

Research on the Impact of Budget Performance Management in Colleges and Universities on the Development of Higher Vocational Education

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Abstract: This article is based on the dual era background of my country's higher vocational education moving from scale expansion to connotative development, and the national finance focusing on optimizing the allocation of financial resources to improve the quality of education. The study of the impact of university budget performance management on the development of higher vocational education belongs to the intersection of education and finance. This article adopts the case study method, taking Shenzhen Polytechnic University as a research case, and conducts an in-depth analysis of the budget performance management of universities and the development of higher vocational education. It aims to analyze how the budget performance management of universities affects the development of higher vocational education, and the impact of budget performance management of universities on the development of higher vocational education. This article studies the development issues of higher vocational education from the financial perspective of "budget performance management". It provides national education and financial authorities with a new perspective to understand the efficiency of resource allocation in higher vocational education, and provides decision-making support for improving the budget allocation and expenditure performance evaluation of higher vocational colleges. Therefore, the research of this article has important theoretical and practical significance.

Keywords: universities, higher Vocational colleges, budget performance management, higher vocational education

1. Introduction

With the high-quality development of our country's economy, higher vocational education is the main position for cultivating technical and skilled talents, and its development quality is directly related to the country's overall competitiveness. General Secretary pointed out in "Accelerating the Construction of a Modern Vocational Education System": "Vocational education is an important part of the national education system and human resources development. Vocational education has a broad future and great potential." In recent years, the country has successively issued the "National Vocational Education Reform Implementation Plan", "Opinions on Promoting the High-Quality Development of Modern Vocational Education" and other important policies on the development of vocational education, clearly proposing to improve the funding investment mechanism and strengthen budget performance management. However, in the practice process of various higher vocational colleges, there are still many problems related to "emphasis on investment and neglect of management" and "emphasis on distribution and neglect of performance", which to a certain extent restricts the rapid development of higher vocational education in my country.

2. Research on the relationship between budget performance management of universities and the development of higher vocational education

2.1. Introduction to budget performance management in colleges and universities

2.1.1. University budget performance management

Budget performance management in colleges and universities is a systematic management activity that runs through the entire process of budget preparation, budget execution, budget monitoring, budget

performance evaluation and feedback in colleges and universities. Its core is based on the management concept of "results in spending money and accountability in inefficiencies". It goes beyond the traditional accounting and supervision functions and emphasizes the close linkage between the use of financial resources and the benefits generated. It aims to improve the efficiency of resource allocation in higher vocational education and achieve the strategic goals of higher vocational colleges. Therefore, it is an important management tool to achieve optimal allocation of financial resources and strategic goals.

2.1.2. Introduction to Shenzhen Polytechnic University and its budget performance management

This article lists the funding budgets of some universities in Guangdong Province in 2025 (see Table 1 for details). The funding budgets of various universities have increased and decreased. Shenzhen Polytechnic University is used as an example for a specific analysis. Shenzhen Polytechnic University is a public undergraduate-level vocational school. Its predecessor was Shenzhen Vocational and Technical College founded in 1993. In June 2023, the Ministry of Education approved the establishment of Shenzhen Polytechnic University. The school became the first undergraduate-level vocational school based on a high-quality "double high" school since the Ministry of Education issued and implemented the "Standards for the Establishment of Undergraduate-Level Vocational Schools (Trial)". Since its establishment, Shenzhen Polytechnic University has continuously innovated its school-running systems and mechanisms, educational and teaching concepts, and talent training models, creating many firsts in China's higher vocational education. Its comprehensive strength ranks among the top of similar institutions in the country, and is known as a banner of China's higher vocational education. The funding budget of Shenzhen Vocational and Technical College in 2022 is 3.359 billion yuan, the funding budget of Shenzhen Polytechnic University in 2023 is 3.299 billion yuan, the funding budget in 2024 is 3.344 billion yuan, and the funding budget in 2025 is 3.242 billion yuan. The full-scale budget of Shenzhen Polytechnic University in 2025 has decreased compared with the previous year, mainly because its project fund "Education Fee Additional Project Budget" has decreased compared with the previous year.

