

# Empirical Study of Management of Vocational High School with Regional Public Services Agency in Indonesia

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*Abstract:* - The freedom learning policy is one of the Vocational High School Program (VHS) of the Center of Excellence (CoE), encouraging independent and productive schools to switch from Work Units to Regional Public Services Agency (RPSA). This research aims to reveal the empirical conditions of the management implementation of VHS RPSA, which is by the Management Standards in the Indonesia Education National Standard of VHS. Research methods use mixed sequential explanatory type, initial quantitative stage, and reinforced qualitative data. Research subjects based on a family of expertise include VHS State of 6 Yogyakarta, VHS State of 2 Depok Sleman, VHS State of 1 Bawang Banjarnegara, and VHS State of 63 Jakarta. The results showed that the dimension of human resources management is 80% (high), the dimension of facilities management is 86.88% (high), the dimension of financial management is 51.42% (sufficient), the dimension of learning program management is 85,5% (very high), and the dimension of community empowerment management is 82.25% (high). The combined mean of the five management dimensions of VHS RPSA was 77.5%. Analysis of variance showed that the five dimensions of management were different, with a significance value of 0.001. The implication of this research is to provide a map of the implementation of VHS RPSA in Indonesia that is specific to getting the CoE Program.

*Key-Words:* - Regional Public Services Agency, Center of Excellence, Vocational High Schools, Dimension Management

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## 1 Introduction

Vocational High School of Center of Excellence (VHS CoE) has the task of being the best practices of freedom learning implementation for other schools, especially in the management, quality of graduates, cooperation in the world of work, and the implementation of teaching factories. There are six supports of the Ministry of Education, Culture, Research, and Technology in the implementation of the CoE Program, namely: strengthening human resources, strengthening work-ready and character learning, strengthening the learning of learners' practices, data-driven school management, mentoring by universities, and cooperation of the central government with the region. Technically, the implementation of the CoE Program refers to the VHS CoE's Pocket Book [1]. The concept of freedom learning in the VHS CoE Program covers student and teacher internships in industry, industrial practitioners teaching in schools, and management transformation to Regional Public Service Agency (RPSA).

Regulation of the Minister of Home Affairs of the Republic of Indonesia Number 79 of 2018 concerning RPSA explains that it is a system applied by the technical implementation unit of the regional agency in providing services to the community that has flexibility in financial management patterns as an exception to the provisions of regional management. Flexibility, in this case, means financial management flexibility patterns by implementing organizational functions based on good governance in the provision of quality, sustainable, and competitive services (healthy business practices) to improve services to the community without seeking profit to advance the general welfare and educate the life of the nation [2]. Flexibility in school management has been carried out in developed countries where some forms determine school policies related to school budget decisions, academic programs, education policies, promotions, graduation, discipline, and attendance [3]. Schools are considering spending and savings planning, encouraging financial

inclusion, risk management, and protection from asymmetric information [4]. The development of schools into RPSA is in line with Sallis stating that educational institutions are required to develop their potential to quality and the need to show the public that they can provide consistent quality services [5].

VHS RPSA is a school that was formed to provide optimal services to the community by providing products and services that are promoted without prioritizing seeking profit and based on the principles of efficiency and productivity [6]. VHS RPSA is given autonomy in its financial management to improve the quality of service to stakeholders. School autonomy helps principals achieve higher quality by increasing flexibility in three areas, namely academic, organizational, and management, thus improving the quality of educational services provided [7]. The advantages of VHS CoE that have implemented RPSA of financial management patterns are: (1) improving public services; (2) budget efficiency; (3) autonomy of the school's financial management; (4) making students more productive and competent; (5) improve the welfare of teachers and managers; (6) remuneration; and (7) ease of management of inventory goods [6].

Empirical data in 2019 shows the number of VHS RPSA in Indonesia as many as 24 schools every year. The CoE Programs can boost every VHS for self-exploitation and prepare for the management of RPSA based on good school governance [8]. Flexibility in managing VHS RPSA is an opportunity for schools to be productive and independent in structuring income and expenditure from income generating, improving the quality of graduates, learning processes, human resources, and educational facilities. The government's policy on VHS RPSA provides flexibility in school financial management. The importance of government policy on school funding aims to achieve clarity on workable funding mechanisms and maintain policy priorities [9]. The implementation of VHS RPSA clarifies the school's financial planning and budgeting as well as more transparency and accountability [10].

