



## The Influence of School Head Academic Supervision on the Achievement of the National Standards of Middle School Education in Bima City

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### **Abstract**

This research is motivated by the importance of academic supervision by school principals on national education standards in the fulfillment of SNP achievement. The purpose of this study was to determine the extent of the contribution of the influence of academic supervision of school principals on the achievement of National Standards of Middle School Education in the City of Bima. The approach taken in this research is *ex post facto* in which the researcher does not give treatment to the research variables. But examine the facts that have happened. Then the facts are explored using a questionnaire that contains a number of questions that reflect various aspects of the research variable. The sample in this study was principals and junior high school teachers in Bima City. To determine the contribution of the influence of the implementation of academic supervision of school principals to the achievement of the National Education Standards performed using Canonical Correlation analysis. Canonical correlation analysis is a multivariate analysis technique that can be used to identify and measure linear relationships involving more than one independent variable and more than one dependent variable. In this study, the canonical correlation analysis is used to analyze the relationship between the academic supervision of the principal and the achievement of the National Standards for Junior High School in the City of Bima. There are three criteria used to interpret canonical functions, namely canonical weights, canonical loads, and canonical cross-loads. The results of data analysis showed that two canonical functions were obtained. The interpretation of the first canonical function was chosen because it was judged to be more feasible based on the significance test of the canonical function together or individually. The results of the interpretation show that the principal's academic supervision and the achievement of national education standards have quite strong links. The biggest contribution made by the independent and dependent variables is planning academic supervision and assessment standards. The conclusions of this study are as follows: There is an influence of the principal's supervision on the achievement of the National Standards of Middle School Education in the City of Bima. Based on the results of this study it is recommended that the implementation of the principal's academic supervision be maintained because it has a positive effect on the achievement of the National Education Standards.

**Keywords:** *Academic Supervision; National Standards of Education; Canonical Correlation*

## Introduction

The principal has an important and strategic role in realizing the management and organization of quality education. This is consistent with the principal job of the principal as a manager, namely managing of people, managing of resources, and managing of change (Everard, et al, 2004). This means that, the management of human resources and other educational support resources must be a concern and focus on the implementation of the principal's work. Principals are required to have the competence to manage changes that continue to occur dynamically. Principals need to control and direct the quality of education through the performance it displays because the principal can be said to be the main key determinant of the school in achieving its goals. The principal is the key person who determines the smoothness and success of all school activities he leads to achieve national education goals and school institutional goals, namely achieving the quality of education in accordance with community expectations.

In general, the principal's job is as a supervisor that is to supervise the work carried out by educational staff in order to realize appropriate, effective and efficient learning management. Sergiovani and Starrat (2002) state that *supervision is a process designed to help teacher and supervisor learn more about their practice; to better able to use their knowledge and skills to better serve parents and schools; and to make the school a more effective learning community.*

The principal as a supervisor must have adequate knowledge, interpersonal skills, and technical skills. Skills that must be possessed by the principal in academic supervision activities are conceptual, interpersonal, and technical skills. Conceptual skills are the ability of principals to master the concepts of academic supervision such as understanding, objectives, functions, principles, and dimensions of the substance of academic supervision, as well as instruments to gather information about planning, implementing and evaluating learning. Interpersonal skills are basic abilities that must be possessed by the principal in order to manage communication and conflict or teacher problems related to learning performance. Technical skills are the ability of principals to apply appropriate supervision techniques in carrying out academic supervision both individually and in groups.

In reality the competency and skills of the principal as an academic supervisor are still low. The results of Wahyuni's research (2018) show that the indicators of not achieving the quality of education have not been fulfilled not yet apart from the role of principals / teachers, teachers and other education personnel. The principal / madrasa as a leader of an educational institution is expected to be able to regulate all matters related to the achievement of the goals, missions and vision of the established institution. One indicator of the lack of supervision of a school principal / madrasa seen from the low accreditation results. Thus the one who is fully responsible for the implementation of accreditation in schools / madrasas is the principal / madrasa.

Kagama and Irungu's research (2019) in Kenya revealed that, *“Headmaster appraisal as an important vehicle for promoting educational quality which is believed to have the potential to facilitate teachers’ professional development and to stimulate instructional improvement. However, critics of headmaster appraisal regard it as a mechanical and meaningless exercise Headmaster appraisal becomes a perfunctory ritual activity that is disjointed from the process of teaching improvement and education quality development. However, the headmaster (principals) and heads of academic departments are increasingly playing leading roles in the appraisal of teachers and similar cases replicate in most developing countries.*

Research Hardono, et al., (2017) found that in addition to work motivation that allegedly affected the quality of education was the supervision of the principal. As a leader, the role and supervision pattern of the principal will not be separated from the successes and failures of a school. The low supervision of school principals is related to the role of teachers to always follow their direction in carrying out the tasks of administering schools in order to develop and advance schools.

The results of Yusuf's research were strengthened by Suhirno (2013). On average, principals experienced difficulties in carrying out guidance to teachers through supervision with class visit techniques, using personal meetings, teacher board meetings, using school visit techniques, and group meetings. The principal in carrying out academic supervision is only time spent on school administrative matters. This means that the implementation of school principals' academic supervision cannot be carried out optimally.

