

Effectiveness and Development Strategies of Vocational Colleges in Wenzhou and Taizhou from the Perspective of High-quality Development: A Comparative Analysis of 15 "Double High" Colleges in Zhejiang Province

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Abstract

Building on the "Vitality Wen-Tai" vocational education highland, promoting the high-quality development of vocational colleges in the Wen-Tai region, and effectively evaluating their performance are crucial. Based on a comparative analysis of 15 "Double High Plan" colleges in Zhejiang Province, this study examines six key indicators: talent training, innovation services, professional construction, school-enterprise cooperation, social services, and internationalization. The analysis of the performance of eight vocational colleges in Wen-Tai reveals that: The overall performance of vocational colleges in Wen-Tai is relatively superior, displaying regional characteristics and existing gaps. There are certain regional disparities in the performance of these vocational colleges. Development is uneven across different types and levels of colleges. To address these issues, it is recommended to use the performance evaluation of "Double High" colleges as a benchmark, strengthen the regional advantages and distinctive development of vocational colleges, fully leverage the advantages of the "Vitality Wen-Tai" vocational education highland, and promote balanced and coordinated development of vocational colleges in the Wen-Tai region.

Keywords

High-quality Development; Vocational Colleges; School Performance.

1. Introduction

In 2021, the "Opinions of the Ministry of Education and the People's Government of Zhejiang Province on Promoting the Integration of Vocational Education and Private Economy to Support the Construction of 'Vitality Wen-Tai'" was issued. This document proposed a series of supportive policies for talent cultivation, "Double High Plan" construction, industry-education integration, social services, and international exchanges in vocational colleges in the Wen-Tai region. These policies highlight the unique role of the Wen-Tai region as an "important window" for vocational education in Zhejiang.

Among the 50 vocational colleges in Zhejiang Province, the vocational colleges in the Wen-Tai region have made significant contributions to leading vocational education reform, promoting talent cultivation, supporting regional development, and improving policy standards. Out of the 15 "Double High Plan" colleges in Zhejiang Province, there are 6 high-level school construction units (2 in Category A, 3 in Category B, and 1 in Category C) and 9 high-level professional group construction units (1 in Category A, 4 in Category B, and 4 in Category C). Among these, the Wen-Tai region occupies two positions (one in Category C for high-level school construction units and one in Category C for high-level professional group construction units). However, compared to the highly developed "Double High Plan" colleges, the average level of vocational colleges in the Wen-Tai region still lags behind.

To further advance the construction of the vocational education highland in the Wen-Tai region and promote the high-quality development of vocational education, it is crucial to comprehensively analyze the current situation and effectiveness of vocational colleges in this region. This analysis should be based on the "Double High Plan" construction in Zhejiang Province and the "Four Creations and Five Enhancements" [5]tasks for the high-quality development of vocational colleges. Targeted countermeasures should then be proposed for their future development.

2. Performance Indicators under the Perspective of High-quality Development

The "Double High Plan" is results-oriented and starts from the logical premise of "what vocational colleges should become." It aims for the construction of landmark achievements and high-quality development, serving as a template for the reform and development of vocational colleges[1]. Therefore, evaluating the quality of vocational colleges in Zhejiang Province based on the performance indicators proposed in the "Double High Plan" performance management method is highly instructive.

Based on the construction tasks of the "Four Creations and Five Enhancements" in the "Double High Plan" colleges, and in line with the requirements for high-quality results, an indicator system for evaluating the performance of vocational colleges has been established. This system follows the principles of representativeness, comparability, and availability of data. The indicators are divided into six aspects: talent cultivation, innovation services, professional construction, school-enterprise cooperation, social services, and internationalization[2]. The specific indicators are detailed in Table 1.

