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## **Modeling Educational Financing for Private Vocational High** Schools in Deli Serdang Regency in the Context of Optimizing **School's Marginal Contribution**

Yulita Triadiarti<sup>1</sup>, La Ane<sup>2</sup>, Jumiadi<sup>3</sup>, Muhammad Abdillah<sup>4</sup>, Nurul Syahrani<sup>5</sup>

1,2,3,4,5 Universitas Negeri Medan, Indonesia

Email: yulita@unimed.ac.id

\* Correspondence: yulita@unimed.ac.id

#### **KEYWORDS ABSTRACT**

School Marginal Contribution, Modeling

Education Financing Model, The purpose of this research is to develop an educational financing model that best suits the needs in optimizing the marginal contribution value of private vocational high schools in Deli Serdang Regency. This study employs a qualitative research method. The author develops an educational financing model for vocational high schools using a descriptive qualitative method aimed at identifying phenomena occurring in the field to be presented as an educational financing management model. The research was conducted in private vocational high schools in Deli Serdang Regency. In this study, the author selected 31 respondents, including the Head of the Vocational High School Division of the Deli Serdang Education Office, ten Principals, ten Vice Principals for Facilities and Infrastructure, and ten School Treasurers from 13 private vocational high schools. This research produces a Model expected to be effective and efficient in financing private vocational high school education in Deli Serdang Regency. The resulting Educational Financing Model can serve as a standard for implementing school management, especially for private vocational high schools.

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#### Introduction

One of the standards that support the achievement of quality education is education financing standards. Without education financing standards, other standards may not be implemented effectively (Nurhamzah et al., 2020). The achievement of education quality will be hampered or even will not succeed if educational institutions only rely on the use of education funds without good education financing management (Priatna et al., 2018). Azhari &; Kurniady (2016) and (Kurniady et al., 2018) have conducted research on the relationship between education financing management and the quality of vocational high schools in the city of Bandung. The results of the research stated that the influence of education financing management on the quality of education in vocational schools is very strong. This proves that with good financing management will be able to improve the quality of schools.

Education financing management is a factor that will support the success of achieving quality education. Although educational institutions already have adequate funds, if not managed effectively and efficiently it will not support the achievement of quality education. The school is seen as an organization that requires management, including fund management (Barlian, 2016). Two things that can support the success of educational achievement are adequate costs and effective and efficient financing management. Several studies that have been conducted discussing financing management focus on planning, implementation, and accountability (Nurdiani &; Nugraha, 2018) and (Wahyudin, 2020). These three aspects are proven to greatly contribute to the effectiveness and efficiency of the implementation of management functions, Furthermore, research was developed that financing management does not only focus on these three things. There are other aspects, namely organizing, supervising, and continuous improvement of education financing (Nurhamzah et al., 2020). Organizing in management greatly affects the effectiveness and efficiency of organizational performance (Muttagin, 2018) (Mahiri, 2016) concluded that supervision, in this case internal supervision can reduce financing errors, realize transparent and accountable financial statement quality, minimize fraud, and make institutions good corporate governance (GCG). In addition, the results of research (Jaya &; Pamungkur, 2016) state that continuous improvement greatly impacts the effectiveness and efficiency of the management function.

The novelty of this research is the existence of financing management which is studied based on quality management theory, starting from planning, organizing, implementing, supervising, accountability, and continuous improvement. Furthermore, based on the study of quality management theory, this research builds an effective and efficient model that is able to optimize the value of the school's marginal contribution. The efficiency rate can be measured by calculating the school's Marginal Contribution. The marginal contribution of a High School/Vocational is the net income in a high school/vocational school reduced by variable costs or direct costs incurred by the school. The use of margin analysis is done because it is able to inform academic planning, enrollment strategies and overall school strategic planning. Based on Permendikbud No.75 of 2016 concerning School Committees, education units can levy education fees from parents/guardians of students based on clear investment and/or operation planning and outlined in strategic plans, annual work plans, and annual budgets that refer to National Education Standards (Permendikbud, 2016). Related to this regulation, secondary schools are allowed to collect funds from the community in the implementation of school management.

Based on this background and previous researches, the author is interested in developing an education financing model in private vocational high schools in Deli Serdang Regency with the aim of optimizing the marginal contribution of schools. Optimal marginal contribution is an indicator that education financing has been efficient. The selection of private vocational high schools is carried out because vocational high schools have special characteristics in determining school operating costs. In achieving student competencies that tend to be practical, vocational secondary schools have many cost centers that will be interesting to discuss. The selection of schools with private status is carried out to make it easier to make observations and analyses related to school education financing policy making carried out by managers or foundations. Based on data from the Central Statistics Agency (BPS), the number of Private Vocational High Schools

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(SMK) in Deli Serdang Regency is 112 schools, having around 34,170 students. This condition is considered favorable in the sampling process.

