



The 20th National and International Conference
"Strengthen knowledge to drive education and integrate across sciences for sustainable development"
December 3, 2025 Online Via Zoom

EDUCATIONAL FINANCIAL INSTRUMENT IN MUNICIPAL HIGHER VOCATIONAL COLLEGES IN FUZHOU

Yingying Liang

Student of Master in Educational Administration, Suan Sunandha Rajabhat University ,

Email : s67561802128@ssru.ac.th

Ganratchakan Lertamornsak

Graduate School, Suan Sunandha Rajabhat University

E-Mail: ganratchakan.le@ssru.ac.th

Abstract

This paper examines how budgeting functions as a tool for educational financing in the governance of Fuzhou municipal higher vocational college. Based on policy analysis and institutional assessment, this paper identifies four major problems: fragmented governance, insufficient performance monitoring, resource imbalances, and a lack of strategic coordination. To achieve this goal, this article proposes a four-dimensional improvement framework that integrates long-term planning, lifecycle-based implementation, equity-oriented resource coordination, and digital performance monitoring. Emphasizes integrating financial processes with educational objectives, promoting interdepartmental collaboration, and improving transparency through digital tools. By shifting from a compliance-driven budget to a performance-driven management model, this article offers practical recommendations for upgrading the budget system and supporting the high-quality development of vocational education.

Keyword : Educational Financial Instrument, Vocational Colleges, Higher Education

Introduction

Definition and Function of Financial Instrument

Successful educational governance is a systematic activity that encompasses long-term planning, educational management, resource allocation, and quality control (Kusumawati, 2024). In this context, educational financial instruments are a key component of the education governance system. They function as economic instruments for resource allocation and as policy tools that integrate educational values. These instruments facilitate targeted investment in education and support the achievement of development goals through mechanisms such as resource allocation and cost sharing. According to the International Accounting Standards Board (2003), a financing instrument is defined as "a contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity." In the educational context, these instruments should prioritize educational values through financial mechanisms that encourage investment in education and support the development of the education sector. For Fuzhou higher vocational college, these tools should be consistent with the vocational education goal of "training high-quality technicians" (Ministry of Education of the People's Republic of China, 2021) and support important initiatives such as the integration of education and industry and the development of vocational clusters. Fuzhou's higher vocational colleges are primarily funded by the national budget, so their main educational financing tools focus on budget management. This includes key elements such as performance-based financing models, cost allocation mechanisms for education-industry integration projects, budget performance management, and educational cost accounting. Together, these tools provide the financial



The 20th National and International Conference
"Strengthen knowledge to drive education and integrate across sciences for sustainable development"
December 3, 2025 Online Via Zoom

.....

foundation and coordination capacity for effective budget management. Budgeting, a fundamental tool in modern management science, has its roots in business practices from the early 20th century. Anthony (1965) defined it as “the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization’s objectives.” In the field of public administration, Wildavsky (1974) emphasized that budgets are not only economic tools but also political decision-making tools that reflect internal and external power dynamics. Following the passage of a new budget law in China 2014, budgeting practices in higher education were reformed. Barr and McClellan (2018) suggested that budget management in higher education should balance academic goals with financial sustainability .

Orientation Towards Integrated Budget Planning and Management in Higher Education

Budget management in higher education should be planned in line with long-term institutional and national development goals (Li, 2024). For example, China's 2015 World-Class Universities and Degree Programs Plan and Fujian Province's 2020 "Double High Plan" for vocational schools expanded the scope of budget planning from a narrow financial focus to a more comprehensive one, including the allocation of staff, facilities, and assets. This broader view contributes to integrating budget planning into institutional management and improving efficiency. In practice, the budget system operates as a closed loop that includes planning, approval, implementation, adjustment, and performance evaluation (Liu, LP, 2024). Guided by mechanisms such as the "Negative List and Performance Evaluation" (State Council of the People's Republic of China, 2014, No. 11), this process ensures more efficient resource allocation through planning coordination, interdepartmental cooperation, and dual evaluation of financial and non-financial indicators.