Table 1. Performance Indicators of Vocational Colleges

Primary Indicator	Secondary Indicator	Tertiary Indicator
Educational Effectiveness Indicators	Talent Development	Employment Rate, Local Employment Rate, Employer Satisfaction, Three-Year Post-Graduation Promotion Rate, Entrepreneurship Rate
	Innovation Services	Funding Received for Research, Economic Benefits Generated from Horizontal Technical Services, Number of Intellectual Property Projects, Number of Granted Invention Patents, and Translation of patent results into amounts
	Professional Development	Student-to-Teacher Ratio, Proportion of Dual-Qualified Full-Time Teachers, Proportion of Full-Time Teachers with Senior Professional Titles, Number of Provincial and Above-Level Teaching Resource Libraries, Number of Provincial and Above-Level Online Boutique Courses, Number of National Planned Textbooks, Number of New Form Textbooks
	School-Enterprise Cooperation	Number of School-Enterprise Cooperation Textbooks, Total Annual Teaching Hours of Part-Time Teachers from Enterprises, Value of Practice Teaching Equipment Provided by Enterprises
	Community Service	Funding Received for Non-Degree Training, Hours of Non-Degree Training, Hours of Public Welfare Project Training
	Internationalization Development	Number of Oversea Students, Number of Schools Established Oversea, Time Spent by Full-Time Teachers Oversea for Guidance and Training (days), Number of Curriculum Standards Developed and Adopted Oversea, Number of Full-Time Teachers Holding Positions in International Organizations, Number of Awards Won in International Skill Competitions

3. Analysis of the Educational Effectiveness

In the Wen-Tai regions, there are a total of eight higher vocational colleges. Wenzhou has five colleges, including Wenzhou Polytechnic(WZVTC), Wenzhou Vocational College of Science and Technology(WZVCST), Zhejiang Industry and Trade Vocational College(ZJITC), Zhejiang college of Security Technology(ZJCST), Zhejiang Dongfang Polytechnic(ZJDFP), among them, WZVTC and ZJITC are "Double High" institutions. And Taizhou has three colleges, including Taizhou Vocational and Technical College(TZVTC), Taizhou Vocational College of Science and Technology(TZVCST), Zhejiang Automotive Vocational and Technical College(ZJAVTC). Except for ZJDFP and ZJAVTC, which are private institutions, the rest are public higher vocational colleges.

Based on the "Annual Quality Report of Higher Vocational Education" published by various colleges in Zhejiang Province in 2023, the indicators of higher vocational colleges in the Wen-Tai regions were counted. The data analysis is as follows.

3.1. Talent Development Effectiveness

Higher vocational colleges focus on serving the local regional economy as their core goal for talent development. Therefore, the employment rate, local employment rate, employer satisfaction, three-year post-graduation promotion rate, and entrepreneurship rate are considered representative indicators of the talent development effectiveness of higher vocational colleges.

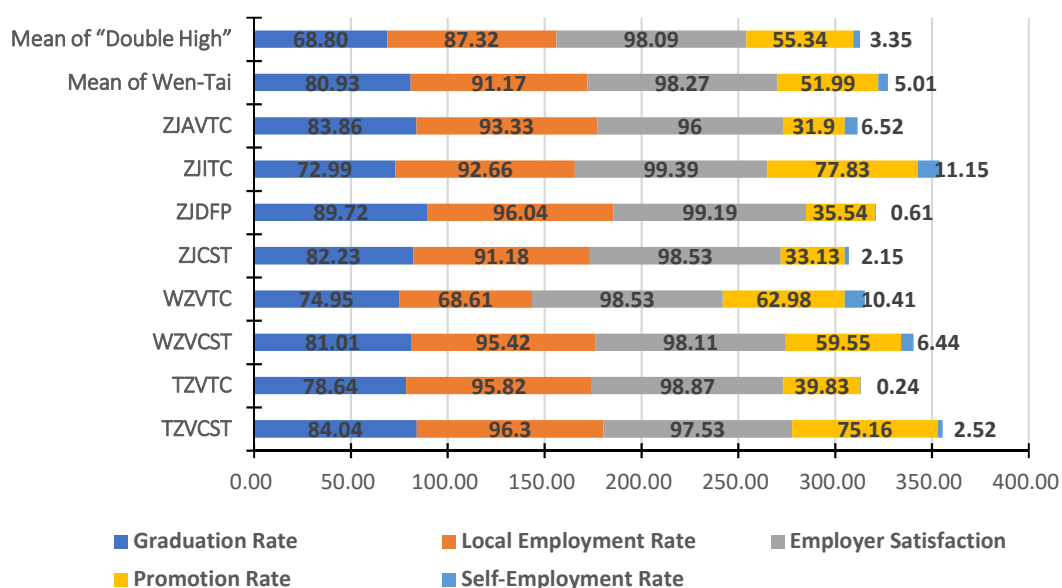


Fig. 1 Talent Development Effectiveness

The average employment rate and local employment rate of the Wen-Tai colleges are significantly higher than the average values of the 15 "Double High" schools. Private vocational colleges outperform public colleges in these two indicators. Regarding employer satisfaction, the Wen-Tai colleges have a high level of employer satisfaction, with an average value higher than that of the 15 "Double High" schools. Graduates from public colleges have higher employer satisfaction than those from private vocational colleges. In terms of the three-year post-graduation promotion rate, the Wen-Tai colleges have a lower rate compared to the average of the 15 "Double High" schools. However, ZJITC, TZVCST, and WZVTC perform well in this indicator, indicating that graduates from "Double High" schools have certain advantages in

long-term career development. Regarding the entrepreneurship rate, the average entrepreneurship rate of colleges in the Wen-Tai regions is higher than the average of the 15 "Double High" schools. Due to the active private economy, students in the Wen-Tai regions have strong entrepreneurial awareness and performance.

