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Effects of Utilization of Maintenance and Other Operating Expenses on School Performance

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Abstract

Maintenance and Other Operating Expenses (MOOE) is a government fund allocated for public elementary and secondary schools that are spent on activities and necessities that support the learning institution's programs. It also helps maintain a safe and healthy environment for the entire school community. The study has employed a descriptive – correlational method of research to determine the extent of its utilization in terms of building maintenance, physical facilities, instructional materials, utilities, and procurement and how it significantly impacted District 1 Elementary Schools' School-Based Management (SBM) ratings. Based on the regression analysis done, it has revealed that all the sub-constructs of MOOE utilization were correlated with the SBM ratings to a varying extent. In general, the better that the school head utilized MOOE, the better the SBM ratings. Conversely, the lesser that school head utilizes MOOE, the lesser satisfactory the SBM rating may be perceived.

Keywords: *maintenance and other operating expenses, government fund allocation, school – based management, school improvement plan, utilization, financial resources, school performance ratings*

Introduction

The operational funding covers school operation expenditures and allocation. This includes building maintenance, physical facilities, instructional materials, utilities, and procurement, for bills payment, personnel development, and others. It adheres to the guidelines stipulated in the Department of Education Order 13, s. 2016 otherwise known as Implementing Guidelines on the Direct Release and Use of Maintenance and Other Operating Expenses (MOOE) Allocations of Schools, Including Other Funds Managed by Schools. It is allocated for DepEd schools that are intended to be spent on activities and necessities that support the learning programs and help maintain a substantial school environment both for the students and its personnel.

Specified in the revised Implementing Guidelines on the Direct Release, Use, Monitoring, and Reporting of MOOE in Dep Ed order No.008, series of 2019 that it is a potent tool to promote and strengthen the school-based management and accountability. It provides mechanisms, procedures, and standards for its utilization to the fullest to address the essentials of the school management and operations.

In an internet article published in June 2016, document. worldbank.org, for the past five years, the Philippine government continuously increase its funding in education, having the confidence that it would meet the school's operational needs to strengthen school-based management. Furthermore, it has increased 45 percent in real terms exhibiting the government's support to the department.

Supported by several pieces of research, increased school funding is tantamount to effective school-based management practices. It would also mean better education outcomes. The provision of sufficient funding has led to significant improvement, as reflected in the results of the National Achievement Tests by four to five percentage points.

Thus, students' achievement is a determinant of a performing teacher and the effective planning and implementation of the management plans of the institution.

Maruli (2014) elaborated in his study, that teacher quality is an important feature of the school that boosts students' success. Improvements in the delivery of education would most likely to yield enormous benefits. An institution with an exemplary roster of educators, quality education is guaranteed. Such quality could only be achieved if proper avenues are provided to its stakeholders: learning materials, facilities, seminars, training, and workshops.

These can only be fuelled with collaborative efforts from all the sectors to secure maximization of funding to support the students, the teachers, and the school. Opportunities and possibilities for instruction delivery enhancements and provision of infrastructures for students' practicum greatly rely on the proper allocation of funds, program implementation, and management.

Mendoza (2016) explained that the main consideration in the use of MOOE is the approved School Improvement Plan (SIP) in the implementation in the current year as reflected in the Annual Implementation Plan (AIP).

SIP is a road map that establishes the changes that the school needs to improve in totality and a portion of this capitalize on teacher's development and instructional materials which eventually be translated to satisfactory performance of the students and the teachers.

Furthermore, the effectivity of its employment of apportionments can be determined by the School-based Management (SBM) assessment. It will define the level of SBM practices, provide basis of establishment of plan of actions, and improve the support system through interventions that the school and the Dep Ed can offer.

In this light, the study hoped to identify the impact of the utilization of school financial resources or the Maintenance and Other Operating Expenses of the identified schools in District 1 to their School-based Management ratings.

1.1. Objectives of the Study

The main objective of the study is to determine the effect of the utilization of Maintenance and Other Operating Expenses to School Based Management ratings. Specifically, it sought answers to the following:

1. What is the extent of the utilization of Maintenance and Other Operating Expenses in the following areas:
    1.1. Building Maintenance
    1.2. Physical Facilities
    1.3. Instructional Materials
    1.4. Utilities / Procurement (Others)
2. How may the level of School Based Management be described?
3. Does utilization of Maintenance and Other Operating Expenses exert significant effects on the School Based Management ratings?
4. Based on the findings of the study, what implications may be drawn?