VHS RPSA has many potential incomes generating, among others, namely the sale of products and services produced by students, laboratories and buildings rentals, school operational assistance funds, and grants. A school principal must have entrepreneurial competence to increase school income generating [11]. Incomes VHS RPSA can be spent to improve school academic services such as teacher internships, guest teachers from industry, procurement of practical

tools and materials, and updating laboratories and workshop labs [12]. School spending on learning is more productive and contributes to student achievement than another service spending [13]. Therefore, it is expected that the existence of VHS RPSA can improve the quality of learning in both theory and practice to improve the quality of graduates produced.

Based on the background of potential and problems, it needs to be strengthening of VHS RPSA as CoE to support each other schools. The purpose of this study is to describe the empirical conditions of the management implementation of VHS RPSA.

The empirical study of the implementation of management dimension in VHS RPSA Indonesia is based on the Regulation of The Minister of Education, Culture, Research, and Technology Number 34 of 2018 on Indonesia Education National Standards of VHS, which the CoE Program strengthens. The specifications of this study are unique, which VHS RPSA got the CoE Program in 2021. This needs to be researched because the uniqueness of VHS RPSA needs to be evaluated its implementation empirically and become a policy option in the opening of a new RPSA or improvement in the quality and service school. For that, it is necessary to construct a research hypothesis to focus the research presented in a comprehensive and directed manner. The alternative hypotheses proposed in the study are as follows.

- H1 The quality of implementing the management dimension in VHS RPSA Indonesia is above 80%, assuming that the school assisted by the CoE Program is excellent in Indonesia.
- H2 There are significant differences in the implementation of management dimension in VHS RPSA Indonesia analyzed together.

## 2 Research Method

This policy research uses a combination of qualitative and quantitative approaches (mix-method) with sequential explanatory types. This method is a direction in determining the VHS RPSA policy in Indonesia. This mixed approach can explain the research and hypothesis testing results comprehensively based on data and facts in the field. The qualitative approach is a literature review to review the rules and guidelines for the management implementation of VHS RPSA. The quantitative approach uses the cross-sectional survey to determine the impact of VHS RPSA implementation.

The population of this study is the entire VHS RPSA that received the CoE Program in Indonesia. Sampling techniques are carried out by purposive sampling, including VHS State of 2 Depok Sleman, VHS State of 6 Yogyakarta, VHS State of 1 Bawang Banjarnegara, and SMK State of 63 Jakarta. Sources of primer information are the principal, RPSA manager, deputy principal, teacher, and head of the administrative sub-section. The selection of research sites is based on VHS with RSPA status in Indonesia with a certain uniqueness. The uniqueness is based on the involvement of VHS in two programs, including the RPSA and CoE programs. This means that not all VHS in Indonesia get the two programs together, so the study in this method is very important to study.

Research data collection techniques use questionnaires, interviews, and document studies. The questionnaires were used to obtain quantitative data on implementing the VHS RSPA variables. Interviews are used to explore and confirm the results of quantitative data. Key informants are school principals, RSPA managers, study program coordinators, and teachers. Document studies are used to examine the results of VHS RSPA performance achievements, RSPA policies, and identification of school products or services as income-generating schools. The research instruments used questionnaires and interview guidelines. Indicators of success in the management of VHS RPSA refer to the standard dimensions of education management with indicators that include: human resource management, facilities management, financial management, learning program management, and community empowerment management. Data analysis techniques used in this research are quantitative descriptive techniques and qualitative data analysis.

### 3 Results and Discussion

#### 3.1 Empirical Conditions of Management Implementation of VHS RPSA

The management of VHS RPSA is a crucial part of achieving the school's goal of providing educational services to the community. The practical implementation of VHS RPSA management to support the CoE Program is based on five dimensions of management: human resources (HR), facilities, finance, learning programs, and community empowerment. The five management aspects are the dimensions of management standards on Regulation of the Minister of Education, Culture,

Research, and Technology Number 34 of 2018 about Indonesia Education National Standards of VHS.