3.2. Effectiveness of Innovation Services

The output of innovation services in higher vocational colleges is represented by the research and innovation achievements they acquire and the benefits they generate. The representative indicators include the amount of research funding received (amount of funding for horizontal technical services, amount of funding for vertical research, and income from technology transfer), economic benefits generated from horizontal technical services, number of intellectual property projects, and number of granted invention patents.

In terms of research funding received, the amount of funding for horizontal technical services is the highest, followed by the amount of funding for vertical research, with less income from technology transfer. In terms of performance, WZVTC and WZVCST in Wenzhou demonstrate outstanding performance, with total funding amounts significantly higher than the average of the 15 "Double High" schools. WZVTC receives the most funding for horizontal technical services, WZVCST receives the most funding for vertical research, and ZJITC receives the most income from technology transfer. Additionally, WZVTC achieves the highest economic benefits from horizontal technical services, significantly exceeding the average of the 15 "Double High" schools, followed by WZVCST. In terms of innovation achievements, WZVTC and TZVTC have more intellectual property projects than the average of the "Double High" schools in Zhejiang Province. WZVTC performs the best in terms of the number of intellectual property projects and granted invention patents, exceeding the average of the "Double High" schools in Zhejiang Province. ZJITC and TZVTC also perform well in this indicator. Overall, the innovation performance of the six public colleges in the Wen-Tai regions is significantly better than that of the two private colleges.

Table 2. Effectiveness of Innovation Services (Unit: 10,000 yuan; items)

School	Research Funding Received	Funding for Horizontal Technical Services	Funding for Vertical Research	Income from Technology Transfer	Economic Benefits from Technical Services	Income from Patent Commercialization	Intellectual Property Projects	Granted Invention Patents
TZVCST	1410.50	1176	222	12.5	700	94.6	85	15
TZVTC	2381.62	1508	480.82	392.8	32705.21	308	194	31
WZVCST	3473.89	1751.04	1441.34	281.51	35513.2	11.2	70	20
WZVTC	4556.50	2940.98	1215.66	399.86	95878.4	660.3	245	179
ZJCST	1005.54	981.043	24.5	0	1135	51.9	149	14
ZJDFT	206.34	161.6	44.74	0	0	0	30	4
ZJITC	2326.90	1483.52	410.48	432.9	24373	28.67	156	44
ZJAVTC	0.00	0	0	0	0	0	12	0
Mean of Wen-Tai	1920.16	1250.27	479.94	189.95	23788.10	144.33	118	38
Mean of "Double High"	2327.07	1608.23	491.78	227.06	29007.11	91.92	137	32

3.3. Effectiveness of Professional Development

The professional development of higher vocational colleges focuses on the "Three Reforms of Teachers, Textbooks and Teaching" with a key emphasis on the construction effectiveness of teachers, teaching, and textbooks. The effectiveness indicators of teacher development in higher vocational colleges include the student-to-teacher ratio, the proportion of dual-qualified

full-time teachers, and the proportion of full-time teachers with senior professional titles. A lower student-to-teacher ratio indicates better than higher teacher-to-student ratio. In the Wen-Tai regions, the student-to-teacher ratio in higher vocational colleges is 17.32, higher than the average of 16.34 of the 15 "Double High" schools, with WZVTC and TZVCST having the best student-to-teacher ratios, both below 16. The higher the proportions of dual-qualified full-time teachers and full-time teachers with senior professional titles, the higher the quality of teacher team in higher vocational colleges. The average proportion of dual-qualified full-time teachers in higher vocational colleges in the Wen-Tai regions is 67.02%, lower than the average of 74.73% for the 15 "Double High" schools, with ZJDFF and WZVTC having the highest proportions. The average proportion of full-time teachers with senior professional titles in the Wen-Tai colleges is 26.69%, still lower than the average of 34.14% for the "Double High" schools. WZVTC has a proportion of full-time teachers with senior professional titles of 40%, higher than the average of the "Double High" schools.

