

Design and Build a Mobile Application Model for Supervision of Educational Financing through a Collaborative Managerial Assistance Program for Junior High Schools in Deli Serdang Regency

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Abstract. The purpose of this research is to develop a mobile application model for monitoring education financing in junior high schools in Deli Serdang Regency by implementing a collaborative managerial assistance program. This research continues previous research which has developed a model of education financing management to optimize the marginal contribution of schools. One strategy that has been successfully implemented in the financing management model is supervisory assistance. Through this research it is hoped that it will be able to produce a model of managerial assistance program that is most appropriate in the implementation of the education financing oversight function. Furthermore, in implementing the supervisory function, a mobile application was designed to carry out supervision of education financing in schools.

This study uses a qualitative research method that aims to identify phenomena that occur in the field to be presented in the form of a model for monitoring education financing. The research was conducted from February to October 2023 at junior high schools in Deli Serdang Regency. The author determines two schools as a place to make observations. Respondents consisted of the Head of the Junior High School Section of the Deli Serdang Regency Education Office, the Principal, the Deputy Principal, the School Treasurer, and the School Supervisor.

Through the development of a school education financing supervision model, it is hoped that it will be able to improve the supervisory function in the stages of school education management. The model for supervising school education financing will greatly contribute to increasing the efficiency and effectiveness of fund management, the quality of education, and the transparency and accountability of school finances.

Keywords: Supervision model, education financing.

1 Introduction

Education financing is providing the funds or resources needed to provide education. Education funding can come from various sources, such as the government, the private sector,

or from funds collected from the community (donation funds). Education financing can be used for various purposes, such as providing learning facilities, regulating teacher salaries, or providing financial assistance for disadvantaged students. The fund management process can also be used to provide facilities, resources, and educational programs. Education financing can be managed in various ways, such as with a financing system regulated by the government or with a financing system managed by the private sector. In a government financing system, the government provides funds for education and regulates how these funds are used. Meanwhile, in the private financing system, education is financed and managed by the private sector.

The cost of education is one of the most critical factors in education administration. School quality will be good if the cost of education is managed optimally. The purpose of managing education financing is to achieve the expected school quality. The school's vision and mission must remain the primary concern at each financing management stage. One of the standards that support the achievement of quality education is the standard of education financing. With an educational financing standard, other measures may be carried out effectively [1] [2]. However, the achievement of the quality of education will be hampered. It will only succeed if the educational institution uses funds to manage suitable education financing [3]. Azhari & Kurniady (2016) and [5] have researched the relationship between the management of education financing and the quality of vocational high schools in Bandung. The results of the research state that the influence of education financing management on the quality of education in vocational high schools is powerful. Problems that invariably arise in education financing management are 1) The inability of the family to finance education, 2) gaps in education financing, 3) Bureaucracy and poor management, 4) Lack of transparency and accountability, and 5) limited funds and available budget. The way to overcome these problems is by 1) Increasing educational accessibility, 2) Increasing the efficiency of the use of funds, 3) Increasing transparency and accountability, 4) Development of Human Resources, and 5) Cooperation between the public and private sectors

Education financing is critical to ensure quality education and encourage economic and social growth. However, education financing can also give rise to problems such as inequality in access to education and corruption in the management of education funds. The government often plays a significant role in financing education by providing funds from the state budget or aid programs to schools and students. The private sector can also play a role in financing education through donations or CSR programs. Suitable education financing can increase access to education for all individuals and improve the quality of education in general. However, problems still need to be addressed in the education financing process, such as a lack of available funds, unequal distribution, or transparency in fund management.

One way to solve problems in education financing is by supervising the ongoing education financing process. Supervision of school education financing is a monitoring process carried out by the government, an independent supervisory agency, or an authorized body/educational authority appointed by the government to ensure that the funds used for school education are used appropriately under the objectives and plans that have been determined. This supervision includes monitoring the management of school funds, financial inspections/audits, management supervision, and evaluation of educational results through internal auditing and supervision mechanisms in schools. This supervision aims to ensure that funds used for school education are used effectively and efficiently to improve the quality of education and provide

equal opportunities for all students to learn. The analysis results prove a relatively strong relationship between the implementation of education management and the marginal contribution of schools [6]). Further research tries to build an education financing model that aims to optimize the marginal contribution of schools. Research was conducted at vocational high schools and succeeded in building a model with several selected activities which were deemed capable of accommodating the implementation of effective and efficient learning [7].