##### 3.1.1 HR Management of VHS RPSA

HR is one of the essential aspects of school management because resources can be optimally useful when managed by quality human resources [14]. Figure 1 shows that the average empirical condition of VHS RPSA for HR management tends to be high, with an average of 80%. The high value is because the CoE Program in VHS RPSA which a school that excels and is unique. The results of the confirmation of direct interviews with school leaders found several obstacles, namely: (1) VHS RPSA management is mainly done by teachers to increase the workload of teachers; (2) The wages of education personnel recruited as employees of production units have not been financed from the results of RPSA income generating; and (3) The cultural shock of differences in work rhythm experienced by teachers and education personnel, where with several programs such as the CoE Program and RPSA makes them have to work more effectively and efficiently.

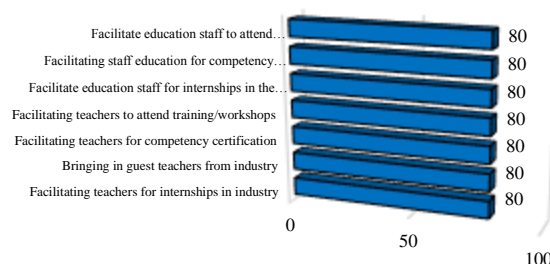


Fig. 1: Empirical Conditions of HR Management of VHS RPSA

The results are shown in Figure 1 align with the results of research on the success of a project which states that good human resource management makes an organization healthy [15]. This potential is reinforced by the impact of the CoE Program, providing a trigger for VHS RPSA to work optimally to improve continuous organizational performance and provide a positive influence for accelerating school progress [16]. This indicates a need to improve the HR management of VHS RPSA to provide a healthy organization, prosperous human resources, and supporting competencies in a conducive organizational climate. The policy of strengthening human resources from the Indonesian government can be boosted through training, workshops, competency development, and academic

levels relevant to the core business in the VHS RSPA.

### 3.1.2 Facilities Management of VHS RSPA

VHS RSPA of facilities supports school income generating and accumulating assets [17]. Figure 2 shows the empirical average of the management implementation of facilities for VHS RSPA is 86.88%. The CoE Program of VHS RSPA is robust internally and externally (government and partners). Confirmation of qualitative data in the field that several things are not optimal, including (1) Implementation of maintenance and improvement is still at a conditional level and has not been routinely scheduled, (2) There needs to be an improvement in the quality of infrastructure, and (3) The means of supporting income generating are still limited to meeting the needs of materials for learning practicum of teaching factory.

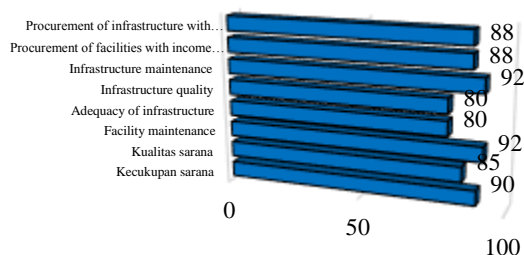


Fig. 2: Empirical Conditions of Facilities Management of VHS RSPA

Figure 2 explains that the effectiveness of the VHS RSPA is an important aspect in the implementation of an income-generating-based education model. The facility becomes an implementation construction driven by the principal, who has a principle of sustainability thinking [18]. The role of the school can consider costs and benefits in managing school facilities so that the resulting output can support sustainability in achieving school performance [19]. The research results' relevance shows that facilities' need and completeness are the keys in the VHS RSPA to optimize existing resources for increasing school income generating and improving academic services.

### 3.1.3 Financial Management of VHS RSPA

Financial management in VHS RSPA is different from VHS in general. VHS RSPA is given flexibility in financial management to improve the quality of school services. In this dimension, the entrepreneurial attitude of the principal is the key to the flexibility of school financial management [20].

Figure 3 shows a quite satisfactory average where the percentage value of financial management in VHS RSPA is 51.42%. The percentage is low because some indicators of schools are not implementing RSPA financial governance flexibly well. Some of the financial management findings that have not been optimal include: (1) There is no mechanism for managing employee performance benefits in the form of remuneration; (2) Revenue from RSPA income generating derived from products and services sales of teaching factory is still not optimal; (3) The price of school products and services is slightly higher than the market price because there are additional taxes so that it is less competitive, and 4) Not optimal promotional media owned by the school.