In line with the results of the study, nationally in Indonesia the improvement in the quality of learning has not been maximized, and is judged to be still not well measured by the learning process and student learning outcomes. Various studies reveal that the learning process in class generally does not run interactively so that it cannot foster creativity and critical power, and students' analytical skills. During this time competence as a result of learning that is very important to be measured and owned by students is actually less attention. The achievement of the quality of education is still far below the achievements of developed countries or even below the neighboring countries.

The condition that the headmaster's academic supervision was not yet optimal was also experienced in Bima City. Data on findings in the field related to the implementation of academic supervision of junior high school principals in the City of Bima based on measuring the achievement of minimum standards of basic education, in the last two years shows that 15 public junior high schools and 6 private junior high schools whose principals supervise classes and provide feedback to teachers two times each semester in 2017 only 57.87%, while in 2018 only 63.27%. This means that the principals of junior high schools who carry out academic supervision are on average only 60% of people and still 39% of people who have not yet carried out academic supervision.

The data on the findings in the field is supported by the results of a study from the PPTK Division of the City of Education and Culture Office of Bima City (2017/2018) concerning the performance evaluation of principals which includes seven components of the process assessment. The results of the study obtained include: principals as educators obtained an average value of 85.1; manager 85.2; administrator 85.1; supervisor 83.4%; leader 84; innovator 84.05; and the principal as a motivator 85.5. From the seven indicators of the process evaluation, the achievement of the principal's performance as a supervisor ranks lowest, namely: only 83.4 while ideally is 86. This means that 16.6% of principals in carrying out their supervising performance are still not good. The SNP achievement data based on the SMP PMP report card in 2018 covering eight standards, namely the SKL Standard, content standard, process standard, value standard, PTK standard, Sarpras standard, management standard, and cost standard are still below the SNP standard of 6.67. Achievement of quality report cards of junior high schools in the City of Bima namely the standard content standards of 5.51; standard process of 6.03; assessment standards of 5.44; graduate competency standard 5.88; PTK standard of 3.64; Sarpras standard of 3.89; management standards of 4.49 and financing standards of 5.8.

To overcome the problem of fulfilling the SNP achievements, it is necessary to supervise the school principal systematically and continuously so that the quality culture of the education unit grows and develops independently. This quality assurance is the answer for each component in the education unit according to its authority. This education quality assurance certainly cannot work alone, it needs support from the central government, regional governments, and the community, including education stakeholders.

## **Method**

This research is a quantitative research. In quantitative research, researchers describe phenomena in more detail using quantitative data. This study uses an ex post facto approach that is the researcher does not give treatment to the research variables but examines the facts that have occurred. This research was conducted at a junior high school in the City of Bima.

The population in this study were all junior high schools in the city of Bima, amounting to 21 schools consisting of 15 principals of state junior high schools and 6 principals of private junior high schools and 794 teachers. Sugiyono (2014: 80) explains that the population is a generalization area that consists of objects / subjects that have certain qualities and characteristics determined by researchers to be studied and then draw conclusions. The research sample was 15 state junior high schools and 6 private junior high schools in the city of Bima. The instrument used in this study was a questionnaire to measure the effect of academic supervision conducted by principals on content standards, process standards, assessment standards and graduate competency standards.

In this study the Academic Supervision of School Principals (x) as an independent variable and National Education Standards Achievement (y) as the dependent variable. The Academic Supervision Variables in question are planning (x1), implementation (x2), while the variable of quality standard achievement is SKL standard (y1), content standard (y2), process standard (y3), and assessment standard (y4). The relationship between variables in this study consisted of six variables which will be analyzed using Canonical Correlation analysis.

## **Result and Discussion**

The number of canonical functions that are formed follows at least many variables in each variate. The first step of canonical correlation analysis is to obtain one or more canonical functions. In this study, the first group variat consisted of two dependent variables namely planning academic supervision and implementation of academic supervision while the second variant consisted of four independent variables namely content standards, process standards, assessment standards, and graduate competency standards. The focus of canonical correlation analysis lies in the linear combination of one set of variables with a combination of another set of variables. The first step is to find a linear combination with the largest correlation value among all other pairs that are not correlated. The process is repeated until the maximum correlation is identified. Linear combination pairs are called canonical variates and relationships between pairs are called canonical correlations.

From the results of the canonical correlation equation above, the calculation results (SPSS output) are as follows:

## a. Individual Testing

## Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon. Cor.	Sq. Cor.
1	.18757	88.93549	88.93549	.39742	.15795
2	.02334	11.06451	100.00000	.15101	.02280

## Dimension Reduction Analysis

Roots	Wilks L.	F	Hypoth. DF	Error DF	Sig. of F
1 TO 2	.82285	1.99680	8.00	156.00	.050
2 TO 2	.97720	.61451	3.00	79.00	.608

It appears that for the first canonical function the magnitude of 0.800 with a significance of 0.05. While the second canonical function is only 0.300 with a significance of 0.608. From these results it can be seen that function 1  $<0.05$  is individually significant, whereas function 2  $> 0.05$  is not individually significant. Therefore henceforth we will only use the first canonical function.