Digital technology has played a pivotal role in improving these processes. The application of big data analytics has revolutionized budget planning, replacing error-prone manual processes with integrated online platforms and automated data analysis. As a result, an increasing number of Double First-Class Universities which means a national initiative in China aimed at building world-class universities and disciplines, have adopted smart budget systems, significantly improving the accuracy, timeliness, and efficiency of decision-making (Shan, 2023). Integrated budget management meets three key requirements in higher vocational institutions. First, it contributes to narrowing the funding gap, as the average annual growth rate of budget allocations (6.8%) is still below the growth rate of demand for educational funding (9.2%) (National Bureau of Statistics of China, 2022). Second, it promotes transparency and accountability, as evidenced by the increase in annual budget disclosure rates at centrally managed higher education institutions, from 54% in 2015 to 100% in 2021, which contributes to the modernization of governance systems. Finally, it minimizes organizational risks. Data show that companies with comprehensive financial management have a 42% lower risk of default and a 68% lower risk of theft than companies without such systems (State Audit Bureau of the People's Republic of China, 2020). These results suggest that planned adjustments, supported by digital innovation and systematic assessment, can strengthen organizational health and resilience while optimizing budget efficiency.

Advantages and Improvements in Fuzhou’s Municipal Higher Vocational Colleges

Given the central role that vocational education plays in national development and its social functions, the Fuzhou municipal government has strengthened its fiscal policy through targeted institutional support (Liu, L.P., 2024). Over the past decade, these municipal fiscal



The 20th National and International Conference
"Strengthen knowledge to drive education and integrate across sciences for sustainable development"
December 3, 2025 Online Via Zoom

.....

policies and mechanisms have promoted the sustainable growth of vocational education by combining planning guidance, financial investment, and quality monitoring. The Fuzhou Vocational Education Quality Improvement Action Plan, a key component of this reform process, integrates long-term planning, fiscal allocations, and outcomes monitoring to improve student achievement (Fuzhou Municipal People's Government Office, 2024). Following the 2014 budget reform, policy evaluation cycles were shortened, enabling government departments to respond more quickly to emerging educational needs. Consequently, per capita funding increased significantly, with both performance-based and project-based funding increasing as a share of total funding. Investment in higher vocational colleges has continued to grow, particularly following the launch of the "Double High Plan" in 2020, which increased the share of municipal education spending allocated to higher vocational colleges. Driven by increases in per capita funding benchmarks and steady annual appropriations, this trend reflects improvements in the efficiency and quality of education financing (Wang, 2018). Transfer payments to higher vocational colleges, despite occasional fluctuations, have generally increased and now account for a significant portion of total transfer payments to higher education. Although initially modest, these transfers have reached unprecedented levels in recent years, directly enhancing institutional capacity and teaching quality (Liu, L.P., 2024). Overall, these fiscal strategies constitute a comprehensive policy framework within which targeted investments, systematic funding allocation, and long-term planning work together to enhance the long-term resilience and competitiveness of Fuzhou's vocational higher education.

In the field of education management, optimizing the budget expenditure structure not only helps to improve financial efficiency, but is also an important mechanism for advancing the long-term goals of the school, including improving teaching quality, strengthening student support services, and promoting academic development (Cao, W., 2024). According to China's financial classification system for higher vocational education expenditures, these are generally divided into personnel expenses, operating expenses, and special project expenses, with each category corresponding to a specific management function. Personnel expenses, such as faculty salaries, social security, and pensions, play an important role in faculty retention, job satisfaction, and productivity, and are key aspects of human resource management in education. Operating expenses are allocated per capita to ensure the smooth operation of administrative services and educational logistics, and to support daily teaching activities. Funds allocated for special projects are used to expand infrastructure, implement digital educational technologies, and develop applied teaching capabilities in accordance with the college's long-term plan, which are closely related to the implementation of educational policies and academic planning. (Liu, L.P., 2024). By adjusting its budget structure to align with its core educational functions, Fuzhou's higher vocational colleges have successfully harmonized financial investment with educational management objectives. According to financial expenditure data from 2014 to 2023, personnel expenses increased by 3.3 percentage points, strengthening the college's long-term teacher development strategy and improving teacher motivation and quality control capabilities (Liu, L.P., 2024). At the same time, administrative expenses decreased by 3.9 percentage points and special funds increased by 2.9 percentage points, reflecting more efficient budget investment. Targeted and prioritized allocation of funds. This structure promotes decentralized planning and allows each department to request funding for projects aligned with the direction of education reform. This strengthens bottom-up participation in resource allocation and improves the alignment of budgets with learning priorities. This structural optimization not only improves fiscal sustainability but also enhances the long-term alignment of educational objectives and financial management.



