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Optimization of Direct and Indirect Cost Allocation to Improve the Quality of Education Services

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Abstract: Education costs, which are divided into direct costs and indirect costs, play an important role in improving the quality of education services. An appropriate allocation strategy for these two types of costs is urgently needed to optimize the sustainability of educational operations. This study aims to find out strategies and challenges in optimizing the allocation of education costs to improve education services. The method used in this study is library research. The results of this study show that several strategic steps include direct cost allocation for infrastructure, development of the quality of educators through training, technology procurement, strengthening extracurricular activities for soft skills, and regular evaluation of budget allocation. However, there are challenges in optimizing cost allocation, such as budget limitations, imbalances in fund allocation, lack of transparency, lack of technological support, and social and economic inequality.

Keywords: Optimization, Tuition Fees, Educational Services

1. Introduction

Education serves as a fundamental pillar in a nation's development. Ideally, it should be accessible to all segments of society, free from financial barriers.[1] Education financing is one of the central issues that directly affects the accessibility and quality of education services. In the context of developing quality human resources, education has a strategic role as the main pillar. However, the challenges of education financing involving direct costs and indirect costs are often an obstacle to achieving these goals. Direct costs include components such as tuition, books, uniforms, and learning aids, while indirect costs include transportation support, meals, additional learning facilities, and scholarship programs. [2, pp. 24–25]

Optimizing education financing is becoming increasingly important considering the significant differences in people's economic capabilities. Economically weaker families often face difficulties in financing their educational needs, either directly or indirectly, potentially exacerbating social inequality. This inability not only hinders access to quality education but also creates long-term impacts in the form of limited opportunities for improving living standards and widening social gaps. This shows that the issue of education financing not only has an impact on individuals but also has implications for social and economic development as a whole.[3]

In addition, the autonomy policy of educational institutions in managing finances adds to the complexity of the problem. Many educational institutions have to shift the burden of costs to the community due to budget constraints, thus posing new challenges in the provision of inclusive and equitable education services. The imbalance in budget

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allocation between direct and indirect costs is also a significant obstacle, which often hinders the development of the overall quality of education services. In this context, the ineffectiveness of education cost allocation strategies often exacerbates service inequality, especially in economically and geographically marginalized regions.[4]

This problem is exacerbated by the lack of transparency and accountability in financial management in several educational institutions, which has the potential to cause inefficiency and budget abuse. In addition, the use of technology to support education financing management is still very limited, especially in areas with inadequate digital infrastructure.[5] This raises an urgent need to identify effective strategies for managing education costs optimally.

This research aims to answer fundamental problems related to optimizing education financing. How can an effective education cost allocation strategy be implemented to meet the operational and sustainability needs of education? What are the factors that hinder the management of direct and indirect education costs? With this approach, this research is expected to offer relevant solutions to support inclusive, quality, and sustainable education.

2. Results and Discussion

The cost of education is divided into two, namely direct costs and indirect costs. Direct costs include costs incurred for the purpose of implementing teaching and student learning activities in the form of purchasing teaching tools, learning facilities and teacher salaries incurred by both the government, parents and students themselves. Meanwhile, indirect costs are lost costs (*earning forgone*) in the form of opportunity costs that students sacrifice during their studies, including living expenses, transportation and official records[6, p. 3]

In principle, direct costs are funds used for school operations directly for the benefit of the teaching and learning process. Meanwhile, indirect funds are lost profits and funds that support students to be able to attend school. With the right allocation, these two types of costs play an important role in improving the quality of educational services in educational institutions, allowing the optimal fulfillment of operational needs and the sustainability of student education.

Direct and Indirect Education Fee Allocation Strategies

1. Direct Tuition Fee Allocation for Infrastructure and Facilities

One of the important aspects in improving the quality of education services is the allocation of direct education costs aimed at the development of infrastructure and facilities in the educational environment. Educational facilities, which include classrooms, laboratories, and learning equipment, as well as supporting infrastructure such as roads, dormitories, and recreation areas, play a role in creating a comfortable and conducive learning environment.[7, pp. 1-2] The presence of quality facilities and infrastructure supports a more effective learning process and attracts more students, educators, and other stakeholders[5, pp. 1-3]. Therefore, direct investment in this infrastructure has a significant impact on the quality and image of educational institutions.