Some problems that may be encountered in monitoring school education financing include a need for more transparency in the management of education funds, which can lead to corrupt practices or misuse of funds. Corruption: There is a possibility that school education funds are used for other purposes that are not under their intended purpose; Lack of capacity and resources necessary to conduct adequate supervision, such as a lack of competent auditors or supervisory staff; Lack of coordination between parties responsible for supervision and management of education funds, such as between regional government and central government. ; Lack of access to information needed to carry out supervision, such as unavailable or inaccurate financial reports; Lack of community participation: The community is often not involved in decision-making regarding school education financing, making it difficult to evaluate whether the funds used are in line with community needs; Lack of effective sanctions for violations in the management of education funds, such as the lack of applicable punishment or compensation mechanisms; Lack of standards: Without clear standards on how to measure school performance, it is difficult to determine whether funds used for school education are being used effectively.

One of the standards that supports the achievement of quality education is education financing standards. Education financing standards are necessary to implement other standards effectively [1]. Quality education will only be successful if institutions rely on education funds with good education financing management (Priatna et al., 2018). Education financing management is a factor that will support the achievement of quality education. Even though educational institutions have adequate funds, they must be managed effectively and efficiently to support quality education. Schools are seen as organizations that require management, including fund management [8][9]. Two things can support successful educational attainment: adequate costs and effective and efficient financing management. Several studies that have been conducted discussing financing management focus on planning, implementation, and accountability [10] and [11] [12]. These three aspects have contributed significantly to the effectiveness and efficiency of implementing management functions. Furthermore, research has shown that financial management focuses more on these three things. Other aspects include organizing, monitoring, and improving education financing (Nurhamzah et al., 2020).

Considering the importance of the supervisory function in managing school education financing, a supervisory model is needed to control the entire process and stages of education financing. The education financing monitoring model is a method used to ensure that funds used for education are managed well and used under the specified objectives.

2 Method

This research uses a qualitative and case study approach to provide a comprehensive picture of the reality regarding junior high schools' education financing supervision model. Qualitative

research will interpret many respondents' opinions and reveal phenomena based on the data collected, and the analysis is more qualitative [13]. [14] [15] stated that qualitative research methods are a research process and a basic understanding of methodology that investigates social phenomena and human problems. According to [16] [17], in the case study approach, researchers usually start data analysis during the data collection process and then continue data collection. Based on this understanding, several advantages of using qualitative research in this study can be taken, namely: a) Exploring various information relating to education financing management in private high schools related to the process of education financing, starting from the elements of the leadership, elements of the principal and the development committee Schools, b) provide answers to research questions through the process of collecting natural phenomena (natural settings) and evidence regarding the policy of implementing the process of management of education financing in private high schools, c) Building good interactions with research respondents to be able to capture and understand the reality related to quality management in the process.

Initial research has been carried out on previous research, where researchers have succeeded in developing a school education financing model. Technically, the stages carried out in this research are Proposal preparation, research design, survey and data collection, data analysis, FGD analysis results with school principals, FGD initial model formation, expert validation and initial product revision, field trials, and product revision initial, FGD model finalization, Report preparation, Dissemination.

The research was conducted from March to October 2023. The research was conducted at junior high schools in Deli Serdang Regency. The respondents in this study came from junior high schools in Deli Serdang Regency, namely the Head of the Middle School Division of the Deli Serdang Regency Education Office, ten Principals, Deputy Principals, and ten School Treasurers. The research subject is a junior high school in Deli Serdang Regency. The research object is developing the first school education financing monitoring in the Deli Serdang Regency through a Collaborative Managerial Assistance Program.

The instrument developed consisted of interview guidelines, observation guidelines, and documentation studies. Data was collected primarily by providing a questionnaire distributed via the Google Form application. Next, in-depth interviews will be conducted directly, observations and discussions through Focus Group Discussions, which will be conducted online via Zoom Meeting.