Education management as a dimension of process and substance in education (Pulido Capurro &; Olivera Carhuaz, 2019). As a dimension, process management has been explored in planning, organizing, staffing, directing, budgeting, controlling, evaluating, and reporting. Substantial management includes curriculum, students, teachers, staff, money, facilities, and participation in the management of education. The organizational level can be analyzed at global, regional, local, and institutional levels. Organizational functions can be analyzed on leadership, planning, supervision, communication, decision making, and innovation in management processes (Barbón Pérez &; Fernández Pino, 2018). Research in the field of education management has been used for institutional innovation and student achievement.

Research on the implementation of education management has been conducted in Brazil to analyze the contribution of assessment to education management in schools and universities (Bauer, 2019). The results showed that there are differences in contributions based on district-level assessment scales and larger scales in the implementation of education management, so different criteria are needed to measure success.

Research on education management standards has been conducted by Anwar (2018). The most important essence of education management standards, especially in the development of Private Aliyah Madrasahs in Gorontalo City, is the application of education management standards related to the support of infrastructure facilities as an element in improving the quality of madrasahs. This is in accordance with the needs of the people. This factor will be realized if maximized through innovation in the educational process and approval of student success, educational institutions that are managed with the principles of independence, partnership, participation, open access and accountability. (Anwar, 2018). Cost is a resource that is scarified or forgone to achieve a specific goal (Horngren et al., 2010). Cost is the sacrifice of economic resources measured in units of money, has occurred or is likely to occur for a specific purpose. Cost is a certain sacrifice to obtain benefits. In financial accounting, such prerequisites or sacrifices on the date of acquisition are expressed by deduction of cash or other assets at present or in the future (Sudjana, 2004). Ramadhani &; Kardoyo (2019) stated that the characteristics or characteristics of education costs are: (1) education costs will always increase and in the calculation of education financing is expressed in units of unit coost, (2) the largest cost in implementing education is the cost of human factors, (3) the unit cost of education will increase commensurate with the school level, (4) unit cost Education is influenced by the type of educational institution, and (5) the components financed in the education system are almost the same from year to year.

The marginal contribution of a High School/Vocational is the net income in a high school/vocational school reduced by variable costs or direct costs incurred by the school. Margin analysis can be used in a variety of ways to inform academic planning, enrollment strategies and overall school strategic planning (Diris &; Ooghe, 2018).

Researchers have conducted research on the relationship between the implementation of effective education management and marginal contribution to secondary schools in North Sumatra by processing data and quantitative methods. The results of the analysis prove that there is a relatively strong relationship between the implementation of education management and the marginal contribution of schools (Triadiarti et al., 2022)

#### **Research Methods**

This study uses qualitative research methods to provide a comprehensive picture of reality regarding the financing management model of vocational secondary school education, especially private schools. Qualitative research will do a lot of interpretation of respondents' opinions and reveal phenomena. Qualitative research methods are often called naturalistic research methods because the research is carried out in natural conditions, referred to as qualitative methods, because the data collected and analysis are more qualitative (Sugiyono, 2018). Creswell (2018) suggests that qualitative research methods are a process of research and understanding that is fundamental to methodologies investigate social phenomena and human According to Borg and Gall (2013) that case study researches typically begin data analysis while still engaged in data collection and continue data collection until additional data contribute nothing new about the phenomenon being studied. In the case study approach, researchers usually start data analysis during the data collection process and then continue collecting data. Additional data usually do not make a new contribution to the phenomenon or issue being studied. This research refers to case studies in several vocational high schools in Deli Serdang Regency. The design of this case study is carried out as an effort of scientific accountability related to the logical relationship between research focus, relevant data collection, analysis and research results. The success of this case study plan is that it is possible for the researcher to maintain the holistic characteristics and meaningfulness of the observed events. This study uses purposive methods to adjust to research objectives and focus on selected respondents for in-depth studies (Komariah, 2017).

Initial research has been conducted on previous research, where researchers examined the relationship between secondary education management and marginal contribution of high school/vocational schools in North Sumatra. The test results have proven the relationship between secondary school education management, specifically in the discussion in this study is the standard of financing with the marginal contribution of the school. Data collection is carried out by interviews, observations and documentation studies are carried out. To carry out its function as an instrument, researchers develop special instruments to collect the necessary data. The developed instrument consists of interview guidelines, observation guidelines and documentation studies. Data collection is carried out primarily by providing questionnaires that are distributed through the Google Form application. Furthermore, in-depth interviews will be conducted directly, observations and discussions through Focus Group Disscussion which will be carried out online through Zoom Meeting.