However, the allocation of costs for educational facilities is not just an investment in physical form, but also includes efficient management. This increase in the capital of these facilities is often associated with higher education costs. However, the cost also shows an effort to maintain better quality. These additional costs are part of an investment that reflects an improvement in the quality of education services that are sometimes not quantitatively measured.[9, p. 27] Therefore, the allocation strategy must prioritize careful planning by considering the aspects of local needs and the characteristics of each educational institution.

Steps that can be taken, namely balancing direct expenditure on infrastructure and expenditure on education services, also need to be considered strategically. Optimizing the sharing between spending on services and infrastructure

is important to achieve sustainable growth in the quality of education. A balanced distribution can reduce the risk of congestion, expenses, or inefficiencies in managing education costs.[9, pp. 16–19] For example, proportionate expenditures allow institutions to meet the needs of physical facilities without neglecting aspects of direct services, such as curriculum updates and competency development of educators.

2. Development of the Quality of Educators and Training Personnel

The allocation of education costs for the development of education quality is essential to improve the quality of education in institutions. Effective resource allocation budgeting can have a significant impact on teacher education, which ultimately leads to improved student outcomes. The importance of quality teacher education is the basis for national development, because teachers form future generations[7, p. 5]. The following are the steps that can be taken to improve the quality of education:

- a. **Course Reorganization:** the need to reorganize teacher education courses to make them more relevant and responsive to current educational demands. This includes updating the curriculum to reflect modern teaching practices and learning theories.
- b. **Innovative Training Programs:** Implementing innovative training programs is essential. These programs should focus on equipping educators with the skills necessary to adapt to the changing educational environment and diverse student needs.
- c. **In-Service Training:** the importance of in-service training for teachers. Regular training sessions can help educators stay updated with the latest teaching methodologies and technologies, allowing them to better address the dynamic needs of their students.
- d. **Use of ICT:** Incorporating Information and Communication Technology (ICT) into teacher education is another recommended step. This can improve the effectiveness of teaching and give educators the tools to engage students in a more interactive and meaningful way.
- e. **Provide facilities for the professional growth of teacher educators.** This includes access to workshops, seminars, and conferences that focus on contemporary educational challenges and solutions.[10]

3. Provision of Technological Facilities and Infrastructure

In the digital era, the use of technology in learning is increasingly important, this technology affects the learning media used today. Therefore, educators or teachers are required to have digital skills, teachers must understand and master technology [11, pp. 20–21] By allocating direct costs for technology (such as computer devices, internet access, and online learning platforms), educational institutions can develop digital-based learning methods. Technology can also help find information on lesson materials for students and a means of communication between teachers and thus help the learning process [12, pp. 18–21]

4. Extracurricular Activities and Soft Skills Development

Extracurricular activities, talent development programs, and soft skills training are important elements in improving the quality of education holistically. Financing for these activities can be allocated with the aim of supporting learning that not only focuses on hard skills, but also other relevant skills. A person's success is not solely determined by technical ability (*hard skills*) alone, but is more dominantly influenced by *soft skills*. Research shows that about 80% of a person's success is determined by soft skills, while only 20% comes from *hard skills*. This confirms that *soft skill* development is an urgent need for every individual. [13, p. 132]

In the context of the business and industrial world, *soft skills* are one of the main criteria in the selection of human resources. Skills such as communication, teamwork, leadership, and problem-solving not only complement technical competencies but are also the main requirements for learners to become quality

graduates.[14, p. 248] By practicing soft skills from an early age, students are not only equipped with technical skills, but also interpersonal skills that make them more competitive and adaptive individuals. This is in line with the needs of the job market that increasingly demands holistic skills, making education graduates a valuable asset for economic and social development.

5. Cost Allocation Evaluation

To ensure that direct and indirect allocation of education costs contributes to improving the quality of education services, it is important to conduct regular evaluations. This evaluation can ensure that every allocated fund really has an impact on improving the quality of education and allows educational institutions to make adjustments if there is an ineffective use of the budget.