The 20th National and International Conference
"Strengthen knowledge to drive education and integrate across sciences for sustainable development"
December 3, 2025 Online Via Zoom

To further integrate financial planning into its educational management system, Fuzhou City implemented an integrated budget management information system in 2021. This digital transformation incorporates an administrative-focused budgeting approach and seeks to improve the efficiency and quality of university decision-making through data transparency, performance accountability, and real-time monitoring. The system integrates budget planning, execution, and evaluation functions, and promotes interdisciplinary collaboration between departments, administrative offices, and the finance department. This is essential to ensure that budget decisions are not limited to the finance department but reflect the true needs of the entire college, including teaching, research, and student development (Zhou, 2022). The system categorizes indicators according to specific educational functions (e.g., curriculum innovation, teaching quality, and improving the learning environment). In April 2022, a comprehensive analysis of 5,565 performance indicators was conducted across 68 faculties and 51 educational fields, covering all major administrative and academic disciplines (Zhou, 2022). Each faculty has the authority to add or delete indicators, encouraging active participation in performance-based budgeting and the development of more specific and educationally relevant indicators. This approach transcends financial management and integrates financial management into the broader organizational performance system, promoting a long-term, accountable, and learning-oriented budgeting model.

Existing problems in Fuzhou's Municipal Higher Vocational Colleges

One of the most serious problems facing Fuzhou's higher vocational college is the fragmentation of organizational governance, particularly in the relationship between long-term educational planning and the allocation of financial resources. Budgeting is typically handled by administrative and financial departments, but the lack of involvement of academic departments and leaders means that budgetary decisions are disconnected from key educational needs, such as curriculum innovation, faculty development, and applied research (Su and Lai, 2018). This hierarchical structure constrains the transition to a decentralized governance framework, which is essential for fostering participatory decision-making, and a cornerstone of contemporary educational management. Furthermore, insufficient horizontal collaboration across departments leads to planning processes focused on following procedures rather than aligning with educational priorities. Consequently, many school of colleges focus primarily on technical accounting practices and regulatory compliance, with less attention paid to the long-term impact of their budget choices or the assessment of pedagogical value. This creates a dual budget cycle. Mismatches between central government programs and institutional funding sources, such as tuition fees, further complicate planning, leading to inconsistent forecasts and disparate outcomes. This discrepancy undermines evidence-based planning and adaptive management, two pillars of effective educational governance.

The main problems facing vocational colleges in Fuzhou are the lack of a performance-based budgeting culture and a fragmented talent development system. From an educational management perspective, budgeting is not just a financial process; it is also a powerful tool for organizational behavior, incentives, and leadership development. However, many colleges view budget management as a passive compliance exercise, rather than a comprehensive management tool for improving educational quality, staff accountability, and overall organizational efficiency (Zhou, 2022). The root of the problem lies in conceptual and operational deficiencies. First, colleges leaders often lack a long-term understanding of how performance measurement impacts decisions such as hiring, promotions, and program investment. As a result, budget processes are siloed within departments and lack buy-in from



The 20th National and International Conference
"Strengthen knowledge to drive education and integrate across sciences for sustainable development"
December 3, 2025 Online Via Zoom

academic and human resources departments. Second, most faculty and administrative staff are not involved in setting performance goals or developing metrics, which undermines the legitimacy and autonomy of performance management. This contradicts the fundamental principles of participatory leadership and shared responsibility in modern educational governance. Furthermore, without a clear link between budget execution and investments in professional development and continuing education, colleges cannot inspire faculty and leaders to innovate and achieve excellence. This disconnects staff development from colleges long-term plan, reducing effectiveness in areas such as improving educational quality, building a talent pipeline, and developing staff competencies. Effective execution requires more than metrics and scorecards; it also requires a values-based management philosophy that links budgets to professional development, stakeholder feedback, and continuous quality improvement.