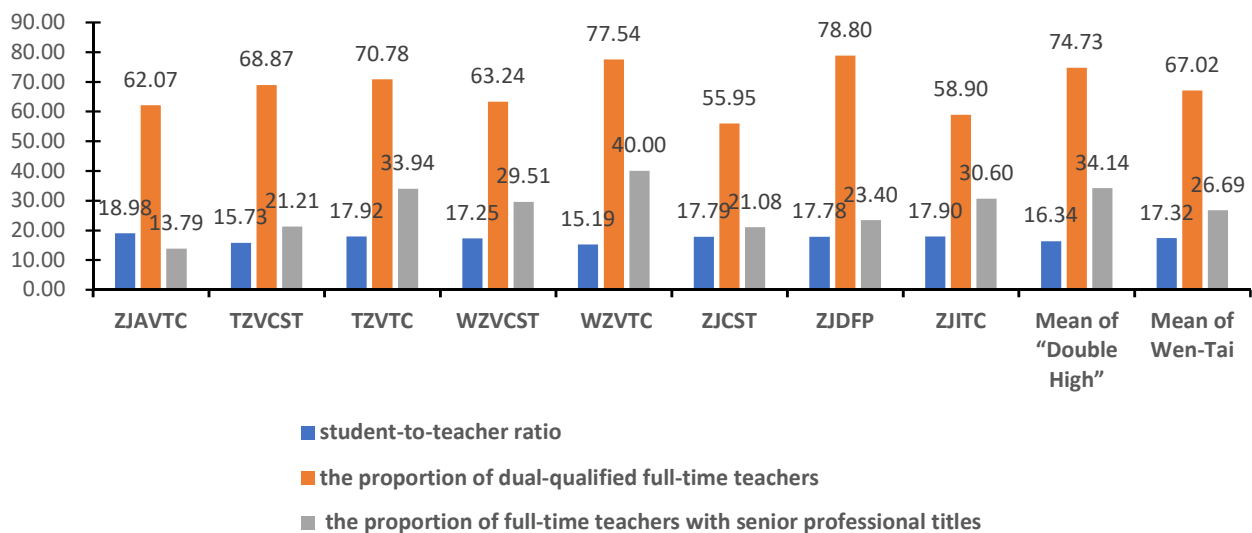


Fig.2 Talent Development Effectiveness

In terms of teaching and textbooks, the focus is on the construction effectiveness of schools in terms of the number of provincial and above-level teaching resource libraries, the number of provincial and above-level online boutique courses, and the number of national planned textbooks and new form textbooks. Overall, the average number of achievements in the Wen-Tai colleges is lower than that of the 15 "Double High" schools in Zhejiang Province, especially in the construction of national-level achievements. The average performance of "Double High" schools in the Wen-Tai regions is better than that of ordinary higher vocational colleges in the region, but there is still a gap compared to the "Double High" schools in Zhejiang Province, especially the top "Double High" schools like Jinhua Polytechnic and Zhejiang Financial Vocational College.

In terms of the specific performance of higher vocational colleges in the Wen-Tai regions, the construction effectiveness of teaching resource libraries is average, with WZVTC and ZJITC having two national-level teaching resource libraries, both performing better than ordinary higher vocational colleges. For the construction of online boutique courses, the two "Double High" schools are significantly better than other colleges in the country and province, and TZVCST and TZVTC have good results in the construction of provincial boutique courses. In terms of the number of textbooks, ZJDFF and TZVTC have outstanding performance in the construction of national planned textbooks, and TZVTC and ZJITC have the most new form

textbooks. ZJAVTC lags behind due to its weak foundation in construction, still having a significant gap in the accumulation of professional development achievements compared to other colleges.

Table 3. Effectiveness of Professional Development (Unit: pieces)

School	Number of Teaching Resource Libraries		Number of Online Boutique Courses		Number of Textbooks	
	National Level	Provincial Level	National Level	Provincial Level	National Planned	New Form
TZVCST	0	0	0	38	0	8
TZVTC	0	0	0	28	4	16
WZVCST	0	0	0	14	0	4
WZVTC	2	2	9	56	0	11
ZJCST	0	0	0	12	1	11
ZJDFP	0	0	1	17	7	4
ZJITC	2	0	4	21	2	14
ZJAVTC	0	0	0	0	0	0
Mean of Wen-Tai	0.50	0.25	1.75	23.25	1.75	8.50
Mean of "Double High"	2.13	0.33	6.27	27.80	18.07	26.73