Data processing in qualitative research starts from the initial process of collecting data and information is carried out until the data and information are all collected. Activities in research data analysis consist of data *reduction*, *data display*, and *conclution drawing/verification*. At the data reduction stage, data or information is obtained through four instruments, namely document review instruments, interview instruments, observation or observation instruments and questionnaire or questionnaire instruments. The process of presenting data (*data display*), with the aim that the data collected through the results of reviewing documents, interview results, observations and the results of distributing questionnaires, can be seen as a whole picture, making it easier for researchers to make interpretations and formulate appropriate conclusions in answering research questions. The discussion of research findings is carried out by interpreting, interpreting, then providing comments on research findings supported by supporting

theories and concepts and previous research results relevant to the discussion of research results (Creswell, W. John &; Creswell, 2018).

#### **Results and Discussions**

The management model of private vocational secondary school education financing based on research results can be described as follows:

# A. Model: Management of Education Financing in Private Vocational High Schools

### **Paradigm**

The cost of education is one of the most important factors in the provision of education. The quality of the school will be good if the cost of education is managed optimally. Therefore, the stages in managing education financing need to be considered. The purpose of managing education financing is to achieve the expected quality of schools. At every stage of the financing management process, you still have to make the vision and mission of the school the main concern. The stages of managing education financing are the planning stage of education financing, the stage of implementing financing, and supervising education financing.

One of the standards that support the achievement of quality education is education financing standards. Without education financing standards, other standards may not be implemented effectively (Nurhamzah et al., 2020). The achievement of education quality will be hampered or even will not succeed if educational institutions only rely on the use of education funds without good education financing management (Priatna et al., 2018). Azhari &; Kurniady (2016) and (Kurniady et al., 2018) have conducted research on the relationship between education financing management and the quality of vocational high schools in the city of Bandung. The results of the research stated that the influence of education financing management on the quality of education in vocational schools is very strong. This proves that with good financing management will be able to improve the quality of schools.

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#### Goals

The purpose of creating an education financing model in private vocational high schools is to provide alternative solutions that can improve various difficulties and practical problems that occur in the field scientifically. In addition, this model is created to realize effective and efficient education financing management so that financial development can be accounted for in accordance with applicable regulations.

#### Rational

Education is in a supra-system, namely society (Archer, 2013). The education system is an open system so that the education system takes input from the community and provides results / outputs to the community. A harmonious relationship between the school and the community is felt to be important. Related to education financing, it is generally limited to understanding how much nominal must be provided by the government. This kind of understanding is not always wrong, because the concept of cost is related to expenses. So far, education funds sourced from the government are relatively very limited. The limited ability of the government is a big obstacle in the school's efforts to manage the financing of its students' education.

Article 46 of Law Number 20 of 2003 states that education funding is a joint responsibility between the central government, local governments, and communities. Community participation in managing education financing is expected to support the availability of educational facilities in schools, because the budget provided by the government is still lacking for the provision of educational facilities in accordance with the established standards (Ilham, 2020).

Education financing will be effective if supported by a strong and synergistic financing management system (Kurniawan, 2016). Management is a supporting element to realize the ideals and goals of an organization. Reliable education management is based on, namely (1) justice and equality; (2) high quality and relevance; (3) rich and non-dry professionalism; (4) openness, empowerment, participation, and excellence (Gaffar, 2000). The goal is precisely effectiveness and efficiency, both related to the source of financing and the way it is allocated. Through effective, efficient, and transparent financing management, it will show how the source of financing is obtained and allocated appropriately so as to encourage high productivity.

The form of community involvement in this case is the school committee and the school working hand in hand and working together in advancing the school. The school committee as *stalkeholders accommodates and increases the participation of* education stalkeholders at the school level to participate in planning, implementing, supervising the implementation of the construction of educational facilities in schools and participating in financing accountability reporting focused on proportional and open financing management (Susanto, 2021).

In order for school principals as budget users to be able to manage education aid funds, an education financing management model is needed in which there is an open management concept and system. In addition, with the implementation of this model, schools are expected to be able to increase marginal contributions as private schools. Increasing marginal contributions will greatly impact the improvement of school quality supported by good facilities and guaranteed welfare of teachers and education staff.

From the description above, it can be concluded that the rationalism for the formulation of this model is that the management of education financing cannot be separated from community interference, starting from planning, budgeting, implementation, supervision, use and accountability, and reporting. A harmonious relationship between the school and the community is felt to be very important in realizing the goals of education in schools.