The current management structure of Fuzhou's higher vocational colleges suffers from a weak vertical structure. Lack of integration and horizontal accountability. Financial oversight is limited mainly to inspections. Financial data, no tracking of educational outcomes related to expenditures. Reports often focus on compliance rather than long-term plan importance and do not assess how the use of resources contributes to improved teaching, student outcomes, or institutional performance (Xie, 2017). At the same time, the lack of a closed feedback system prevents performance evaluations from being incorporated into subsequent budget decisions. For example, projects that fail to achieve expected educational outcomes are rarely subject to sanctions or future funding adjustments, creating a discrepancy between evaluations and strategic adjustments. The lack of a multidisciplinary team of finance and education experts reduces the effectiveness of internal monitoring and exacerbates the information asymmetry between administrative and educational departments. In this situation, important indicators such as student learning outcomes, graduation rates, and program quality are excluded from financial audits, creating a discrepancy between financial monitoring and evaluations of educational effectiveness.

Another key problem undermining educational equity and effectiveness is resource imbalance. In Fuzhou, private higher vocational colleges account for more than 70% of the region's educational institutions but receive less than 2% of public investment (Liu, L.P., 2024). This not only limits colleges' ability to maintain infrastructure and retain highly qualified teachers but also exacerbates inequalities in student access to quality education. From an educational administration perspective, this reflects the insufficient implementation of needs-based or performance-based funding models that take into account student enrollment, socioeconomic status, and institutional performance. Public colleges face similar problems, with teacher funding based on historical legacy and administrative influence, rather than teacher needs or student achievement (Yuan, N., 2024). Popular or politically influential fields often receive disproportionate funding, while important but less market-oriented programs, such as early childhood education and technical humanities, remain underfunded. This contradicts the principles of educational governance. Educational administration principles stipulate that resources should be aligned with long-term educational objectives, including balanced academic development and equal learning opportunities. Without reforming resource allocation mechanisms or introducing performance indicators and marginal benefit analysis, these structural imbalances will continue to hamper systemic improvement and the long-term response of higher vocational colleges.



Improvement Suggestion

In modern higher education administration, the budget should no longer be considered simply an accounting or compliance management tool. Rather, it must be redefined as a financial instrument for education. It is a dynamic mechanism that translates an colleges' mission into resource flows, connects educational priorities with projects, and enables flexible decision-making at all levels of administration. In this context, a good budget is not simply a spending plan; it is a framework that guides action, creates incentives for efficiency, and ensures accountability for the delivery of educational services (Barr and McClellan, 2018). This shift is particularly important for higher vocational colleges in Fuzhou. The current budget system emphasizes managing expenditures to achieve educational objectives and separates financial planning from academic operations.

Addressing this issue requires fully integrating budgets into the overall education administrate ecosystem to support institutional strategies, improve organizational effectiveness, and ensure equitable resource allocation. Reforms should focus on four key aspects: long-term alignment, harmonization of implementation efficiency and effectiveness, equitable resource allocation and flexibility, and closed-loop digital oversight. These four aspects not only reflect international best practices in higher vocational education financing but also directly address local government challenges such as fragmented planning, poor oversight, and inefficient use of funds (Jiang et al., 2020; Liu, 2024).

Purposeful Alignment of Budgeting and Educational Planning

Budgeting must be closely coordinated with college planning. A budget focused solely on the needs of each unit will not effectively fulfill the educational mission. Instead, a forward-looking budgeting system based on medium-term and long-term educational objectives, such as program modernization, faculty development, graduate employability, and internationalization, must be established. In the context of China's "Double High Plan," this entails establishing a medium-term expenditure framework to allocate resources based on phased academic goals and development indicators (Ministry of Education of the People's Republic of China, 2021). Furthermore, colleges' budgeting should follow the principles of project lifecycle management, including goal setting, resource planning, phased implementation, performance monitoring, and outcome evaluation. Each funded project, such as the establishment of a new laboratory, a faculty development program, or curriculum enhancement, should have a clear deadline and deliverable. Budget proposals should be aligned with college priorities and measurable indicators, such as student academic performance, faculty research output, and collaboration with industry (Kose et al., 2022). This goal-orientation not only improves planning accuracy but also enables a shift in organizational focus from reactive resource allocation to proactive investment in education. This strengthens organizational cohesion, reduces inefficient resource use, and improves goal alignment across departments. In this way, budgeting becomes a practical extension of educational administration, rather than an isolated financial activity.