Methodology

Descriptive - correlational method of research was utilized in the study to determine the extent of improvement carried by utilization of School Financial Resources or Maintenance and Other Operating Expenses (MOOE) and its impact to School-Based Management ratings.

Correlational research shows relationships or connectedness of two or more variables. It is concerned in indicating the existence of a relation and not the causes and ways of the development of such relationship. The study has also used quantitative research approach in analyzing and understanding the collected data. A standardized survey tool was used as primary data gathering tool and the result of Individual Performance Commitment and Review of the previous year.

Since it had dealt with school finance and its management and the school-based management rating, a letter of consent was secured from the Division Office and to the school principals prior to the conduct the study. Data accumulated and used were solely for study purposes.

Regression analysis was used to determine the impact of the utilization of MOOE to school-based management ratings. It is a set of statistical process of estimating the relationships between the dependent variable (outcome variable), the ratings and one or more independent variables (predictors, covariates or features) utilization.

2.1. Respondents of the Study

The respondents were the teachers of the District 1 Elementary Schools in Bulacan. They were purposively and randomly chosen. The teacher – respondents have at least served the school for more than a year. They came from the different subject areas and some held position in the institution. The personnel were currently employed during Academic Year 2019 – 2020. The total number of respondents and its distribution per school was determined utilizing the Raosoft sample size calculation with the margin of error of 5% and confidence level of

95%. The Raosoft sample calculator is a software used primarily to calculate or generate sample size of a research or a survey.

The researches have requested the concern schools for a copy of their SBM ratings for the past (3) three consecutive years 2017 up to present.

2.2. Instrument of the Study

In order to gather significant information, a standardized survey questionnaire on the Assessment of Utilization of School Financial Resources or Maintenance and Other Operating Expenses Managed by Schools was utilized. The survey was divided into four areas buoyed in the Maintenance and Other Operating Expenses for school improvement and the variables of the study: building maintenance, physical facilities, instructional materials, and utilities / procurement (others).

It has a 5 – point Likert scale to determine the extent of improvement. The mean results of the data gathered were tabulated.

It was quantified using the following scale:

Scale	Descriptive Evaluation
5	Very Much Improved (VI)
4	Fairly Improved (FI)
3	Not Present in School (NPS)
2	Less Improved (LI)
1	No Improvement (NI)

The School-based management rating has the following ratings and scales:

Scale	Descriptive Evaluation
0.50 – 1.49	Developing
1.50 – 2.49	Maturing
2.50 – 3.0	Advanced

Table 1: Utilization of Maintenance Operations and Other Expenses in terms of Building Maintenance

Indicators	**Mean**	**Interpretation**
Classroom Ceiling	4.22	Fairly Improved
Principal's office ceiling	4.61	Very Much Improved
Classroom Roofs	4.05	Fairly Improved
Principal's Office roofs	4.40	Fairly Improved
General physical, conditions of the classrooms	4.24	Fairly Improved
Canteen	3.96	Fairly Improved

Electrification of Classroom Building	4.15	Fairly Improved
Lighting of Classrooms	4.28	Fairly Improved
School Stage	4.05	Fairly Improved
Science and Laboratory/Computer Laboratory Buildings	3.68	Fairly Improved
Average	**4.17**	**Fairly Improved**

It displays that the Principal's office ceiling garnered very much improved with the highest weighted mean of 4.56 and the lowest weighted mean is 3.68 in the Science/ Laboratory Buildings with fairly improved. On the other hand, it can be garnered from Table 1, Utilization of MOOE in terms of building maintenance is described as fairly improved with general average mean of 4.17.

The findings corroborated the result of the study of Lander (2019) as building improvement fits into one of two broad areas: building improvement is something that is done for the building that changes its function and it increases its value or extends its useful life. Thus, the need for improvement maintains the integrity of the building and functionality of the facilities.

Table 2: School finance resource management in terms of Physical Facilities

Indicators	Mean	Interpretation
Air conditioning of offices	4.04	Fairly Improved
Proper ventilation of classrooms	4.04	Fairly Improved
Covered walks	3.87	Fairly Improved
Pathways	3.99	Fairly Improved
Library furniture	3.68	Fairly Improved
School fence	3.94	Fairly Improved
Desk and chairs	4.00	Fairly Improved
Tables	4.02	Fairly Improved
Fixtures and furniture like cabinets	3.87	Fairly Improved
School gardens	4.08	Fairly Improved
Hand washing area	4.05	Fairly Improved
Comfort rooms	3.92	Fairly Improved
Hand washing area	4.08	Fairly Improved

Water system	3.69	Fairly Improved
Average	**3.95**	**Fairly Improved**

As perceived from the data presented in Table 2, it shows that the school garden has the highest weighted mean of 4.08 which is fairly improved. And the lowest weighted mean is 3.68 for library furniture with the interpretation of fairly improved. In general, the Level of School Finance Resources Management in terms of physical facilities is "Fairly Improved" revealed by the general average mean of 3.95.

