The Development of Performance-Based High School Financing Management Model of Senior-High Schools in Pemalang Regency

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Abstract

Three main resources of school financial management problem in Indonesia are (a) the low transparency and accountability (b) the inappropriate standard operating procedures (SOP), and (c) the inappropriate operational fund calculating system. This research aims to develop the school financial management system. This is a research and development (R&D) which implemented three main steps, i.e. (a) describing the school financial management system, (b) developing a model, and (c) validating the model. The subjects of the study were two state senior high schools in Pemalang regency. There are three main results of this research. They are the real description of the school financial management system, the model or SOP for financial management, and the model for calculating the school operational fund. After being validated, the models were proven effective.

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INTRODUCTION

A decentralized system has been implemented in Indonesia to bring a tremendous change in the management of education. The Local Government is responsible for the management of the education sector at all levels (elementary, secondary, and high school), except for higher education. These changes in the education management authority immediately change the pattern of financing education sector. The regency has a huge right and responsibility to manage the entire education financing.

Theoretically, the delegation of the financial management education authority of the local government can build and improve transparency, accountability, sustainability, effectiveness, and efficiency of the financial management of education. It is chosen because the local government is closer to people and has the advantages of information than the central government so that it can provide services to the public, which is really needed by the community in their respective areas.

The response given by the government to public demands can be quicker and precise because they deal directly with the residents of the concerned areas. Another argument is that the emergence of competition or rivalry between areas will enhance the view of the similarities between what is expected by the society with programs implemented by its government (Davoodi da Zou in Puji Wibowo, 2008: 61). In line with this, Qates (1993: 239) also argues that the decentralized financial management has the potential to contribute to education in the form of increased government efficiency.

Empirically, the implementation of decentralized management of education funding in Indonesia has many obstacles. The three main obstacles are (1) the limited ability to maintain and improve the delivery of education because of the magnitude of the budget available is low, (2) the commitment of the managers of the funding of education is very diverse, and (3) the ability of management in the education sector at the regional level is still very limited (Supriyadi, 2006: 11).

Cost is the amount of funds expected to be provided for a project or specific activities (Gaffar, 1987: 162). Cost is the amount of expenditure in the form of money related to the acquisition of various input factors of education, for example, teachers, books, buildings, land, equipment, etc. (Thomas, 1971: 31). This restriction was reaffirmed by Bowen (1981: XX) that the cost of education is carried out by an education unit to obtain services, land, labor, or capital to purchase goods and services or to provide financial assistance to students.

Understanding the cost of education mentioned above, which is also confirmed by the Ministry of Education (2008), is more specific in the funding of education. According to the Republic of Indonesia's Government Regulation No. 48/2008, education funding is the financial resource provided for organizing and managing education. It was further stated that education funding is the provision of the financial resources required for the implementation and management of education.

In simpler Decentralized Basic Education (2008: 11-15), it defines the cost of education as the rupiah value of all resources (input), the sacrifice of the opportunities, as well as the money spent for all educational activities.

At the school level, the cost can be classified into operating costs and investment costs. Operational costs are the costs resulting from the procurement of goods and services needed for the implementation of education that is used within one year or less per student per year. The operational costs can be divided into operational costs of personnel and non-personnel.

The operational costs of personnel covers all school expenses used for the welfare of personnel or human resources (HR) and the personnel development at school. The personnel's welfare includes salaries, benefits, welfare, transport including official travel, uniforms, overtime work, holiday allowances and so on.
The unit costs of education beyond the operational expenditure include all school personnel other than those utilized for the welfare of teachers and staff at schools, namely stationery, books, tools and consumables, power and services, coaching students, meetings and operating costs of the school committee. The investment costs of BSNP covers the cost of providing infrastructure, human resource development, and permanent capital.

In calculating the Educational Unit Standard Cost (BOSP), the National Education Standards Agency (BSNP), as listed in Regulation No. 19/2005, uses the number of classrooms (study group) to accommodate the variations among schools. Schools with different number of study groups will have different values of the Educational Unit Standards Cost.