Effective Execution and Results-Based Accountability

Effective budget management requires not only legal compliance but also collaboration between colleges, transparency in performance, and rapid adjustments. Fuzhou's higher vocational colleges should implement integrated budget management systems that connect administrative, academic, and financial departments on a single platform. These platforms should provide real-time data on budget execution progress, expenditure deviations, and key



The 20th National and International Conference
"Strengthen knowledge to drive education and integrate across sciences for sustainable development"
December 3, 2025 Online Via Zoom

performance indicators to facilitate collaboration between departments and provide early warning of delayed or underutilized funds (Behnke and Hegele, 2024). It is important that budget management be directly aligned with performance indicators. Each major budget line item should be aligned with clearly defined and mutually agreed-upon outcomes (e.g., improving faculty performance ratings, increasing the number of internships, achieving program accreditation, etc.). Colleges can implement performance-based funding mechanisms to award bonuses or expand program reach to high-performing units, while reviewing, adjusting, or reallocating funds to low-performing units (Zhou, 2022). From an administrative perspective, it is essential to establish multifunctional budget committees that include financial experts and education system managers. These committees monitor the achievement of program objectives and outcomes, resolve interdepartmental conflicts, and make informed decisions on the reallocation of funds. These mechanisms embody the modern principles of participatory governance and shared responsibility, fundamental pillars of educational administration (Cao, T. , 2024). By closing the loop between funding and results, colleges can move from a passive funding model to a proactive performance culture, ensuring that all expenditures serve clear educational purposes and contribute to institutional improvement.

Fair Resource Adjustment and Flexible Allocation

The third priority of budget reform is to improve the equity and efficiency of resource allocation among and within agencies, Liu L.P. (2024) notes, Fuzhou's private vocational colleges, where the majority of students enroll, receive less than 2% of public funding. This severely limits their ability to maintain educational quality and attract top talent. This imbalance undermines not only equity in public education but also the effectiveness of the region's workforce development system as a whole. To solve this problem, A categorical, results-based funding model should be introduced. Public funds should be allocated based on factors such as student learning outcomes, infrastructure, alignment with labor market needs, and colleges' performance. Colleges should establish secondary allocation mechanisms to reward units and programs based on marginal benefit analysis. Programs that achieve high results through innovation, student academic achievement, or community engagement should receive strategic funding. Programs that continue to underperform could be restructured or merged. Concurrently, higher vocational colleges are advised to establish flexible budgetary reallocation systems that permit adjustments during the fiscal year to address emerging requirements or evolving conditions. Structured adjustment procedures, triggered by identified performance gaps, can direct mid-year fund transfers and ensure that resources remain aligned with institutional priorities. Such measures not only enhance operational efficiency but also cultivate an adaptive management ethos capable of responding effectively to uncertainties and seizing opportunities for innovation(Jiang et al., 2020).

Closed Circuit Digitalization and Monitoring

The advancement of budget reform relies on establishing a real-time digital monitoring system that supports transparency, accountability, and ongoing improvement. In Fuzhou, initial progress has been made through the development of a unified budget management information platform; however, the system must move beyond basic record storage to provide decision-making support and predictive analysis (Shan, 2023). Future systems should incorporate technologies such as AI-driven anomaly detection, blockchain-based data recording, and interactive dashboards that present both financial and academic performance in real time. With these functions, colleges can monitor deviations, pinpoint potential risks, and analyze



irregularities as they occur. For instance, when project outcomes differ greatly from planned targets, the system could trigger a review process involving finance staff, project leaders, and external auditors to identify causes and recommend solutions. In addition, performance information should be accessible not only to senior administrators but also to faculty members, students, and support staff. Such openness encourages shared responsibility and strengthens trust in institutional decision-making. Achieving flexible governance and stronger budget discipline requires standardized feedback loops that connect planning, implementation, assessment, and review (Chang et al., 2017; Asare et al., 2024). Ultimately, digital governance is not only a matter of technology but also a means of applying innovative management practices that help colleges make faster, more informed, and more accountable choices in educational financing.