Table 1 Summary of funding budgets for some universities in Guangdong Province in 2025

Serial number	City	Name of university	Budget (100 million yuan)	Increase (decrease) from the previous year
1	Guangzhou	Sun Yat-sen University	216.22	increased by 21.20%
2	Guangzhou	South China University of Technology	126.50	increased by 5.08%
3	Guangzhou	Jinan University	85.11	increased by 12.0%
4	Shenzhen	ShenZhen University	75.07	increased by 3.61%
5	Shenzhen	South University of Science and Technology of China	53.63	decreased by 9.84%
6	Guangzhou	Guangdong University of Technology	37.38	increased by 9.19%
7	Guangzhou	South China Normal University	37.07	increased by 9.84%
8	Guangzhou	South China Agricultural University	32.64	increased by 0.83%
9	Shenzhen	ShenZhen Polytechnic University	32.42	decreased by 3.05%
10	Guangzhou	GuangZhou University	29.55	decreased by 12.3%
11	Guangzhou	Southern Medical University	26.84	increased by 14.38%
12	Shenzhen	ShenZhen Technology University	19.99	decreased by 7.93%

Data source: Compiled from public data on the Internet

Shenzhen Polytechnic University's budget funding source mainly comes from financial appropriations. It adopts a budget preparation method that combines the "incremental budget method" and the "zero-based budget method", that is, "each department of the school increases or adjusts the budget on the basis of the previous year's budget" and "prepare plans and budgets on a zero basis, regardless of the budget allocation of the project in previous years, and only declare the budget based on the current situation." A small part of the school's funding source comes from other related income

of the school, including tuition income, accommodation fee income, social training income, etc. In terms of budget performance management, Shenzhen Polytechnic University has taken relevant measures and achieved good operational results, including: establishing and improving the budget performance management system at the school level, making budget performance management one of the important tasks that all departments of the school pay attention to, establishing the concept and understanding that budget performance management can affect the development of higher vocational education; building a comprehensive information platform for school-level budget performance management, focusing on improving the level of informatization construction; cultivating compound talents who are familiar with the development business of higher vocational education and master the financial performance of university budget performance management, etc.

2.2. Introduction to the development of higher vocational education

Regarding the development of higher vocational education, we not only need to pay attention to traditional indicator factors, such as school scale, number of students, etc., but also need to focus on other related core elements released in recent years, including: the quality of talent training (such as skills competition awards, the proportion of vocational qualification certificates obtained, Employment quality and starting salary of graduates), social service capabilities (such as the scale and level of technical training, the amount of money received from horizontal projects), the depth of industry-education integration (such as the quality of industrial college construction, the number of school-enterprise cooperative R&D projects), and education and teaching innovation (such as high-level teaching achievement awards, curriculum resource construction, etc.).

Vocational education is an important part of modern education. Higher vocational education is a high-level education stage of vocational education. Through higher education, students can transform professional subject knowledge into specific social practice skills. Wang Xingxing's robotics team optimizes user experience through intelligent services and uses technology to bring convenience to life; Liang Wenfeng's DeepSeek technology uses low-cost and high-efficiency AI models to promote inclusive applications in medical care, education and other fields. Both of them demonstrate the development and application of technology. Therefore, the development of higher vocational education is crucial to national and socio-economic development.

In recent years, our country has introduced some important policies to promote the development of vocational education, including gradually increasing investment in higher vocational education funds, etc., striving to improve the level of development of higher vocational education in our country, and achieving corresponding results^[1]. However, for the development of higher vocational education, the government, enterprises, and higher vocational colleges still need to cooperate and work together to truly achieve high-quality development of higher vocational education^[2].

2.3. How does budget performance management in universities affect the development of higher vocational education?

2.3.1. Strategic development orientation and financial fund allocation mechanism of higher vocational colleges

Budget performance management in colleges and universities usually sets various expenditure performance targets. These performance targets are consistent with the strategic development direction of higher vocational colleges, which can in turn affect the allocation and investment of financial funds. In the field of higher vocational education management, the allocation of financial funds will be tilted towards key majors that meet the needs of industrial economic development, such as artificial intelligence, electronic communications, intelligent manufacturing, financial technology and other majors; priority will be given to supporting students' academic learning, improvement of practical teaching conditions, and teacher team building to provide them with stable and sustained financial investment support. This strategic development orientation and financial fund allocation mechanism of higher vocational colleges enables limited educational financial funds to be invested in important links that can best improve the training of higher vocational and technical talents, and rationally optimizes the allocation of financial resources^[3].