In order to answer the problems or research questions, in this study, specifically about the calculation of operating costs for each education unit per year per student to be closer to reality, therefore, it is necessary to pay attention to the basic assumptions that cover (1) the determination of school’s condition including the number of classrooms, the number of educators and education personnel, the number of subjects, the value of salaries and benefits; (2) the determination of the cost components; (3) the determination of the volume of use or the use of component costs; and (4) the determination of the price of each component cost.

Conceptually, the management of an efficient education is one of the basic needs in education development. Efforts to improve the efficiency of education management professionals need to continue to be created by improving the ability of personnel in each unit of work, both at central and local levels in order to get to know and understand their own problems, to then make a decision in problem solving, planning and management of educational programs more efficiently. Especially at the institutional level, the level of efficiency is determined by the success of the education system. First, clearly describe the purpose of education in the education process at each level and type of education. Second, the preparation of the content, orientation, and structure of the educational programs based on those goals. In addition, the managerial needs to also be supported by the input of education management, learning and school management, as well as educational outcomes (Strategic Plan of Ministry of National Education, 2009: 68).

The decentralized system of education management in Indonesia brought about changes in the management of education. Local Government (regency/city) have a huge right and responsibilities for managing the financing of education in their respective territories. It brings positive and negative impacts. Positively, decentralized management of education costs can increase transparency, accountability, sustainability, effectiveness and efficiency because local government is more distantly related to the information society that has the advantage compared to the central government. However, due to the limited capacity and commitment of the managers of educational costs which are very diverse among the areas, various issues on education management expenses actually reduce the transparency, accountability, sustainability, effectiveness and efficiency of managing those costs. It is necessary for financing the management model of education, especially in secondary education that becomes the sole responsibility of government, the central, provincial and regency levels. There has not been a clear concept on how society can directly participate in the management model of financing.

In a simple paradigm of this study, it can be explained as follows. In order to ensure the planning, implementation, and evaluation of financing of secondary education, especially secondary education that is transparent, accountable, sustainable, effective, and efficient, the analysis or proper calculation of operational costs and resource requirements of each fund educational unit is needed.

There are six major steps of management activities or the funding management of secondary education, namely (1) analysis/ BOSP
calculation, (2) analysis of the BOSP sources of funds, (3) BOSP planning, (4) the realization of BOSP, (5) monitoring and evaluation of BOSP, (6) the formulation of the BOSP transparency level of accountability, effectiveness, and efficiency.

Analysis of BOSP was carried out by doing: (a) the formulation of all BOSP components, (b) the pricing of all BOSP components, and (c) the formulation of educational units classification which is very influential on the type and volume of activities to be implemented.

The analysis of operating funds is made to formulate the types, sources of funds, which can be divided into two main categories, namely the government and society. In this case, the governments are the central government, provincial, and regency levels. While people are parents or society in general.

The next step is the planning of the education unit operating costs which are based on two major considerations, namely: (a) the vision, mission, and strategy of the education unit, and (b) the type and volume of activities, both intra-curricular and extracurricular. Furthermore, the plan is implemented, monitored and evaluated to determine the level of transparency, accountability, effectiveness and efficiency of management. In the end, all of which serve as the basis for implementing the management at a later stage.

This research generally aims to find an innovative model of financial management education unit based on the performance of Senior High Schools in Pemalang. The findings of the model is based on the data obtained using descriptive qualitative and quantitative approaches to help solve the management problems of tuition fees and many planned development activities, to improve the system of calculating the operational costs of education in the education unit, which in turn can manifest financing system that is effective, efficient, transparent and accountable.

METHODS

This research was designed as a research and development study. As explained by Borg and Gall (1983) research and development approach can be used to produce a specific product and test its effectiveness. By using the research and development stages as suggested by Borg and Gall (1983), the activities undertaken in this study include (1) the qualitative study, (2) the review of related literature, (3) the development of the model, (4) the evaluation the model, and (5) testing the model.