Conclusion and Further Work

This paper examines budgeting as an instrument for educational financing in the administration of Fuzhou's municipal higher vocational colleges. A comprehensive analysis of colleges' budgeting practices identifies four major weaknesses: a fragmented governance framework, insufficient accountability for results, inequitable allocation of resources, and a lack of coherence between financial management and educational principles. These shortcomings not only diminish financial efficiency but also obstruct the achievement of critical educational objectives, including enhancing teaching quality, fostering teacher development, and improving student performance. To address these challenges, the paper presents a four-dimensional improvement framework—purposeful alignment, results-based accountability, equitable resource distribution, and digital oversight that integrates financial rationale with educational administration concepts. The findings indicate that a budget system designed and implemented along these lines can serve as a catalyst for organizational change, active stakeholder engagement, and the generation of educational value. From a broader perspective, this discussion contributes to the ongoing dialogue on embedding effective financial management into the long-term planning and structural design of vocational education, guiding the transition toward more responsive, accountable, and learning-centered administration.

This paper proposes a conceptual and operational framework for enhancing budget management in higher vocational colleges and highlights several directions for further investigation. First, empirical analyses should be conducted across different regions and colleges to assess how varying administrative contexts influence the effectiveness of performance-based budgeting models and the redistribution of resources. Second, greater attention is needed to the integration of emerging technologies such as artificial intelligence, big data analytics, and blockchain into financial management systems, with the aim of improving forecasting accuracy, preventing fraud, and enabling real-time oversight. Third, budget planning should be more closely aligned with student-centered goals, including career preparedness, equitable access to admissions, and inclusive development. This may involve linking budgetary indicators to measures such as student achievement outcomes and graduate employment rates. Fourth, comparative assessments across educational sectors are necessary. Examining the relationships between vocational education, general higher education, and the K-12 system can help identify effective practices as well as challenges in education finance reform. In addition, targeted analyses should explore how fiscal policies and government incentive programs influence organizational behavior and financial equity in both public and private educational colleges. Collectively, these lines of inquiry would provide a stronger basis



for embedding financial instrument as a central component in sustaining educational quality and institutional resilience.

References

- Anthony, R. N. (1965). *Planning and Control Systems: A Framework for Analysis* (1st ed., p. 17). Harvard University Press.
- Asare, S., Fobiri, G., & Bondinuba, F. K. (2024). Enhancing fairness, transparency and accountability during tendering under Ghana's procurement system: A systematic review. *Built Environment Project and Asset Management*.
<https://doi.org/10.1108/bepam-04-2024-0107>
- Barr, M. J. & McClellan, G. S. (2018). *Budgets and Financial Management in Higher Education* (3rd ed., pp. 4–5). Jossey-Bass.
- Behnke, N., & Hegele, Y. (2024). Achieving cross-sectoral policy integration in multilevel structures—Loosely coupled coordination of “energy transition” in the German “Bundesrat.” *Review of Policy Research*, 41(1), 160–183.
<https://doi.org/10.1111/ropr.12551>
- Cao, W. (2024). Analysis of the Impact of Financial Structure Optimisation of Universities on Government Accounting Comprehensive Budget Performance Management Based on ABC Model Perspective. *Applied Mathematics and Nonlinear Sciences*, 9(1).
<https://doi.org/10.2478/amns-2024-3620>
- Cao, T. (2024). Research and Application of an Integrated Budget Management System for Provincial Financial Management (pp. 363–373). In *Proceedings of the International Conference on Financial Management* (pp. 363–373). Springer Nature.
https://doi.org/10.1007/978-981-99-6956-2_32
- Chang, W., Atanasov, P., Patil, S. V., Mellers, B. A., & Tetlock, P. E. (2017). Accountability and adaptive performance under uncertainty: A long-term view. *Judgment and Decision Making*, 12(6), 610–626.
- Fuzhou Municipal People's Government Office. (2024, February 27). Notice on issuing the ten measures to deepen the reform of modern vocational education system construction in Fuzhou (Document No. Rong Zheng Ban Gui [2023] 29).
- International Accounting Standards Board. (2003). *IAS 32: Financial instruments: Presentation*. IFRS Foundation.
- Jiang, L., Yang, X., & Jin, J. (2020). Research on university budget management under the background of high-quality development. *West Forum on Economy and Management*, 31(3), 57–64. <https://doi.org/10.12181/jjgl.2020.03.07>
- Kose, T., Bakici, T., & Hazir, O. (2022). Completing Projects on Time and Budget: A Study on the Analysis of Project Monitoring Practices Using Real Data. *IEEE Transactions on Engineering Management*, 1–12. <https://doi.org/10.1109/tem.2022.3227428>
- Kusumawati, E. (2024). Strategic Planning in Education: A Bibliometric Analysis. *Evolutionary Studies in Imaginative Culture*, 1815–1829.
<https://doi.org/10.70082/esiculture.vi.1597>
- Li, C. (2024). Discussion on the Optimization Strategies for Comprehensive Budget Management of Media Enterprises Based on Strategic Orientation. *Frontiers in Business, Economics and Management*, 14(2), 184–188.
<https://doi.org/10.54097/twjyz646>