3.4. Effectiveness of School-Enterprise Cooperation

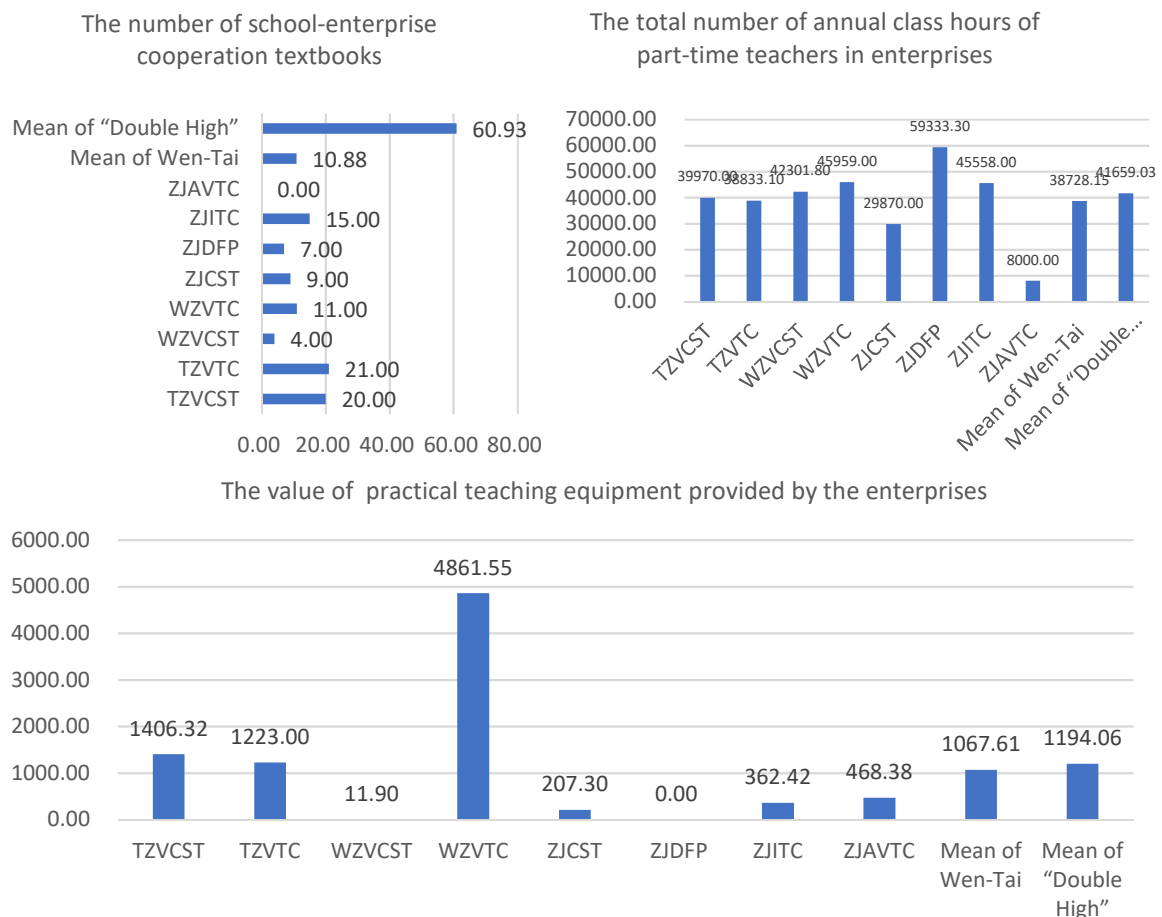


Fig.3 Effectiveness of School-Enterprise Cooperation

Based on the three dimensions of "human, financial, and material" in school-enterprise cooperation, the effectiveness of cooperation between higher vocational colleges and enterprises is represented by three indicators: the total number of annual teaching hours provided by enterprise part-time teachers, the value of practical teaching equipment provided by enterprises to schools, and the number of cooperative textbooks between schools and enterprises. In terms of the total number of annual teaching hours provided by enterprise part-time teachers, ZJDFP, a private institution, has the highest total number of annual teaching hours provided by enterprise part-time teachers. Both "Double High" colleges in Wenzhou and WZVCST have total teaching hours higher than the average of the 15 "Double High" colleges, with overall performance of vocational colleges in Wenzhou better than those in Taizhou. Regarding the value of practical teaching equipment provided by enterprises, WZVTC has the highest value of practical teaching equipment provided by enterprises and is significantly higher than the average of the 15 "Double High" colleges, followed by TZVCST and TZVTC. In terms of the number of cooperative textbooks between schools and enterprises, there is a significant gap between the performance of vocational colleges in Wen-Tai and the average of the 15 "Double High" colleges, with two public higher vocational colleges in Taizhou performing relatively well. Overall, enterprises have performed well in providing teachers and equipment to vocational colleges in Wen-Tai, but their performance in producing cooperative textbooks between schools and enterprises is not ideal.