Steps in the data processing process: (1) Data Examination and Selection (Data Verification): Data verification is the process of examining data or cross-checking obtained through the results of document review, interviews, observations, and questionnaires and then grouping them into research questions, stages This is done to ensure that all the required data has been obtained, if not, then record it and then return to the location to collect and complete it (Sugiyono, 2015); (2) Data Categorization: Categorization is the activity of grouping data obtained from informants based on the categorization of research questions; (3) Reduction and Relevance

The data is analyzed from the start by reducing data that is deemed irrelevant to the research focus and research questions so that only relevant data is retained; (4) Validation: Validation is carried out to find out whether the data that has been obtained is correct and accurate and complete as required; (5) Integration: All data from all sources are combined or combined to

answer each research question so that data emerges that has been integrated and can go through the next stage of data processing; (6) Narration: Narrating or revealing the findings based on each research question or in other words describing the data that has been obtained in sentence form.

3 Results and Discussion

The supervisory mentoring strategy produces the following mentoring programs: (1) Collaborative supervisory managerial mentoring program. The collaborative supervisory, managerial mentoring program concerns school management in the form of sharing, working together, and giving or receiving input to each other without patronizing. With a collaborative approach, mentoring will be more successful because those accompanied by the mentor have the same position. The companion is flexible, friendly, and not rigid. The expected goal is collaborative managerial assistance, creating closer communication and coordination between the mentor and the supervisor. (2) The workshop/training program creates a Cost Budget Plan (RAB).

Generally, a workshop is a meeting where people with interests, expertise, or professions in a particular field actively participate in intensive discussions and activities on a particular object or project. Some other opinions say that a workshop is a form of activity in which several experts in a particular field gather with a group of people with the same background or profession and carry out interaction activities together to discuss a particular problem. The workshop/training program makes a Budget Plan. Generally, a workshop is a meeting in which a group of people has an interest, expertise, or profession in a particular field that is actively involved in a discussion and intensive activity on a particular object or project. Some other opinions say that a workshop is a form of activity in which some experts in a particular field gather with a group of people with the same background and profession and carry out joint interaction activities to discuss a particular problem. In the implementation process, this workshop activity will focus more on discussing specific problems accompanied by training. The participants in it will get new knowledge that is very useful and can also be applied in their professional fields

In the implementation process, these workshop activities usually focus more on discussing various specific issues accompanied by training. The participants in it will gain new knowledge that is very useful and can also be applied according to their professional field. A budget plan is a detailed planning of the development required in project activities. A budget plan will provide data representing an overview and guidance regarding estimates, processes, and costs required to complete the project. In its management, funds will be used for infrastructure improvements, such as classroom repairs, latrine rehabilitation, fencing, and equipment procurement. The use of existing funds must be well-planned and relevant so that the authorities can account for them. The importance of planning is that the budget plan that will be created requires personnel who understand how to prepare the correct budget plan. This program aims to understand the initial concept of forming and compiling a budget plan, analyzing the amount/volume of work, calculating the amount of labor and material requirements, and using Microsoft Excel to create the budget plan.

The collaborative Supervisory Managerial Assistance Program is assistance concerning school management that includes sharing, cooperation, mutual giving, or receiving input without patronizing. With the collaboration approach, the assistance will be more successful because those accompanied by a companion have the same position. The companion is flexible,

kinship, and not rigid. The expected objectives are collaborative managerial assistance, making a means of communication and coordination that is closed between those guided and supervisors.