The focus of this study was limited to the upper secondary education. The reason is that not all secondary schools implement good financing for the regulations and management system.

The descriptive qualitative analysis was used to analyze the data and information obtained from the preliminary studies. The use of descriptive qualitative analysis aimed to gain an overview of the role of schools, principals, teachers, treasurer, administrative staff of the school committee, parents in the planning, implementation, and evaluation of education financing. Descriptive analysis was also used to interpret the results of the qualitative and quantitative analysis which give an overview of the weaknesses of the validated and tested model in the field so that the results can be used as a basis for revising and developing the model. The technique used to analyze the data was the descriptive qualitative technique using case description analysis approach. Statistical analysis was used to determine the level of effectiveness of the model being tested in the field. The effectiveness of the model was shown by comparing the average results of trainee’s ability and level of service satisfaction. The statistical analysis used in this research was SPSS 11.5. The descriptive analysis was used to determine (1) the level of ability of the financial management managers, which includes the level of understanding, the ability to plan, the ability to control, and the ability to control; (2) the level of competence of the executive in managing the budget that includes personal
competence, social competence, and professional competence; (3) the level of service satisfaction.

T-test was used to determine the differences in the value of the average (mean) between the pretest and the posttest. The chi-square analysis was used to determine the relationship between the sub-variables of capabilities of budgetary management. The variables include the ability of the managers of sub-level, ability to execute the plan, and control the costs. Product moment correlation analysis was used to determine the relationship between service satisfaction sub-variables.

RESULTS AND DISCUSSION

The results of this study can be presented in three parts, i.e. (a) overview of financial management that had been implemented in Pemalang Senior-high Schools including planning, organizing, implementing, monitoring, evaluation and quality improvement, (b) the development results of the finance management model, and (c) the effectiveness of BOSP calculation model.

The Financial Management of the Senior-high schools in Pemalang

The financial management organized by the educational units that have been implemented so far are as follows.

a. Planning

At all educational units, the process of preparing school budgets has already involved stakeholders of the schools. It shows the implementation of the delegation and the participation of all citizens in the planning of BOSP. The financial source of education, in general, came from the central government, the provincial government assistance, the local government’s aid, and the public donations. The central government assists in the form of the School Operational Assistance (BOS). The provincial government aids them in the form of Blockgant. The Pemalang Regency Government assists them in the form of salaries and allowances for civil servants, and School subsidy (SBS). The community’s contribution comes from the parents.

The determination of expenditure items was based on the priorities and needs that are planned in budgets. The school budgets were obtained from the Department of Education in Pemalang. The preparation of the program activities and budgeting were based on the principles of performance-based budgeting.

The planning process begins with an evaluation of budgets in the previous year. The current year needs identification, prioritization of activities, budget formulation activities and internal socialization. Budgetary planning begins in March, but until October (the learning activities have been carried out for 4 months) the School Budgets were usually still unfinished and has not been legalized by the Department of Education.

In preparing the budgetary planning, many schools do not start with an needs analysis (needs assessment) and the internal as well as external environment or the SWOT analysis. By not doing a thorough needs analysis, many education units are forced to violate the budgetary planning.

The lack of control and inspection internally and externally on a regular basis is one of the main causes of delays and inaccuracies in budgetary planning.

b. Organizing.

School budgetary plan is compiled by the drafting team consisting of the principal, vice principal, school treasurer and coordinator of field development. The drafting team is appointed by agreement and in charge of preparing and disseminating the budgetary plan. This will then be approved by the school committee and the Education Office in Pemalang regency and disseminated to the entire school communities and parents/caretakers of the students through a meeting.

There are several educational units socializing the school budgeting plan by putting it on the bulletin boards, and some even list it on the school’s website, so that it is accessible for everyone. But not all the budgetary
implementation team have the personal, social, and professional capability which means they must be honest, transparent and has the ability to do financial management. It was proven that in 2014/2015 out of 11 educational units in Pemalang regency, only 3 educational units had their school budgeting plan ratified by the Head of the Department of Education. Likewise, in 2016, until the end of October, there are educational units which are still gathering parents to raise funds for the budget, and only seven educational units have handed over their budgeting plan to the Department of Education.

c. Implementation.