3.5. Effectiveness of Community Service

Regarding participation in non-degree training and public welfare projects, the participation of higher vocational colleges in social training is examined based on the number of non-degree training projects, the amount of non-degree training funds received, the number of non-degree training hours, and the number of public welfare project training hours.

Table 4. Social Service Achievements of Higher Vocational Colleges

School	Number of Non-Degree Training Projects	Non-Degree Training Hours	Non-Degree Training Funds Received	Public Welfare Project Training Hours
Unit	Projects	Hours	Ten Thousand Yuan	Hours
TZVCST	99.00	3508.00	401.26	452.00
TZVTC	83.00	5610.00	994.74	592.00
WZVCST	175.00	6953.00	1403.19	0.00
WZVTC	346.00	21653217.00	2426.63	18506577.00
ZJCST	49.00	522932.00	887.75	2920.00
ZJDFP	26.00	1448.00	205.82	200.00
ZJITC	158.00	177263.00	935.32	142305.00
ZJAVTC	15.00	624.00	60.97	18.00
Mean of Wen-Tai	118.88	2796444.38	914.46	2331633.00
Mean of "Double High"	250.60	1473218.71	1640.90	1248693.80

In terms of the number of non-degree training projects, WZVTC has the highest number, significantly higher than the average of the 15 "Double High" colleges, while the rest of the colleges are below the average of the "Double High" colleges. In terms of non-degree training hours, non-degree training funds received, and public welfare project training hours, WZVTC also performs outstandingly, while the rest of the colleges are below the average of the "Double High" colleges. In terms of social service achievements, it is evident that the performance of

vocational colleges in the Wen-Tai regions is generally lower than that of the 15 "Double High" colleges, with the following characteristics: public higher vocational colleges perform better than private higher vocational colleges; "Double High" colleges in the Wen-Tai regions perform significantly better than ordinary colleges; and most colleges in Wenzhou perform better than those in Taizhou.

3.6. Effectiveness of Internationalization

Based on the two dimensions of "bringing in" and "going out," this section examines the achievements of higher vocational colleges in internationalization from the perspectives of schools, programs, teachers, and students. The number of programs accepting overseas students, the number of overseas students, the number of Sino-foreign cooperative education programs, and the number of students in Sino-foreign cooperative education programs are used to represent the "bringing in" achievements of higher vocational colleges. Wen-Tai higher vocational colleges perform significantly below the "Double High" colleges in Zhejiang Province in these indicators. For the first two indicators, only WZVTC has two programs accepting overseas students, with a total of four overseas students. The other colleges scored zero in these indicators, far below the average level of the 15 "Double High" colleges in Zhejiang Province (average of 2.93 programs accepting overseas students and 27.73 overseas students). In terms of Sino-foreign cooperative education, only WZVTC, WZVCST, and ZJITC have one Sino-foreign cooperative education program each, but their number of enrolled students is still significantly below the average level of "Double High" colleges.

Table 5. "Bringing In" Achievements of Internationalization in Higher Vocational Colleges

School	Programs Accepting Oversea Students	Oversea Students	Sino-Oversea Cooperative Education Programs	Students in Sino-Oversea Cooperative Education Programs
TZVCST	0	0	0	0
TZVTC	0	0	0	0
WZVCST	0	0	1	107
WZVTC	2	4	1	81
ZJCST	0	0	0	0
ZJDFP	0	0	0	0
ZJITC	0	0	1	32
ZJAVTC	0	0	0	0
Mean of Wen-Tai	0.25	0.50	0.38	27.50
Mean of "Double High"	2.93	27.73	2.47	595.40

In comparison, higher vocational colleges in Wen-Tai perform relatively better in the "going out" aspect of internationalization, but there is still a gap compared to the 15 "Double High" colleges. In terms of overseas schooling, only WZVTC and WZVCST have established overseas schools and programs, with the former having actual enrolled students. In terms of teacher internationalization, ZJITC has the longest time for full-time teachers to guide and conduct training overseas, significantly higher than the average of the 15 "Double High" colleges, followed by WZVTC. In terms of symbolic achievements and leading demonstration roles, the two "Double High" colleges in the Wen-Tai regions perform significantly better than other colleges. These two "Double High" colleges surpass the average of the 15 "Double High" colleges in Zhejiang Province in the number of course standards developed and adopted internationally, the number of full-time teachers holding positions in international organizations, and the

number of international skills competition awards, far exceeding other ordinary higher vocational colleges in the Wen-Tai regions. Ordinary higher vocational colleges in these regions show relatively weak internationalization achievements.