2.3.2. Incentive and constraint mechanisms for budget performance management in universities

By establishing an incentive and constraint mechanism that links expenditure performance with financial resources, the government departments in charge of education will have a profound impact on

the development of various educational undertakings in higher vocational colleges and secondary teaching units. Possible measures include giving incremental financial budget rewards to colleges and secondary teaching units that achieve performance targets, such as achieving major teaching achievements, winning high-level vocational skills competition awards, significantly improving the quality of student employment, etc.; while for colleges and secondary units that continuously fail to complete performance targets, their budget scale for the next year will be reduced accordingly, and the allocation of financial funds will be reduced. This mechanism forces higher vocational colleges and secondary teaching units to proactively optimize internal management, speed up budget execution, and effectively improve the expenditure efficiency of the unit's fiscal funds, thus promoting the progress of higher vocational education.

2.3.3. Establish budget expenditure performance monitoring and evaluation system

Establishing a standardized and complete budget expenditure performance monitoring and evaluation system can provide higher vocational colleges with a decision-making basis for budget expenditure performance management and financial resource allocation optimization, and strengthen the optimal management of education financial expenditures^[4]. At the school level of higher vocational colleges, the departments in charge of teaching can use the realization of corresponding performance goals as one of the arguments for the establishment and adjustment of each major; at the same time, at the social level, establishing a budget performance monitoring and evaluation system can provide decision-making reference for the government departments in charge of education to improve the design of education systems and adjust education policy orientation; through the disclosure of budget performance management information in colleges and universities, social supervision of financial expenditures in higher vocational education is enhanced, the openness and transparency of budget performance management in higher vocational colleges are promoted^[4], and the expenditure efficiency of education funds in higher vocational colleges is improved^[5]. Finally, a comprehensive budget performance evaluation will be conducted after the project is completed to provide reference and experience for future budget performance management work, thereby promoting the continuous improvement of higher vocational education.

2.3.4. Establish a budget performance risk prevention and control system

By introducing the performance concept into the entire process of budget management in colleges and universities, a risk prevention and control system for budget performance management has been established to help higher vocational colleges conduct strict feasibility studies at the budget preparation stage, evaluate the budget performance targets of each department, avoid ineffective financial budget investment at the source, and reduce risks at the budget preparation stage; strengthen expenditure control during the budget execution process, and promptly detect budget deviations. It is necessary to avoid frequent budget adjustments and ensure the rigidity of budget management, but also pay attention to the need to be flexible according to the actual situation. Thereby avoiding risks during the budget execution stage^[6]; after the completion of the budget project, timely summary and review, self-evaluation of the completion of each project's performance goals and submission to the financial department for overall evaluation and assessment, and continuous improvement and revision of the project performance management system, striving to converge the performance goals of each department with the overall performance goals of the school, while eliminating risks in the completion stage of the budget project^[7]. Ultimately, through such a set of risk prevention and control systems, the financial funds needed for the development of higher vocational education are guaranteed and the sustainable development of higher vocational education is promoted.

2.4. The impact of budget performance management in universities on the development of higher vocational education

2.4.1. Impact on student development

Budget performance management of colleges and universities takes "student work" as the core performance indicator, giving full play to the strong support of financial resources for student work, and promoting the improvement of the quality of skilled talent training in higher vocational colleges; in student development work, student academic performance, graduate employment quality and graduation starting salary level, employer satisfaction, vocational skills competition awards, professional qualification certification examination pass rate, etc. have become important evaluation indicators. At the same time, these important evaluation indicators will also help students improve their overall quality and employment competitiveness.

2.4.2. Impact on professional construction and teacher team building

In terms of professional construction, the budget performance management of colleges and universities establishes a professional early warning and dynamic adjustment mechanism so that the professional construction of higher vocational education always resonates with industrial changes, accurately connects with the industry, and builds majors in the industrial chain; it urges higher vocational colleges to update majors in a timely manner and eliminate backward majors, and focus on developing advantageous professional groups that meet industry needs and regional economic development. In terms of teacher development, higher vocational colleges may incorporate the ratio of "double-qualified" teachers, corporate practical experience, technology and industry service levels, etc. into the performance indicator system, thereby encouraging more full-time teachers to visit and study in companies. Engineers from companies are also welcome to come to higher vocational colleges to teach students, creating a team of teachers who understand both teaching and the actual industry.