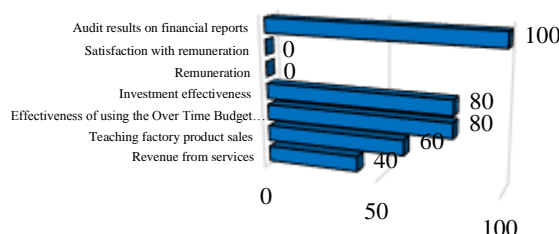


Fig. 3: Empirical Conditions of Financial Management of VHS RSPA

Figure 3 shows that financial management at VHS RSPA has not optimized the use of remuneration in improving employee performance. By applicable rules, VHS RSPA has a role in school flexibility in financial management. To manage finances, financial flexibility is given to schools as a process of improving school quality [6]. VHS RSPA is given the flexibility to manage finances to impact school income fulfillment significantly. Capital structure, investment, and debt become managers' focus on financial flexibility [21]. From the analysis results, the flexibility of financial management as remuneration has not been a concern of VHS RSPA. This indicates that a strategic step is needed to socialize micro-level policies to introduce flexible financial management through remuneration. The remuneration is expected to improve HR performance to become more prosperous, effective, and efficient.

### 3.1.4 Learning Program Management of VHS RSPA

VHS RSPA focuses on providing services in the field of education and learning. There needs to be an effort to deliver a climate in learning that leads to entrepreneurship-based learning [22]. Figure 4 shows that the average percentage of learning

program management of VHS RPSA is 85.5% or a high category. The results of the interview deepening were found to be things that have not been optimal, namely: (1) The implementation of online learning cannot be as much as offline learning because students are not monitored directly; (2) During the Covid-19 pandemic the presence of students in virtual classes is less than optimal; (3) Teaching factory learning that reflects the industry work culture has not been optimally implemented during the Covid-19 pandemic; (4) The products produced by teaching factory are not all absorbed by the market; (5) There are teaching factory learning tools that are less industry standards; (6) The use of innovative learning media that has not been optimal; (7) Non-conformance of competence taught with all needs of industries; (8) The placement of street vendors in the industry has not all been competently; (9) There are industries or agencies that do not accept street vendors during a pandemic; (10) Assessments are carried out mainly from the tasks given by the teacher; and (11) the assessment device of learning is not validated.

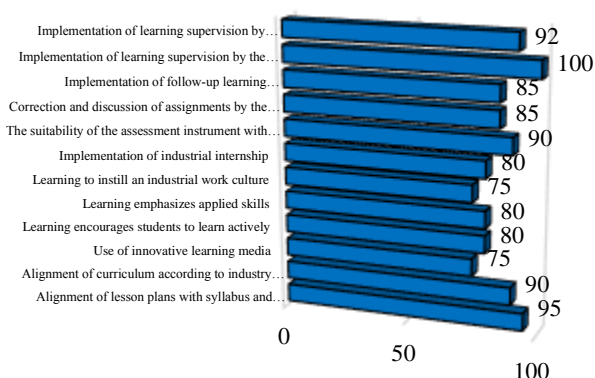


Fig. 4: Empirical Conditions of Learning Program Management of VHS RPSA

Figure 4 shows the reasonable means attributable to success in the CoE Program. This CoE program encourages schools to improve the quality of learning by being oriented to the world of work [16]. This means that work culture, learning systems, material content, human resources, partners, and so on are oriented towards improving the quality of learning. Management of learning programs is always inherent in regular academic implementation. This component is the essence of the educational process at VHS RPSA. The learning expected to be optimal is applying the teaching factory method based on production and projects. Applied learning for VHS RPSA will be integrated into producing services or products that impact profits in generating school income [23]. A good

above-average result indicates that the studied schools show good performance and quality.

### 3.1.5 Community Empowerment Management of VHS RPSA

The management of VHS RPSA can provide operational more optimally if it has support from the community. Figure 5 shows that the average management of community empowerment for VHS RPSA is 82.25%, or in the high category. Deepening qualitative data through interviews that still encounter some obstacles in the management of community empowerment include (1) Equalization of perceptions and community mindsets related to the development of schools that have not been optimal; (2) Socialization of school to external programs that are less than optimal; (3) Mass production and services are still limited in meeting the demands of partners and communities; and (4) Not optimal cooperation between schools with professional organizations and alumni bonds.