The 20th National and International Conference
"Strengthen knowledge to drive education and integrate across sciences for sustainable development"
December 3, 2025 Online Via Zoom

-
- Liu, L.P. (2024). Research on optimizing fiscal investment in municipal higher vocational colleges in Fuzhou (Master's thesis, Fujian Agriculture and Forestry University).CNKI. <https://doi.org/10.27018/d.cnki.gfjnu.2024.000982>
- Liu, X. (2024). Development of an Comprehensive Budget Management and Performance Evaluation System: A Case Study of Company A. *Academic Journal of Management and Social Sciences*, 7(3), 69-72.<https://doi.org/10.54097/qtq10266>
- Ministry of Education of the People's Republic of China. (2021). *Strategic framework for the phased development of high-level vocational institutions and disciplines*. Ministry of Education.
- National Audit Office of the People's Republic of China. (2021). *Audit report on budget execution of universities directly under the Ministry of Education (2020)* [Report].
- National Bureau of Statistics of China. (2022). *China statistical yearbook 2022*. China Statistics Press. <http://www.stats.gov.cn/sj/ndsj/2022/indexeh.htm>
- Shan, J. (2023). Improvement of the financial management supervision system of universities in the context of big data. *Applied Mathematics and Nonlinear Sciences*. <https://doi.org/10.2478/amns.2023.2.00186>
- State Council of the People's Republic of China. (2014). *Guiding opinions on promoting the transformation of government functions through the implementation of the negative list system* (Document No.11).
- Su, B., & Lai, M. (2018). Research on optimizing budget Management in colleges based on the New Budget Law. *Management Observer*, (17), 167-169, 172. <https://doi.org/10.3969/j.issn.1674-2877.2018.17.066>
- Wang, D. D. (2018). Performance-based resource allocation for higher education institutions in China. *Socio-Economic Planning Sciences*, 65, 66–75. <https://doi.org/10.1016/J.SEPS.2018.01.004>
- Wildavsky, A. (1974). *The Politics of the Budgetary Process* (2nd ed., pp. 4-5). Little, Brown and Company
- Xie, J. (2017). Research on budget management in colleges under the treasury centralized payment system (Master's thesis, Fuzhou University). China National Knowledge Infrastructure.
- Yuan, N. (2024, December). Research on the Optimization Path of University Budget Performance Management. In *2024 7th International Conference on Humanities Education and Social Sciences (ICHESS 2024)*(pp. 895-902). Atlantis Press.
- Zhou, W. Z. (2022). Research on budget performance management in Fuzhou (Master's thesis, FuzhouUniversity). CNKI. <https://doi.org/10.27022/d.cnki.gfzhu.2022.002091>