The evaluation function can provide valid and reliable information on the performance of programs or policies to reveal how far goals and targets have been achieved. The indicators or evaluation criteria discussed are 1) Effectiveness, namely whether the desired results have been achieved, 2) Responsiveness, whether the results of the policy contain satisfactory preferences/values[15, p. 89]

Challenges in Optimizing Direct and Indirect Education Costs

1. Budget Limitations

Direct education costs, such as teacher salaries, facility maintenance, and the provision of teaching materials, are the main needs that must be met by educational institutions. However, indirect costs, such as training, transportation, or subsidies for underprivileged students, often lack adequate attention. The main challenge faced by education managers is budget constraints, which can affect the management of overall operational and development needs. [16, p. 87]

These resource limitations also have an impact on the quality of teachers, especially in terms of access to training and professional development. Efforts to improve teacher competence are often hampered due to insufficient budget allocation. Additionally, limited financial support can reduce teachers' ability to access cutting-edge learning resources, which can ultimately affect the quality of instruction provided to students. [17, p. 3143] Efficient and balanced management is essential to ensure that every aspect of education receives appropriate attention.

2. Imbalance in Fund Allocation

The unequal distribution of the budget between direct and indirect costs is often an obstacle in the management of education. This imbalance can lead to an excessive focus on one aspect, such as prioritizing physical infrastructure, without taking into account other important needs, such as teacher training or student competency development. In many cases, budget allocation is more focused on administrative aspects than improving the quality of learning. For example, funds are often allocated to physical infrastructure improvements rather than to the purchase of adequate practical equipment or teacher training.[18, p. 185]

This imbalance also has an impact on the lack of facilities and infrastructure that support an effective learning process. When budgets are geared more towards physical needs, other equally important aspects, such as the provision of interactive learning facilities or professional training for teachers, are neglected. This can hinder the achievement of quality and holistic educational goals[17, p. 3165]

3. Lack of Transparency and Accountability

A lack of transparency in the financial management system can give rise to the potential for misuse of funds, which ultimately reduces the effectiveness of the use of education fees. Transparency in financial management is an important key to creating accountability, namely a guarantee of public trust through information disclosure and the implementation of responsibilities honestly and professionally.[19, pp. 89-90] Transparency also refers to the openness of managers, including the government, in providing information related to public resource management

activities to parties who need information to ensure the smooth running of an activity process.

With transparency, every policy taken or activity carried out can be thoroughly supervised, so as to prevent irregularities or fraud. In addition, accountability and transparency also bring benefits in the form of creating a conducive work atmosphere, where information disclosure facilitates coordination and increases trust in the organizational environment.[20, p. 165] The steps that can be taken to overcome the transparency problem are:

- a. Conduct training and education for financial managers
- b. Create clear and structured policies on financial management
- c. Improving internal oversight mechanisms to prevent misuse or misappropriation of funds
- d. The use of financial technology to expand access to finance[21, p. 83]

4. Lack of Technology Support

ICT has the potential to improve efficiency, transparency, and accountability in financial management by providing tools for accurate record-keeping, fast reporting, and easy access to information for all stakeholders. But unfortunately, some educational institutions have not utilized technology for financial management efficiency, which causes budget management to be less than optimal. This is due to a lack of human resource capacity, limited technological infrastructure and lack of cost.[22, p. 54]

5. Social and Economic Inequality

The difference in people's economic ability is one of the main causes of inequality in access to education. This gap affects not only direct financing, such as tuition, but also indirect financing, such as transportation, learning needs, and access to scholarships. People with low financial ability often find it difficult to meet these needs, thus having an impact on equality of educational opportunities. For example, children from underprivileged families may experience difficulties in reaching school due to transportation limitations, which ultimately affects their attendance and learning process. [23, p. 13158]

Social and economic inequality can also be seen from the distribution of scholarships that are often uneven or inadequate to cover the needs of students.[24, p. 8543] This further widens the gap between the upper and lower economic groups, where students from well-off families have easier access to quality education, while students from underprivileged families have to struggle harder to simply get a basic education. Therefore, a collective effort is needed from governments, educational institutions, and communities to ensure that education financing, both direct and indirect, can support equitable access and reduce the impact of social and economic inequality.

4. Materials and Methods

This study uses a qualitative approach with a library research method to analyze the types of direct and indirect education financing and their influence on improving the quality of education in Indonesia. The main source of data for this type of research comes from written documents, such as books, scientific articles, and journals that discuss the topic that has been discussed. [25, p. 6] The discussion in this study is the cost allocation strategy, as well as the challenges and solutions faced in the management of the education budget.

Data analysis was carried out with a content analysis approach to identify the main themes related to education cost management. This research also focuses on how direct and indirect cost allocation strategies can be optimized to support the provision of educational facilities, the development of educators, and educational services holistically. To maintain the validity of the findings, the data is compared with various relevant and current sources of literature.

