprises can promote research on curriculum standards, research on professional skills training methods, development of skills training (training) platforms (equipment or tools, etc.), development of professional textbooks, and development of teaching resource libraries. The schools and enterprises should jointly build universal extracurricular practical teaching bases for college students, replacing training with job positions, promoting learning through training, and promoting interdisciplinary and compound high-quality talent training. At the same time, the schools should timely track and understand the specific performance of interns and graduates within the enterprise, and dynamically optimize and improve the quality evaluation system for new liberal arts talents based on talent training opinions proposed by the industry market.

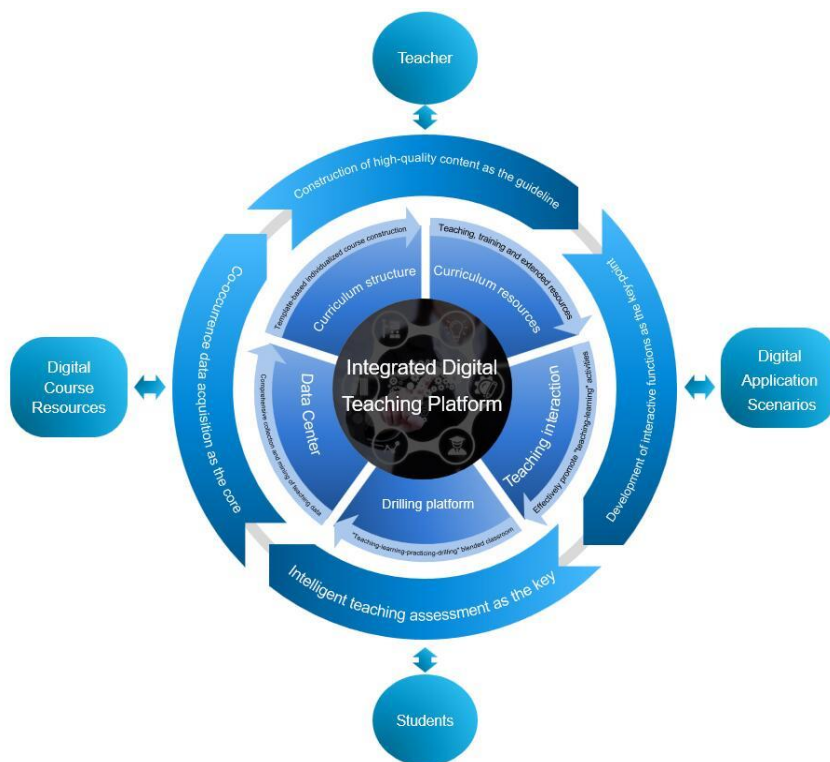


Figure 2 Integrated digital teaching platform.

4. CONCLUSION

In summary, in order to adapt to the development trend of modern education and teaching, and solidly promote the construction of an educational powerhouse, teachers in vocational colleges need to deeply carry out teaching reform work based on the concept of new liberal arts. By adopting measures such as innovative talent cultivation system, promoting digital teaching reform, innovative practical teaching mode, and improving teaching evaluation mechanism, the colleges and universities can upgrade the talent training model, effectively promote the process of new liberal arts construction, and ensure the transportation of high-quality talents for socio-economic development and national construction.

ACKNOWLEDGMENTS

Fund projects: The 2022 Vocational Education English Curriculum Standards and Foreign Language Majors Teaching Standards Special Project (General Project) "Research and Practice on the 'Three Education' Reform of Civil Aviation English Based on the New Curriculum Standards", Project No.: WYJZW-2022-19-0203; Innovative Research on High Quality Talent Training Models from the Perspective of New Liberal Arts, Project No. 21X0408; The 2022 Quality Engineering Education Reform Research and Practice Project of Guangzhou Civil Aviation College is titled "Research on the Cultivation of Compound and Multiple Abilities of Vocational College Students under the Background of New Liberal Arts Construction", Project No.: JG202208.

REFERENCES

- [1] Ma Luting, New Engineering, New Medicine, New Agriculture, and New Liberal Arts - From Educational Concept to Paradigm Transformation [J]. Chinese Higher Education, 2022 (12): 9-11. (in Chinese)
- [2] Ministry of Education of the People's Republic of China, "The Declaration on the Construction of New Liberal Arts" Was Officially Released [EB/OL]. (2020-11-03) [2023-09-17]. https://www.eol.cn/news/yaowen/202011/t20201103_2029763.shtml. (in Chinese)
- [3] CAACNEWS, The Civil Aviation Administration has issued the "Opinions on Promoting the High Quality Development of Directly Affiliated Colleges and Universities of Civil Aviation" [EB/OL]. (2021-12-29) [2023-09-17]. <http://news.carnoc.com/list/575/575729.html>. (in Chinese)
- [4] He Zubin, Promoting the Construction of New Liberal Arts in Response to the Needs of the New Era [EB/OL]. (2021-03-30) [2023-09-17]. https://www.sohu.com/a/458018659_120711264. (in Chinese)
- [5] Wu Yan, Laying a Solid Foundation in the Tide of the Times, Making Adjustment to Thrive in the Trend of Change--Comprehensively Promoting New Liberal Arts Construction [J]. Chinese Higher Education, 2021, 1(01): 5-11+141. (in Chinese)
- [6] Ling Ling, Research on the Training Mode of Compound Talents in Higher Vocational Colleges Under the Background of "Internet plus" Cross-border Integration: a Case Study of Jiangsu College of Information Technology [J]. Journal of Jilin TV & Radio University, 2019(02): 64-65+88. (in Chinese)
- [7] Ministry of Education of the People's Republic of China Curriculum Standards for College English in Higher Vocational Education [S]. Beijing: Higher Education Press, 2021. (in Chinese)
- [8] Zhang Weili, Research on the Development Path of Financial Management Major in Private Universities in the Era of Big Data [J]. Commercial Accounting, 2020(21): 126-129. (in Chinese)
- [9] Notice of the Ministry of Education and the General Office of the Ministry of Education of the People's Republic of China on Deepening Summer Social Practice Activities for College Students [EB/OL]. (2023-06-29) [2023-09-17]. http://www.moe.gov.cn/srcsite/A12/moe_1407/s6870/202307/t20230706_1067464.html. (in Chinese)