References

- [1] Nurhamzah, N. A. E.Q., M. Syah, and Suryadi, "Conceptual Model Of Quality-Based Education Financing Management In Modern Pesantren," *J. Pendidik. dan Kebud.*, vol. 5, no. 2, 2020, doi: 10.24832/jpnk.v5i2.1629.
- [2] Nurhamzah, N. A. E.Q., M. Syah, and Suryadi, "Model Konseptual Manajemen Pembiayaan Pendidikan Berbasis Mutu Di Pesantren Modern," *J. Pendidik. dan Kebud.*, vol. 5, no. 2, 2020.
- [3] T. Priatna, N. Nurhamzah, T. Ratnasih, and H. S. Siregar, "Educational Financing Management in Tarekat-based Pesantren," *J. Pendidik. Islam*, vol. 4, no. 1, p. 63, Jun. 2018, doi: 10.15575/jpi.v4i1.2337.
- [4] U. L. Azhari and D. A. Kurniady, "Manajemen Pembiayaan Pendidikan, Fasilitas Pembelajaran, Dan Mutu Sekolah," *J. Adm. Pendidik.*, vol. 23, no. 2, 2016, doi: 10.17509/jap.v23i2.5631.
- [5] D. A. Kurniady, L. Setiawati, and S. Nurlatifah, "Manajemen Pembiayaan Pendidikan Terhadap Mutu Sekolah Menengah Kejuruan," *J. Penelit. Pendidik.*, vol. 17, no. 3, 2018.
- [6] Y. Triadiarti, L. Ane, E. L. D. Purba, S. Irfan, and D. A. Halim, "Analysis of the Implementation of Secondary Education Management on the Marginal Contribution of High/Vocational High Schools in North Sumatra," in *Proceedings of the 2nd International Conference of Strategic Issues on Economics, Business and, Education (ICoSIEBE 2021)*, 2022, vol. 204, doi: 10.2991/aebmr.k.220104.047.
- [7] Y. Triadiarti, L. Ane, J. Jumiadi, M. Abdillah, and N. Syahrani, "Modeling Educational Financing for Private Vocational High Schools in Deli Serdang Regency in the Context of Optimizing School's Marginal Contribution," *Asian J. Soc. Humanit.*, vol. 1, no. 10, 2023, doi: 10.59888/ajosh.v1i10.99.
- [8] Y. Sofyan, E. Ahmadi, and U. C. Barlian, "Analisis Pembiayaan Pendidikan (Suatu Kajian Praktis Dalam Pengelolaan Anggaran Pendidikan Di Sekolah Menengah Umum)," *J. Ilm. MEA (Manajemen, Ekon. dan Akuntansi)*, vol. 5, no. 1, pp. 221–239, 2021, [Online]. Available: <https://journal.stiemb.ac.id/index.php/mea/article/view/791>.
- [9] U. C. Barlian, "Kebijakan Pengelolaan Dana Pendidikan Tingkat Sekolah Dalam Konteks Otonomi Daerah," *An-Nidzam J. Manaj. Pendidik. dan Stud. Islam*, vol. 3, no. 2, 2016, doi: 10.33507/an-nidzam.v3i2.18.
- [10] M. S. Nurdiani and N. Nugraha, "Analisis Transparansi dan Akuntabilitas Pengelolaan Dana Sekolah," *J. Pendidik. Akunt. Keuang.*, vol. 6, no. 1, 2018, doi: 10.17509/jpak.v6i1.15831.

- [11] U. R. Wahyudin, "Manajemen Pendidikan (Teori Dan Praktik Dalam Penyelenggaraan Sistem...)," *Deepublish*, 2020. .
- [12] Arwildayanto, N. Lamatenggo, and A. A. Rosadi, "Transparency of education financing management at high school in Gorontalo City," *Int. J. Innov. Creat. Chang.*, vol. 5, no. 4, 2019.
- [13] Sugiyono, "Prof. Dr. Sugiyono. 2018. Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.," *Prof. Dr. Sugiyono. 2018. Metod. Penelit. Kuantitatif, Kualitatif, dan R&D. Bandung Alf.*, 2018.
- [14] E. Weyant, "Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, 5th Edition," *J. Electron. Resour. Med. Libr.*, vol. 19, no. 1–2, 2022, doi: 10.1080/15424065.2022.2046231.
- [15] J. D. Creswell, W. John & Creswell, *Fifth Edition Research Design Qualitative, Quantitative, and Mixed Methods Approaches*, vol. 5, no. 2. 2018.
- [16] N. D. Khoeriah, "Pengembangan Model Evaluasi Kinerja Sd Penyelenggara Pendidikan Inklusif," *J. Penelit. dan Eval. Pendidik.*, vol. 17, no. 1, 2013, doi: 10.21831/pep.v17i1.1360.
- [17] Meredith D. Gall, J. P. Gall, and W. R. Borg, *Educational Research An Introduction Eighth Edition*, vol. 53, no. 9. 2013.