The results of this study are expected to provide theoretical and practical guidance in understanding the relationship between direct and indirect education financing and improving the quality of education, as well as offer insight into strategies for optimizing education budget allocation in accordance with the context and needs of education in Indonesia

5. Conclusions

The allocation of direct and indirect education costs has a strategic role in improving the quality of education services. Direct costs include operational needs such as teaching, infrastructure, and quality development of educators, while indirect costs cover lost opportunities and other supporting costs such as transportation and students' living needs. Both complement each other and require balanced management to achieve optimal educational outcomes.

Some of the strategies that can be implemented include allocation for quality infrastructure, development of educators through training, provision of educational technology, and support for extracurricular activities for soft skills development. In addition, regular evaluations are needed to ensure the effectiveness of budget allocation in supporting the quality of learning.

However, challenges such as budget constraints, imbalances in fund allocation, lack of transparency, lack of technological support, and socio-economic inequality often hinder the optimization of education costs. To overcome this, transparent financial management, technology investment, and collaboration between the government, educational institutions, and the community are needed. With good management, the allocation of direct and indirect education costs can support the sustainable growth of education quality, reduce access gaps, and increase the competitiveness of educational institutions

References

- [1] M. Amin, "Strategies for Utilizing Crowdfunding in Supporting Education Financing in the Digital Era," *Journal of Education Policy Analysis (JEPA)*, vol. 2, no. 2, p. 54, 2024.
- [2] Rusdiana, *Manajemen Pembiayaan Pendidikan: Filosofi, Konsep, dan Aplikasi*. Bandung: TRESNA BHAKTI Press Bandung, 2021.
- [3] Y. C. Pamungkas, L. Hamidah, and R. Purnomo, "Problematika Ekonomi dalam Dakwah: Studi Realita Akses Pendidikan di Pondok Pesantren dan Dampak Biaya," *Kamaya*, vol. 7, no. 4, pp. 38–48, Nov. 2024, doi: 10.37329/kamaya.v7i4.3715.
- [4] S. Reinders, M. Dekker, and J. Falisse, "Inequalities in higher education in low- and middle-income countries: A scoping review of the literature," *Development Policy Review*, vol. 39, no. 5, pp. 865–889, Sep. 2021, doi: 10.1111/dpr.12535.
- [5] N. W. Susanto, "Peningkatan Daya Saing Sekolah Melalui Implementasi Platform Pendidikan Nasional Berbasis Teknologi di Indonesia," *Management of Education: Manajemen Pendidikan Islam*, vol. 10, no. 02.
- [6] T. M. PENDIDIKAN and E. S. Hasibuan Din Oloan Sihotang, Asa'aro Laia, Azhar Azis, Babby Hasmayni, Johannes Lumbanbatu, Rismahara Lubis, Rosmawaty Nadeak, Tumpal Manahara Siahaan, Ditta Manullang, Jonson Rajagukguk, Lenni Sinaga, Ilyas Sitorus, Basir, *Bunga Rampai EKONOMI DAN PEMBIAYAAN PENDIDIKAN*. Sioarjo: Zifatama Jawara, 2020.
- [7] T. Illahi, "Sarana dan Prasarana Pendidikan," *Konsep Administrasi Pendidikan*, 2020.
- [8] H. Afriansyah and R. Yunasril, "Administrasi Peserta Didik," *Konsep Administrasi Pendidikan*, 2022, doi: 10.17605/OSF.IO/NRXH8.
- [9] P. Agénor, "Infrastructure, Public Education and Growth with Congestion Costs," *Bulletin of Econ Res*, vol. 64, no. 4, pp. 449–469, 2012, doi: 10.1111/j.1467-8586.2011.00395.x.
- [10] J. Rout, "Quality improvement in teacher education.," *International Education and Research Journal*, 2017.
- [11] Belva Saskia Permana, Lutvia Ainun Hazizah, and Yusuf Tri Herlambang, "Teknologi Pendidikan: Efektivitas Penggunaan Media Pembelajaran Berbasis Teknologi Di Era Digitalisasi," *Khatulistiwa*, vol. 4, no. 1, pp. 19–28, 2024, doi: 10.55606/khatulistiwa.v4i1.2702.
- [12] H. Satria, R. B. Nafisa, S. V. Putri, and G. Gusmaneli, "Pemanfaatan Teknologi Pendidikan dalam Meningkatkan Karakter Anak Bangsa di Era Digital," *J. Reg. Dev. Tech. Initiatives*, vol. 1, pp. 17–26, 2023, doi: 10.58764/j.rdti.2023.2.46.
- [13] S. Khanifah and N. Fatimah, "Penguatan Soft Skill Kecerdasan Sosial Peserta Didik melalui Kegiatan Ekstrakurikuler Di SMA IT Bina Amal Semarang," *SOLIDARITY*, vol. 12, no. 1, pp. 131–146, 2023, doi: 10.15294/solidarity.v12i1.71470.
- [14] N. R. Arminsyah, "Pengaruh Kegiatan Ekstrakurikuler Terhadap Peningkatan Kemampuan Soft Skill Peserta Didik (Studi Survey Di SMKN 34 Jakarta)," *Jurnal Sains dan Teknologi*, vol. 5, no. 1, 2023.