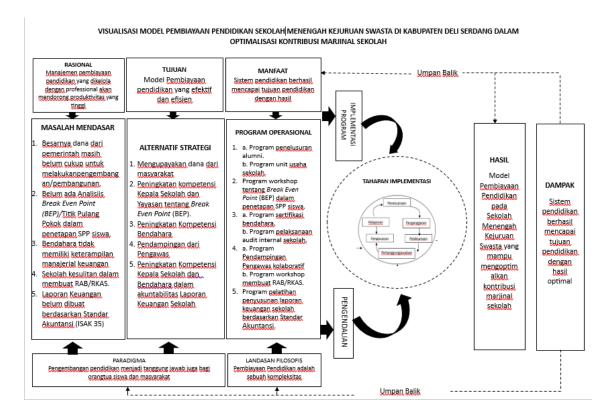
#### Benefit

The benefits derived from this education financing management model in private vocational secondary schools are:

- 1. Increased efficiency and effectiveness of financing through community participation.
- 2. Optimize available resources to achieve optimal school marginal contribution.
- 3. Build effective and efficient education financing management through flexibility in school financial management and innovative efforts with the support of parents, communities, and local governments.

### **Strategies And Programs Produced**

Seeking funds from the community, Increasing the competence of the Principal and Foundation regarding BEP, Increasing the Competence of the Treasurer, Assistance from the Supervisor, Increasing the Competence of the Principal and Treasurer in accountability of school Financial Statements. This strategy produces several programs that are feasible to do, including: Alumni search program in the context of empowerment; School business unit programs; Increasing the competence of the Principal and Foundation on Break Even Point (BEP) Analysis is carried out through a workshop program on Break Even Point (BEP) in determining student tuition fees; Treasury certificate program; School financial internal audit program; Collaborative supervisory managerial mentoring program; Workshop/training program to make a Budget Plan (RAB)



#### Conclusion

The education financing model formed is expected to realize effective and efficient education financing management. The model developed in a study called the

Vocational High School Education Financing Model in Deli Serdang Regency in order to Optimize School Marginal Contribution. Alternative strategies that emerged from the results of the analysis are: Seeking funds from the community, Increasing the competence of Principals and Foundations on BEP, Increasing the Competence of the Treasurer, Assistance from Supervisors, Increasing the Competence of Principals and Treasurers in accountability of School Financial Statements. Based on this alternative strategy, operational programs in schools are determined, namely: Alumni tracing program, School business unit program, Workshop program on understanding BEP, Treasurer certification program School internal audit implementation program, Treasurer certification program, School financial statement preparation training program based on Accounting Standards.

#### References

- Anwar, H. (2018). Implementation Of Education Management Standard In The Guidance Of Private Islamic High School. Jurnal Pendidikan Islam, 4(1). Https://Doi.Org/10.15575/Jpi.V4i1.2250
- Azhari, U. L., & Kurniady, D. A. (2016). Manajemen Pembiayaan Pendidikan, Fasilitas Pembelajaran, Dan Mutu Sekolah. Jurnal Administrasi Pendidikan, 23(2). Https://Doi.Org/10.17509/Jap.V23i2.5631
- Barbón Pérez, O. G., & Fernández Pino, J. W. (2018). The Role Of Strategic Educational Management In Knowledge Management, Science, Technology, And Innovation In Higher Education. Educacion Medica, 19(1). Https://Doi.Org/10.1016/J.Edumed.2016.12.001
- Barlian, U. C. (2016). Kebijakan Pengelolaan Dana Pendidikan Tingkat Sekolah Dalam Konteks Otonomi Daerah. An-Nidzam: Jurnal Manajemen Pendidikan Dan Studi Islam, 3(2). Https://Doi.Org/10.33507/An-Nidzam.V3i2.18
- Bauer, A. (2019). Assessment Of Educational Systems And Educational Management: Theoretical Contributions. Educacao And Realidade, 44(1). Https://Doi.Org/10.1590/2175-623677006
- Creswell, W. John & Creswell, J. D. (2018). Fifth Edition Research Design Qualitative, Quantitative, And Mixed Methods Approaches. In Paper Knowledge . Toward A Media History Of Documents (Vol. 5, Issue 2).
- Diris, R., & Ooghe, E. (2018). The Economics Of Financing Higher Education. Economic Policy, 33(94). Https://Doi.Org/10.1093/Epolic/Eiy003
- Horngren, C. T., Foster, G., Datar, S. M., Rajan, M., Ittner, C., & Baldwin, A. A. (2010). Cost Accounting: A Managerial Emphasis,. Issues In Accounting Education, 25(4). Https://Doi.Org/10.2308/Iace.2010.25.4.789
- Jaya, M., & Pamungkur. (2016). Pengaruh Status Sosial Ekonomi Terhadap Prestasi Mahasiswa Perguruan Tinggi Swasta. Al Ulum Ilmu Sosial Dan Humaniora, 2(3).
- Komariah, D. S. & A. (2017). Metodologi Penelitian Kualitatif. Bandung: Alvabeta, 3.
- Kurniady, D. A., Setiawati, L., & Nurlatifah, S. (2018). Manajemen Pembiayaan Pendidikan Terhadap Mutu Sekolah Menengah Kejuruan. Jurnal Penelitian Pendidikan, 17(3).
- Mahiri, E. A. (2016). Pengaruh Pendelegasian Wewenang Dan Komitmen Organisasi Terhadap Prestasi Kerja Pegawai Dinas Pendidikan Kabupaten Majalengka. Maksi Jurnal Ilmiah Manajemen & Akuntansi, 3(1).
- Meredith D. Gall, Gall, J. P., & Borg, W. R. (2013). Educational Research An Introduction Eighth Edition. In Journal Of Chemical Information And Modeling (Vol. 53, Issue 9).