2.4.3. Impact on the integration of industry and education and practical training conditions

Budget performance management of colleges and universities sets performance indicators such as "depth of integration of industry and education, effectiveness of school-enterprise cooperation" to promote the connection between higher vocational education and regional economic and industrial needs, and keep up with the industrial layout. Each secondary college will actively seek to build industrial characteristic colleges with enterprises, develop teaching resources in a targeted manner, and promote the construction of practical training conditions to be closer to the real production environment of enterprises. These effects have promoted the common progress of higher vocational education and industrial development. The integration of industry and education and practical training practice is a school-running model under higher vocational education. It is also an important way to cultivate vocational skills talents that can adapt to social needs. Enterprises are for-profit and will consider cooperation with higher vocational colleges only if they are profitable. Therefore, higher vocational colleges need to proactively go out, establish cooperative relationships with enterprises, and seek school-running opportunities for the integration of industry and education and practical training^[8].

2.4.4. Impact on institutional governance and brand building

The implementation of budget performance management promotes the governance of higher vocational colleges and has an important impact on college governance and brand building. At the governance level, by establishing a closed loop of budget performance management of "budget preparation-budget execution-budget performance evaluation", the setting of performance goals prompts each department to clarify development priorities and task objectives, promotes the transformation of college governance from past experience-based management to industry and financial data-driven decision-making, and significantly improves the effectiveness of college governance. In terms of brand building, by focusing limited educational financial resources on advantageous majors and special projects, the quality of school running has been improved, the school's core competitiveness has been enhanced, and the school's social influence and reputation have been expanded.

3. Conclusion

Through research and analysis, this article draws the conclusion that budget performance management in colleges and universities has a significant impact on the development of higher vocational education. Budget performance management in colleges and universities has profound effects on student development, professional construction and teacher team building, industry-education integration and practical training conditions, school governance and brand building of higher vocational education through the strategic development orientation of higher vocational colleges and financial fund allocation mechanisms, incentive and restraint mechanisms, and the establishment of budget expenditure performance monitoring and risk prevention and control systems. In summary, the research in this article not only provides a comprehensive case basis for readers to understand the intrinsic relationship between budget performance management in colleges and universities and the development of higher vocational education. The research results of this article also have practical guiding significance for optimizing the allocation of financial resources in higher vocational education and promoting the internal governance of higher vocational colleges. It also lays a solid foundation for subsequent related research in this field.

References

- [1] Yang Guangjun. *The actual situation and optimization thinking of my country's higher vocational education funding* [J]. *China Vocational and Technical Education*, 2023, (24): 75-83.
- [2] Xu Liuying, Li Xiaomin. *Realistic issues and optimization paths of high-quality development policies for higher vocational education in my country* [J]. *Vocational and Technical Education*, 2025, 46(18):59-66.
- [3] He Jingshi. *Research on the input-output efficiency and influencing factors of higher vocational education in my country* [J]. *Heilongjiang Higher Education Research*, 2022, 40(11):129-136. DOI:10.19903/j.cnki.cn23-1074/g.2022.11.019.
- [4] Bai Guangcai, Li Jing. *Research on performance evaluation of financial expenditures in higher vocational education—taking Jiangsu Province as an example* [J]. *Friends of Accounting*, 2014, (20): 34-39.
- [5] Xie Fuquan, Liu Xiangjie. *Research on optimization of financial investment in higher vocational education* [J]. *China Vocational and Technical Education*, 2018, (27): 19-25.
- [6] Liu Shuangxi, Zhang Weikai. *Optimizing the budget performance management model to improve the budget effectiveness of universities - taking N University as an example* [J]. *Finance and Accounting*, 2025, (02): 67-70.
- [7] Wu Qiong, Li Suying, Yao Daoxian. *Research on budget performance management of universities from the perspective of industry-finance integration* [J]. *Finance and Accounting*, 2024, (03): 28-33.
- [8] Ma Luting. *High-quality development of higher vocational education: essential requirements, system construction and strategic paths* [J]. *China Higher Education*, 2024, (23): 8-13.