Based on Lackney's article entitled Overview of Maintenance and Modernization of School Facilities, effective school facility is responsive to the changing programs of educational delivery, and at a minimum should provide a physical environment that is comfortable, safe, secure, accessible, well – illuminated, well – ventilated, and aesthetically pleasing.

It is more than a passive container of the educational process for it serves as an integral component of the conditions of learning. It also contributes to the place experience of students, educators, and community members.

Table 3: School finance resource management in terms of Instructional Materials

Indicators	Mean	Interpretation
Purchase of computer lab/Science lab supplies	3.79	Fairly Improved
	4.15	Fairly Improved
Computer units		Fairly Improved
Provision of teachers' instructional supplies	4.08	Fairly Improved
	4.58	
Reproduction of teachers' made activity sheets/ Exercises downloaded from (LRMDS)		
Average	**4.15**	**Fairly Improved**

In Table 3, it reveals that Reproduction of teachers' made activity sheets with the highest weighted mean of 4.58 and has interpretation of fairly improved while purchasing of computer laboratory and Science laboratory supplies got the lowest weighted mean of 3.79.

Improvement in the support of instructional materials for instruction will tend to lead to a converged and similar learning outcome. However, Voltz, Sims and Nelson (2010) cautioned that there is a need to account for inclusions, which naturally brings divergence of student learning styles and challenges, because at times, materials and equipment ratio tend to show limited scope.

Table 4: School finance resource management in terms of Utilities/ Procurement

Indicators	Mean	Interpretation
Pay for school utilities (e.g electricity and water)	4.32	Fairly Improved
Pay for communication (e.g. telephone and Internet connectivity expenses)	4.57	Fairly Improved
Pay for wages of full time janitorial/ transportation/ Mobility and security services	4.55	Fairly Improved
Teacher's Development (LAC and CI sessions)	4.46	Fairly Improved
Support special curricular program (e.g. advocacy, Assessment, capacity building, learning environment, Learner development and research	4.55	Fairly Improved
Fund activities as identified in SIP and AIP	4.42	Fairly Improved
Finance Expenses (e.g. graduation rites, moving up Or closing ceremonies and recognition activities)	4.38	Fairly Improved
Procure small capital expenditure items worth P.15,000 Issued by COA		
Average	**4.38**	**Fairly Improved**

Table 4 shows that paying for communication got the highest weighted mean of 4.57 and the lowest weighted mean is 4.32 for pay for school utilities. Considering that the level of school finance resource management in terms of utilities in general garnered the total average of 4.15 and has fairly improved interpretation.

It is highlighted in the Dep Ed Order No. 13, s. 2016 (DO 13), a collective improvement in the allocation for payments in utilities may have contributory effects in the improvement of teaching and school services that may lead to better outcomes in students' performance and school's performance in general that payment for wages of full – time janitorial, transportation / mobility and security services, pay for school utilities (electricity and water) and communication (telephone and internet connectivity) expenses; support for school – based training and activities selected or designed to improve learning outcomes, such as but not limited to, Learning Action Cells (LAC) and Continuous Improvement (CI) sessions, special curricular programs (e.g. advocacy, assessment, capacity building, learning environment, learner development, and research); fund for activities as identified in the approved School Improvement Plan (SIP) for implementation in the current year and as specifically determined in the Annual Implementation Plan (AIP) of the school, expenses pertaining to graduation rites, moving up or closing ceremonies and recognition activities; and the procurement of small capital expenditure items worth P15,000 and below, as provided in the new Government Accounting Manual issued by the Commission on Audit (COA) and subject to separate guidelines to be issued by the department must all be given emphasis.