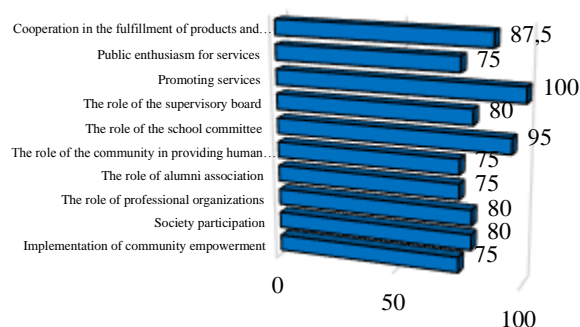


Fig. 5: Empirical Conditions of Community Empowerment Management of VHS RPSA

Figure 5 shows that community empowerment is very important to balance management. It serves to provide advice and policy recommendations in the management of RPSA VHS. RPSA's financial flexibility needs to be monitored externally by the community. These communities are representatives of the school committee, community elements, and VHS partners. Schools maximize community empowerment to obtain external income and school development based on the strategic role of the community. The results obtained in managing RPSA can be utilized for their impact on all school members. Therefore, the school committee can holistically and integratively fulfill management quality through participation in decision-making [24].

### 3.2 Hypothesis Proofing Analysis

Based on the results of quantitative data collection, it is necessary to prove the hypothesis to ensure that

the data under empirical conditions can be generalized widely. Hypothesis testing is divided into two: ensuring the test value is above 80 and testing the analysis of variance for the VHS RPSA management dimension.

### 3.2.1 The First Hypothesis Testing

The first hypothesis test uses a 2-tailed test with a one-sample T-test analysis. The test value is 80, to the high conditions of the VHS RPSA that obtained the CoE Program. Why is it so high? The CoE Program is a superior or excellent, unique VHS, so the hypothesis gives the number 80 as a testing baseline based on factual conditions in VHS RPSA Indonesia. The first hypothesis testing is spelled out in applying five management dimensions: HR, facilities, finance, learning programs, and community empowerment. Tabulating one-sample T-test analysis with 2-tailed tests through IBM Statistic 26 is summarized in Table 1 below.

Table 1. Descriptive Hypotheses Testing of Management Dimensions for VHS RPSA Test Value = 80

Dimensions of Management	N	Mean	Std. Dev.	t	df	Sig. (2-tailed)
Human Resources	7	81,43	4,76	0,795	6	0,457
Facilitate	8	86,87	4,82	4,031	7	0,005
Financial	7	51,43	39,76	-1,90	6	0,106
Learning Program	12	85,58	7,95	2,433	11	0,033
Community Empowerment	10	82,20	9,04	0,804	9	0,442
Mean		77,50	13,26			

Based on Table 1, it can be explained that the average of management dimensions is at a percentage of 77,50 % or in a high category. In the analysis of 2-tailed tests, the testing of alternative hypotheses proved there are two dimensions of management above the value score of 80, namely, Facilitate and Learning Program, and the rest is not

proven. When viewed empirically and analyzed, score decline occurs in the dimension of financial management.

Table 1 confirms that the average financial factors in the VHS RPSA are still far from ideal expectations, so extra strategic steps are needed to solve it. As explained earlier, many factors are caused by the flexibility of financial management. However, the strong point of the irregularities includes (1) Policy differences at the regional level so that the application of financial management flexibility becomes diverse; (2) Understanding the RPSA VHS ecosystem that does not agree, so that implementation in management becomes faltering; and (3) The fear of VHS RPSA managers in utilizing income generating used in employee remuneration.

### 3.2.2 Second Hypothesis Testing

The second hypothesis testing uses analysis of variants to see differences in implementing the five management dimensions. Subsequent post hoc tests were conducted with the Scheffee test to see significant differences between aspects. Both tests were conducted to see, in general, the difference in values of all dimensions of management and to comprehensively see the differences in more detail per dimension. The details of the analysis through IBM Statistic 26 are summarized in Table 2 below.