- Modeling Educational Financing for Private Vocational High Schools in Deli Serdang Regency in the Context of Optimizing School's Marginal Contribution
- Muttaqin, G. F. (2018). Pengaruh Pendelegasian Wewenang Terhadap Kinerja Organisasi. Jurnal Riset Akuntansi Terpadu, 11(2). Https://Doi.Org/10.35448/Jrat.V11i2.4255
- Nurdiani, M. S., & Nugraha, N. (2018). Analisis Transparansi Dan Akuntablitias Pengelolaan Dana Sekolah. Jurnal Pendidikan Akuntansi & Keuangan, 6(1). Https://Doi.Org/10.17509/Jpak.V6i1.15831
- Nurhamzah, E.Q., N. A., Syah, M., & Suryadi. (2020). Conceptual Model Of Quality-Based Education Financing Management In Modern Pesantren. Jurnal Pendidikan Dan Kebudayaan, 5(2). Https://Doi.Org/10.24832/Jpnk.V5i2.1629
- Permendikbud, N. 75 T. 2016. (2016). Tentang Dewan Pendidikan Dan Komite Sekolah. Journal Of Chemical Information And Modeling, 53(9), 1–11.
- Priatna, T., Nurhamzah, N., Ratnasih, T., & Siregar, H. S. (2018). Educational Financing Management In Tarekat–Based Pesantren. Jurnal Pendidikan Islam, 4(1), 63. Https://Doi.Org/10.15575/Jpi.V4i1.2337
- Pulido Capurro, V., & Olivera Carhuaz, E. (2019). Educational Management: An Entrepreneurial Vision Of Basic Education. Revista Científica De La Ucsa, 6(3). Https://Doi.Org/10.18004/Ucsa/2409-8752/2019.006.03.052-062
- Ramadhani, N. S., & Kardoyo. (2019). Kepemimpinan Kepala Sekolah, Biaya Pendidikan, Komite Sekolah, Perilaku Organisasi Terhadap Mutu Lulusan Melalui Mutu Proses. Economic Education Analysis Journal, 8(2).
- Sudjana, A. (2004). Matz, Adolph And Milton F. Usry. Cost Accounting. Sixth Edition. South Western Publishing Co. Mulyadi. Akuntansi Biaya. Edisi 3. Yogyakarta: Bpfe. Undang-Undang Nomor 17 Tahun 2000 Tentang Pajak Penghasilan. The Winners, 5(2). Https://Doi.Org/10.21512/Tw.V5i2.3857
- Sugiyono. (2018). Prof. Dr. Sugiyono. 2018. Metode Penelitian Kuantitatif, Kualitatif, Dan R&D. Bandung: Alfabeta. Prof. Dr. Sugiyono. 2018. Metode Penelitian Kuantitatif, Kualitatif, Dan R&D. Bandung: Alfabeta.
- Triadiarti, Y., Ane, L., Purba, E. L. D., Irfan, S., & Halim, D. A. (2022). Analysis Of The Implementation Of Secondary Education Management On The Marginal Contribution Of High/Vocational High Schools In North Sumatra. Proceedings Of The 2nd International Conference Of Strategic Issues On Economics, Business And, Education (Icosiebe 2021), 204. Https://Doi.Org/10.2991/Aebmr.K.220104.047
- Wahyudin, U. R. (2020). Manajemen Pendidikan (Teori Dan Praktik Dalam Penyelenggaraan Sistem...). Deepublish.