The school team of budgetary plan will have the plan approved by the school community, the Department of Education, and parents/caretakers of students to be officially used as budgets. All the activities and the school budget are implemented based on the ratified and approved plan. If the implementation of activities and budgetary change, it has to go through the process of budgetary determination and implementation changes. Disbursement of the funds is done by filing the funds to the school principal or school treasurer.

The other data found in this research related to the implementation of the budgetary system of high school education in Pemalang regency. They are as follows. First, there are educational units that do not include all sources of funding in the school budgetary plan; second, misallocation and inaccuracy of budget are often found in the spending of some educational units. The most common are the utilization of the School Operational Assistance (BOS) used to finance non-operational spending or not according to their supposed distribution.

d. Monitoring and Evaluation.

Monitoring and evaluation were conducted in the following stages: (1) planning during the preparation and calculation of school budgetary plan, (2) implementation at the time of filing and disbursement activities; and (3) the reporting activities of each program or unified reporting at the end of the school year. Monitoring and evaluation were carried out by those responsible for the program, the school principal, the Department of Education, the school committees and the supervisory bodies. However, monitoring and evaluation are not carried out in a planned or definite schedule. Although, ideally, the inspection and reporting are required to be done each month by the principal, and quarterly reporting is done in an integrated use of the money to the Education Office in Pemalang regency, these activities are not sustainably done.

e. Quality improvement.

The efforts to improve the quality of financial management is done by the beginning of every year. Each education unit holds a meeting or workshop to evaluate the program and budget of the previous year. This evaluation material is used as a reference guide for the preparation of the program and budget of the following year.

School financing management in Pemalang regency has some disadvantages, namely: (1) weaknesses in financial management procedures, such as the lack of a clear standard that is used as a reference and guarantee of minimum service quality and performance benchmarks. (2) weaknesses in calculating the cost per student per school, at an average operating cost of education per student per year per school, (3) weaknesses in choosing an implementation team that is implementing the budget with personal, social, and professional competence. These three basic flaws cause the school budgeting system incapable of being finalized on time and in accordance with the appropriate funding target.

The Development of Financial Management Model by Implementing the Standard Operational Procedure and BOSP Calculation of Senior-high Schools in Pemalang Regency: Research Implication

Given the weaknesses and deficiencies in the financial management system of the high school education units, strategic steps to fix in a comprehensive, integrated and planned manner are needed. Based on the analysis of these study’s results, two basic strategies to improve these weaknesses are suggested, they are: (1)
improve the quality of management and financing (drafting and SOP enforcement), and (2) the calculation of the operational costs of education unit (BOSP) or unit cost per student per year per school.

**Standard Operating Procedure (SOP) Financing Management School**

The components included in the SOP management of senior-high school education financing are: (1) quality procedures, planning and organizing finance; (2) the implementation of quality procedures, inspection, and financing reports, as well as the management quality improvement.

The planning and organization of activities include (1) the formation of the editorial team of the RPS; (2) a SWOT analysis; (3) the preparation of RKS, (4) preparation of School Budgeting Plan including BOSP counting. The implementation phase of the inspection, reporting and management quality improvement activities include: (1) the filing of Blockgrant funds; (2) the submission of BOS funds; (3) the filing of BKM funds; (4) the collection of salary; (5) raising funds from the public; (6) the transactions payment and funding activity report; (7) integrated reporting, and (8) improving the management quality.

The results confirm the development of the financial management conceptual model both by the Focus Group Discussion (FGD) and Mechanical Delphi obtained by the following results: (1) the establishment of RPS editorial team implemented on the first week of March, (2) a SWOT analysis carried out on the second and third week of March (3) the preparation of RKS conducted in April and May, (4) the preparation of School Budgeting Plan held in June until July, and (5) the community fund raising held in September.