Table 2. Anova Test of Management Dimensions for VHS RPSA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6450.644	4	1612.661	5.677	0.001
Within Groups	11079.606	39	284.092		
Total	17530.250	43			



Table 3. Partial Differences Between Management Dimensions in VHS RPSA

(I) Aspect		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Human Resources Management	Infrastructure Management	-6,87500	8,72331	,959	-35,0733	21,3233
	Financial Management	28,57143	9,00940	,057	-,5517	57,6945
	Learning Program Management	-5,58333	8,01617	,974	-31,4958	20,3291
	Community Empowerment Management	-2,30000	8,30626	,999	-29,1502	24,5502
Infrastructure Management	Human Resources Management	6,87500	8,72331	,959	-21,3233	35,0733
	Financial Management	35.44643*	8,72331	,007	7,2481	63,6448
	Learning Program Management	1,29167	7,69324	1,000	-23,5769	26,1603
	Community Empowerment Management	4,57500	7,99505	,987	-21,2692	30,4192
Financial Management	Human Resources Management	-28,57143	9,00940	,057	-57,6945	,5517
	Infrastructure Management	-35.44643*	8,72331	,007	-63,6448	-7,2481
	Learning Program Management	-34.15476*	8,01617	,004	-60,0672	-8,2423
	Community Empowerment Management	-30.87143*	8,30626	,017	-57,7216	-4,0212
Learning Program Management	Human Resources Management	5,58333	8,01617	,974	-20,3291	31,4958
	Infrastructure Management	-1,29167	7,69324	1,000	-26,1603	23,5769
	Financial Management	34.15476*	8,01617	,004	8,2423	60,0672
	Community Empowerment Management	3,28333	7,21690	,995	-20,0455	26,6121
Community Empowerment Management	Human Resources Management	2,30000	8,30626	,999	-24,5502	29,1502
	Infrastructure Management	-4,57500	7,99505	,987	-30,4192	21,2692
	Financial Management	30.87143*	8,30626	,017	4,0212	57,7216
	Learning Program Management	-3,28333	7,21690	,995	-26,6121	20,0455

The analysis shown in Table 2 explained that collectively there is a significant difference between the five dimensions of management in VHS RPSA, as evidenced by significant values below 0.05. This means that the alternative hypothesis tested has proven differences in the management implementation of VHS RPSA in each management dimension. The results also indicate that the implementation in each VHS RPSA is different.

This explanation is in line with the qualitative findings that each school's understanding of RPSA is diverse, as well as support from local governments that are not in line with the central government. Although the Regulation of the Minister of Home Affairs of the Republic of Indonesia Number 79 of 2018 concerning RPSA has been a legal finish, in the implementation at the

regional level, it is still multi-interpretation because it is adjusted to the rules published by the governor. Table 3 explains the differences in each management dimension after partial testing is some differences. There is a significant comparative difference (significant score  $< 0.05$ ) for two-variable relationships, including the dimension of facility management with financial management and learning program management. This indicates that the implementation of different management is in three dimensions of management, namely the dimensions of facilities management, financial management, and the management of learning programs. Other results indicate that the dimensions of human resource management and community empowerment management are in the same condition in every research object. This similarity is based on the CoE Program's focus on the development of HR and the involvement of external VHS RPSA partners in various activities within the school.

#### 4 Conclusion

The results of empirical studies on implementing the management dimensions in VHS RPSA Indonesia showed a high score of 77.5%. The high score was confirmed by qualitative data that showed various obstacles in implementing the management dimension in VHS RPSA, including human resource management, facilities management, financial management, learning programs management, and community empowerment management. Based on the five dimensions of management, the lowest dimension of management is financial management. Summary of qualitative data in the field confirms that in the application of the management dimension is still very minimal understanding of human resources in VHS RPSA. Confusion in using income-generating causes financial management to be less maximal. Inferentially, quantitative data concludes that the five dimensions of VHS RPSA management differ from significant values of 0.001. This shows that, in general, VHS RPSA management dimensions need to be pursued strategically because this management dimension has different objectives and outputs. The difference in output will narrow down to the usefulness of RPSA as governance that pays attention to the quality of services focusing on user satisfaction (students and society).

This research aims to determine which strategic steps should be prioritized in managing VHS RSPA. Based on the results of empirical studies in Indonesia, the development priority is to manage the

financial flexibility of the VHS RSPA. This is important to consider in the future because the essence of the RSPA is how schools can independently, creatively, and innovatively optimize income generating to improve HR performance through a remuneration system. The great hope of the program is to provide improved performance accompanied by meritocracy-based performance allowances. This means that the productivity of human resources will have an impact on school productivity.

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### **Conflict of Interest**

The authors have no conflicts of interest to declare that are relevant to the content of this article.

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