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- [15] H. Hanifah, H. N. Hasanah, R. N. Rahayu, R. Nuraeni, R. Sianturi, and L. Nur, "Evaluasi Alokasi Anggaran Dana BOS untuk Gaji Guru Honorer Sekolah Dasar di Kabupaten Tasikmalaya," *j. PGSD*, vol. 15, no. 1, pp. 87–96, 2022, doi: 10.33369/pgsd.15.1.87-96.
- [16] S. N. S. Sabrina and A. Effana, "Desentralisasi Manajemen Pembiayaan dan Konflik dalam Mahalnya Biaya Pendidikan," *Karimah Tauhid*, vol. 1, no. 1, 2022.
- [17] N. Hasanah, M. A. Nur, S. A. Rahmatillah, D. Darwisa, and K. H. Putri, "Analisis Faktor Penghambat dan Upaya untuk Peningkatan Mutu Pendidikan di Sekolah Dasar Negeri," *jiiip*, vol. 7, no. 3, pp. 3162–3169, 2024, doi: 10.54371/jiiip.v7i3.3769.
- [18] A. R. Milah, U. Hasanah, and R. Nurhidayat, "Implementasi Manajemen Pembiayaan Pendidikan di SMK Negeri 1 Cijulang dalam Meningkatkan Mutu Pendidikan," *jupenus*, vol. 2, no. 2, pp. 183–188, 2024, doi: 10.59996/jurnalpelitanusantara.v2i2.574.
- [19] T. L. W. Maura Hanisa Az'zahra, "Analisis Hukum Terhadap Kurangnya Transparansi Serta Akuntabilitas Pelaporan Keuangan Dalam Suatu Perusahaan," *Media Hukum Indonesia (MHI)*, vol. 2, no. 3, 2024, doi: 10.5281/ZENODO.11541497.
- [20] Nurul Widiana Amin, Eni Indriani, and Yusli Mariadi, "Akuntabilitas Dan Transparansi Pengelolaan Dana Bantuan Operasional Sekolah (Bos) pada Sekolah Dasar di Kecamatan Mataram Tahun 2021," *Risma*, vol. 2, no. 1, pp. 166–174, 2022, doi: 10.29303/risma.v2i1.193.
- [21] A. B. Muslim, D. S. Wulandari, K. Riyanto, and Y. B. Riando, "Implementasi Sistem Akuntansi Berbasis Teknologi untuk Meningkatkan Transparansi dan Pengelolaan Keuangan Koperasi," *Masyarakat Berkarya: Jurnal Pengabdian dan Perubahan Sosial*, vol. 1, no. 3, 2024.
- [22] W. Syachbrani, "Peran Teknologi dalam Meningkatkan Akuntabilitas Pengelolaan Keuangan Desa," *BIJAC: Bata Ilyas Journal of Accounting*, vol. 5, no. 1, 2024.
- [23] I. Maula, A. L. Sari, D. S. Sarimin, and R. H. S. Rondonuwu, "Pendidikan untuk Pemerataan Pembangunan: Memperjuangkan Hak Semua Anak," *Journal on Education*, vol. 05, no. 03, 2023.
- [24] R. Sulfiandi, "Pengaruh Belanja Pendidikan Terhadap Pemerataan Penerimaan Bantuan," *Jurnal Pendidikan dan Konseling*, vol. 4, no. 5, 2022.
- [25] M. N. Adlini, "Metode Penelitian Kualitatif Studi Pustaka," *Edusampul*, vol. 6, no. 1, 2022.