Table 5: Summary of Average Weighted Mean of Utilization of MOOE

Indicators	**Mean**	**Interpretation**
1. Building Maintenance	4.17	Fairly Improved
2. Physical Facilities	3.95	Fairly Improved
3. Instructional Materials	4.15	Fairly Improved
4.Utilities/ Procurement(others)	4.38	Fairly Improved
Average	**4.16**	**Fairly Improved**

Table 5 reveals that the Utilization of Maintenance and Other Operating Expenses is fairly Improved with the weighted mean of 4.16. the highest indicator in this table is the utilities/ Procurement with the weighted mean of 4.38 while the lowest indicator is the physical facilities with weighted mean of 3. 95 with fairly improved interpretation.

Usman (2016) highlighted that accessibility of education resources has always been regarded as an essential and integral part of school administration and basically geared towards the improvement of all other factors in teaching and learning process thus ensuring qualitative service delivery by the school to the society. The success of the schools depends among others on effective school administration with good leadership, proper time management in the school system, allocation of ample financial resources to schools, regular training and re-training of human resources in the school, perfect interrelationship with the community and ingenious utilization of the available resources in the school system (Others).

Impact of MOOE Utilization on School's SBM Practices

Table 6: Regression analysis of Utilization of MOOE on School's SBM Practices

Variables	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	0.653	0.413		1.582	.000
Building Maintenance	0.437	0.109	0.022	0.508	0.287
Physical Facilities	3.928	0.094	0.103	4.116	0.505
Instructional Materials	2.202	0.112	0.074	1.071	0.073
Utilities and Procurement	0.644	0.117	0.569	1.816	0.001*
R-squared = 0.760					
F-value = 6.363					
p-value = 0.006					
alpha = .05					

Utilization of MOOE was quantified in the study in terms of building maintenance, physical facilities, instructional materials, and utilities and procurement. How does the utilization of MOOE affect significantly the SBM practices of public elementary schools in District 1 has been the major concern of the study with the null hypothesis which states that the utilization of MOOE does not exert a significant impact on the SBM practices of public elementary schools. The data collected were subjected to regression analysis to determine the extent of impact the predictor variable cause on the criterion variable.

Result of the regression analysis in Table 5 revealed that all the sub-constructs of MOOE utilization are correlated with the SBM practices in a varying extent as shown by the non-zero B-coefficient. The nature of correlation is positive as can be on the B coefficients, which means that in general the better that the school head utilized MOOE, the better SBM practices. Conversely, the lesser that school head utilize MOOE, the lesser SBM practices may perceive.

A closer look at the obtained coefficients, one could be glean that of the four sub-constructs of MOOE, one sub-construct which is utilities and procurement recorded a B coefficient with associated probability less than the significance level set at 0.05. This means that utilities and procurement with B coefficients of 0.644 correlate significantly with the SBM practices.

The three other sub-constructs of MOOE utilization such as building maintenance, physical facilities, and instructional materials with B coefficients of 0.437, 3.928, and 2.202 respectively correlated with SBM practices but not to a significant extent, since the associated probability exceeds the .05 alpha set.

Further analysis of regression indicated that for every unit increase in building maintenance, physical facilities, instructional materials, and utilities and procurement, SBM practices could generate an increase of .022, .103, .074, and .569, respectively. Analysis of the obtained Beta Coefficient would indicate that of the four sub-constructs of MOOE utilization, utilities and procurement appeared to be the best predictor of SBM practices (0.569).

The result of the analysis of variance of the regression of MOOE utilization in SBM practices revealed an F-value of 6.363 with the associated probability of .006. Since the associated probability does not exceed the 0.05 alpha, this means that the four sub-constructs of MOOE utilization jointly affect the SBM practices, but the best predictor of MOOE utilization was utilities and procurement. Hence, the decision is to reject the null hypothesis which states that utilization of MOOE does not exert a significant impact on the SBM practices of public elementary schools.

This implies that the utilization practices of school head with regard to MOOE reflect on the school management. More so, utilization of MOOE is a significant variable to be considered in managing the school system and its resources. Also, the good way of utilizing MOOE caters the needs of the school and its constituents. All sub-constructs of MOOE utilization may improve the productivity of the school, as well as, its effectiveness and proficiency.

Recommendations

Based on the foregoing conclusions, the following recommendations are being offered:

1. In the absence of computer laboratory and science laboratory, teachers nowadays should be resourceful for preparation in online teaching.

2. School Administrators should have financial management education course to enhance themselves in utilizing MOOE school funds effectively. And it will improve their management procedures and strategies suited for the benefits of the school, teachers and their students.
3. Future Researchers. The findings of this study can be utilized by the researchers for them to gain additional information in understanding the concepts and impact of Maintenance and other operating expenses on school based management.

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