Table 6. "Going Out" Achievements of Internationalization in Higher Vocational Colleges

	schools established overseas	majors offered in schools established overseas	students enrolled in schools established overseas	curriculum standards developed and adopted overseas	days full-time teachers spent overseas for guidance and training	full-time teachers holding positions overseas	awards won in international skills competitions
TZVCST	0	0	0	0	12	0	1
TZVTC	0	0	0	0	29	0	1
WZVCST	2	10	0	0	0	0	0
WZVTC	1	1	141	36	296	11	24
ZJCST	0	0	0	0	0	0	0
ZJDFP	0	0	0	0	0	0	0
ZJITC	0	0	0	22	3620	23	21
ZJAVTC	0	0	0	0	0	0	0
Mean of Wen-Tai	0.38	1.38	17.63	7.25	494.63	4.25	5.88
Mean of "Double High"	1.60	1.27	712.27	14.07	1648.13	9.07	16.80

4. Evaluation of the Educational Effectiveness

Based on the analysis of the six areas above, we summarize and evaluate the educational effectiveness of higher vocational colleges in Wen-Tai from the perspectives of regional differences, school levels, and school types.

4.1. The Effectiveness of Wen-tai Higher Vocational Colleges is Generally Excellent, and Regional Characteristics and Gaps Still Exist

Wen-Tai higher vocational colleges generally perform well in talent cultivation, innovative services, professional development, school-enterprise cooperation, social services, and internationalization. They exhibit distinct regional characteristics due to the development advantages of the local private economy. The higher vocational colleges in Wen-Tai form a virtuous cycle of coupled development with the local private economy, providing high-quality human capital for regional economic development. This is evidenced by higher employment rates, local employment rates, employer satisfaction, graduate entrepreneurship rates, the number of authorized invention patents, and the amount of revenue from patent commercialization. However, when benchmarked against the average performance of the 15 "Double High" colleges in Zhejiang Province, Wen-Tai higher vocational colleges still have room for improvement in terms of long-term career development of graduates, scientific research and innovation achievements, the construction of symbolic achievements, the depth of school-enterprise cooperation, social service participation, and internationalization.

4.2. There are Certain Regional Differences between Wenzhou and Taizhou in the Effectiveness of Higher Vocational Colleges

Overall, higher vocational colleges in Wenzhou perform better than those in Taizhou. However, Taizhou colleges have their unique advantages in certain indicators. For example, Taizhou colleges excel in local employment rates under talent cultivation indicators, the construction of provincial-level online courses and new form textbooks under professional development

indicators, and the value of enterprise-provided on-campus practical teaching equipment and the number of school-enterprise cooperative textbooks under school-enterprise cooperation indicators. However, Taizhou colleges significantly lag behind Wenzhou colleges in terms of technological innovation achievements, social service effectiveness, and internationalization.

4.3. Imbalanced Development among Different Types and Levels of Wen-Tai Colleges

The educational effectiveness of higher vocational colleges in Wen-Tai shows imbalances between "Double High" colleges and ordinary colleges, as well as between public and private colleges. "Double High" colleges, with their better development foundation, strong policy support, and high governance level, play a leading role in talent cultivation quality and long-term development, innovation service effectiveness, professional faculty team building, symbolic achievement construction, school-enterprise cooperation, and social service participation. WZVTC, in particular, stands out in various indicators. Some ordinary colleges also have notable performances in certain areas, such as TZVCST in talent cultivation, WZVCST in technological services, and TZVTC in innovation and textbook construction. However, overall, they still have a considerable gap compared to "Double High" colleges. Additionally, public colleges, with their advantages in resources, student sources, and policy support, outperform private colleges significantly. While private colleges have certain advantages in employment rates and local employment rates, as well as in indicators related to school-enterprise cooperation like the proportion of dual-qualified teachers and the total annual hours of enterprise part-time teachers, they lag far behind public colleges in other educational effectiveness indicators.