Based on the steps agreed in the Focus Group Discussion and Delphi technique, the operational model implemented in this study is that the calculation of BOSP and School Budgeting Plan preparation procedure had just recently been conducted in the high school education units in Pemalang.

**The Calculation of BOSP**

Based on the data obtained, the following is the result of the calculation of BOSP on two units of high school education in Pemalang.

**Table 1.** Basic assumptions used in the calculation of BOSP school year 2014/2015

<table>
<thead>
<tr>
<th>No</th>
<th>School</th>
<th>Number of Classes</th>
<th>Number of Students</th>
<th>Number of Teachers</th>
<th>Number of Academic Personnel</th>
<th>Effective Salary Months</th>
<th>Effective classroom teachings</th>
<th>Number of Program</th>
<th>Number of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SMA N 2 Pemalang</td>
<td>2</td>
<td>30</td>
<td>1163</td>
<td>65</td>
<td>31</td>
<td>13</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>SMA N 1 Randudongkal</td>
<td>1</td>
<td>30</td>
<td>1057</td>
<td>56</td>
<td>17</td>
<td>13</td>
<td>10</td>
<td>3</td>
</tr>
</tbody>
</table>

The followings are the results of BOSP calculation in senior-high schools in Pemalang.
Table 2. Unit cost per public high school student in Pemalang during the 2014/2015 school year.

<table>
<thead>
<tr>
<th>No</th>
<th>Schools</th>
<th>Total Cost (000)</th>
<th>Number of students</th>
<th>Unit cost per student per year</th>
<th>Unit cost per student per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SMA N2 Pemalang</td>
<td>3.135,382,900</td>
<td>6,989,274,900</td>
<td>2,695,944</td>
<td>24,662</td>
</tr>
<tr>
<td>2</td>
<td>SMA N1 R. dogkal</td>
<td>2,445,370,428</td>
<td>5,840,183,488</td>
<td>2,313,500</td>
<td>92,791</td>
</tr>
</tbody>
</table>

Notes:
- **P** = Personnel
- **NP** = Non-personnel
- **TA** = Total Amount

From the explanation above, the BOSP calculation model is very effective, because the results of data analysis using t-test showed that financial management is carried out by calculating the operational costs of the education unit proven to have a positive impact on the ability of budgetary management in controlling the BOSP counting system. The calculation of mean difference toward BOSP calculation mastery on budgetary management prior to and after BOSP calculation training showed a significant difference ($t = 9.440$), the mean pre-training at 6.2000, and the average after training at 13.7333 to Randudongkal State Senior high school 1), to Pemalang State Senior high School 2 $t = 6.000$, the mean at pre-training was 8.0000, and the mean after training was 14.0000.

**CONCLUSIONS**

The financing model and BOPS calculation generated in this study are expected to provide a frame of reference for the educational unit in developing financial management by implementing a detailed standard activity. The SOP and the components of BOSP calculation have also been presented in this study.

Methodologically, this study has limitations in the sample area and the scope of the study. In addition, this is a case study in Pemalang. Therefore, the conclusion can not be overgeneralized. To get a general conclusion, similar research should be conducted more deeply and widespread in a wider range of other educational units or in other regencies.

In addition, the findings of this study were formulated through deductive analysis based on the reality in the field. This model has not been developed through the pilot phase and dissemination models. It is deemed necessary for this study to be followed up by research and development through the dissemination of evaluation models. Therefore, the models can be tested to be a reference for the development of financial management in the education unit.

Based on the analysis, discussion, and conclusions on the outcome of the investigation as presented previously, suggestion needs to be communicated to the parties associated with the findings of financial management and operational costs which are calculated in the high school education units in Pemalang. The suggestion is Education Unit in particular in Pemalang regency should use the standard operating procedures (SOP) for financing management so that the input, process, output, and outcomes of the financial management implementation can be managed properly.

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