5. Development Strategies and Suggestions

5.1. Use "Double High" College Performance Evaluation as a Benchmark to Improve Educational Effectiveness

"Double High" colleges generally have superior educational effectiveness, and their performance evaluation work helps guide colleges in building symbolic achievements, improving resource allocation efficiency, and promoting high-quality development of higher vocational colleges. In practice, Wen-Tai higher vocational colleges should benchmark against "Double High" colleges, set high-level and high-quality construction goals, improve internal self-evaluation mechanisms, and establish a scientific and reasonable performance evaluation index system. They should also build a bottom-up and top-down performance evaluation mechanism from programs to professional groups, departments, and schools^[3]. At the same time, a continuous monitoring mechanism for college performance evaluation should be established, effectively utilizing the results to identify and improve "shortcomings" in the college's educational process. Additionally, leveraging the leading and demonstration roles of the two "Double High" colleges in Wen-Tai, the government should take the lead in establishing a regional higher vocational college development alliance and community, strengthening connections among Wen-Tai higher vocational colleges, and promoting continuous improvement in educational effectiveness.

5.2. Strengthen the Regional Advantages and Characteristic Development of Higher Vocational Colleges to Promote Balanced Development

Wen-Tai higher vocational colleges have shown a good coupling development relationship with the regional economy: providing high-quality technical and skilled talents, technological innovation achievements, and social services to the regional economy, while the active private economy provides good social capital, school-enterprise cooperation platforms, and employment environments for higher vocational colleges. Wen-Tai higher vocational colleges

should fully utilize the regional economic development advantages to strengthen school-enterprise cooperation and integration of industry and education: first, encourage social capital to enter vocational education and guide private enterprises to participate in and host vocational education; second, utilize modern apprenticeship and order classes in talent cultivation to jointly cultivate high-level technical and skilled talents with industry leaders and pillar enterprises; third, in professional development, jointly cultivate "dual-qualified" teams with enterprises, and co-build and share teaching resources; fourth, strengthen technological cooperation with enterprises, jointly research and innovate, and promote local R&D and innovation achievements transformation; fifth, establish school-enterprise training and practice bases, and industrial colleges to promote deep integration of industry and education in higher vocational colleges and enhance social service capabilities. At the same time, fully utilize the "bringing in" and "going out" policy advantages of Wen-Tai to encourage the internationalization of higher vocational colleges.

On the other hand, public colleges should fully utilize their resource and platform advantages, while private colleges should leverage their flexibility and market-oriented advantages. Different types of colleges should develop based on their own characteristics, such as WZVCST focusing on agricultural technology innovation to achieve notable educational effectiveness in entrepreneurship services. Strengthening the regional advantages of higher vocational colleges and building distinctive educational brands will help promote balanced development among higher vocational colleges in Wen-Tai.

5.3. Fully Utilize the "Dynamic Wen-Tai" Vocational Education Highland Advantage to Promote Collaborative Development

To support the construction of the " Vitality Wen-Tai " initiative, Wenzhou has issued the "Implementation Plan for Promoting the Integration of Vocational Education and Private Economy and Supporting the Construction of ' Vitality Wen-Tai ' (2021-2023)," which proposes ten main tasks: stimulating new momentum for enterprises and social capital to participate in vocational education, improving the collaborative and open vocational training system, innovating ways of integrating industry and education, enhancing the level of technical and skilled talent cultivation, promoting efficient flow of industry and education talents, establishing new benchmarks for vocational education supporting innovation and entrepreneurship, promoting the internationalization of Wenzhou vocational education to support private enterprises, building the "digital brain" of Wenzhou vocational education, and optimizing the vocational education development environment. These tasks provide direction and institutional guarantees for the high-quality development of Wen-Tai higher vocational colleges. Higher vocational colleges in Wen-Tai should focus on building a vocational education highland, establishing a city-level industry-education consortium, strengthening the construction of a collaborative mechanism between the two regions, and establishing a long-term mechanism for exchange and cooperation between higher vocational colleges in the two regions to effectively promote their collaborative development.

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- [5] The "Four Creations" refer to creating a highland for technical and skilled talent development, a technical and skilled innovation service platform, high-level professional clusters, and high-level dual-qualified teacher teams. The "Five Enhancements" refer to enhancing the level of school-enterprise cooperation, the level of service development, the level of school governance, the level of informatization, and the level of internationalization.