## b. Group Testing

Furthermore, the overall canonical correlation test was performed with the Pillais, Hotellings, Wilks and Roy Tests. The canonical function is collectively more significant at the 0.01 level so that the analysis can proceed. The analysis results are presented in the following:

## EFFECT CONSTANT

Multivariate Tests of Significance (S = 1, M = 1, N = 38)

Test Name	Value	Exact F	Hypoth. DF	Error DF	Sig. of F
Pillais	.66280	38.32913	4.00	78.00	.000
Hotellings	1.96560	38.32913	4.00	78.00	.000
Wilks	.33720	38.32913	4.00	78.00	.000
Roy's	.66280				

Note: F statistics are exact.

Using the four procedures from Pillais, Hotellings, Wilks, and Roys all are significant because  $0.000 < 0.05$ . Based on the value of correlation strength can be used function 1 because it has the highest correlation that is equal to 0.800 and significant  $< 0.05$  so that it is prioritized in the discussion of this study.

## Interpretation of Canonical Functions

For interpretation, three criteria are used: canonical weight, canonical load, and canonical cross load;

### a. Canonical Weight

Variables that have a greater weight value means that they have a greater contribution to the variate and vice versa. Variables that have the same sign have the same relationship while variables that have different signs have the opposite relationship. The canonical calculation results for independent variat and dependent variat are in Table 1 and Table 2.

**Table 1. Standarized Canonical Coefficients for Covariates**

Covariate	1	2
X <sub>1</sub>	0,79154	0,62087
X <sub>2</sub>	0,70343	0,71917

**Table 2. Standarized Canonical Coefficients for Dependent Variables**

Covariate	1	2
Y <sub>1</sub>	0,26770	0,35491
Y <sub>2</sub>	0,44337	0,71272
Y <sub>3</sub>	0,84857	0,06012
Y <sub>4</sub>	0,40447	0,61412

In Table 1, the correlation number of more than 0.5 weight (correlation weight limit) in function 1 is owned by X1 (planning) of 0.791. In Table 2, a correlation number of more than 0.5 weight (correlation weight limit) in function 1 is owned by Y3 (assessment standard) of 0.848.

### b. Canonical content

The canonical charge states the correlation of the variable to the variate where the variable joins in each canonical function. X1 is the variable that has the highest load with the number 0.714 on the independent variable. While the highest canonical load for the dependent variable group is Y3 of 0.757. Correlation maximization aims to get the "optimal" variable for prediction. The calculation results are in Table 3.

**Table 3. Correlations between Covariates and Canonical Variables**

Covariate	1	2
X <sub>1</sub>	0,71487	0,69924
X <sub>2</sub>	0,61717	0,78683

The results of the correlation analysis between the independent and canonical variables are in Table 4.

**Table 4. Correlation between Dependent and Canonical Variables**

Covariate	1	2
Y <sub>1</sub>	0,05484	0,47250
Y <sub>2</sub>	0,39395	0,64073
Y <sub>3</sub>	0,75764	0,20169
Y <sub>4</sub>	0,41473	0,59193

From the results of canonical weight and canonical loading it can be concluded that indeed there is a significant relationship between the dependent variable and the independent variable or the level of academic supervision and the achievement of national standards.

After conducting research at each school from various levels of the education unit, namely in 21 schools which were used as research samples with details of 16 (sixteen) Public Middle Schools and 5 (five) Private Middle Schools in the City of Bima, the following results were obtained:

		Statistics							
		Rata-rata Perencanaan	Rata-rata Pelaksanaan	Rata-rata Standar Isi	Rata-rata Standar Proses	Rata-rata Standar Penilaian	Rata-rata Standar Kompetensi Kelulusan	Rata-rata Supervisi	Rata-rata Standar Nasional
N	Valid	84	84	84	84	84	84	84	84
	Missing	0	0	0	0	0	0	0	0
Mean		3.8791	3.8845	3.9153	3.9226	3.8867	3.8823	3.8816	3.9024
Median		3.8947	3.8824	3.9231	3.9333	3.8889	3.8846	3.8750	3.9083
Mode		3.84	3.88	3.92	3.93	4.00	3.88	3.83*	3.92
Std. Deviation		.07343	.08441	.05751	.05178	.07911	.06356	.05248	.03411
Minimum		3.74	3.71	3.81	3.83	3.74	3.77	3.75	3.82
Maximum		4.00	4.00	4.00	4.00	4.00	4.00	4.00	3.98

a. Multiple modes exist. The smallest value is shown

## 1) Content Standards

The results of the research of 21 (twenty one) junior high schools in the city of Bima can be seen in the value of fulfillment and the criteria have reached the Content standard, namely (3,9153). Indicator Standards of Content found to meet, namely: (1) Supervision of learning devices in schools that contain characteristics of attitude competencies, (2) Supervision of learning devices in schools that are developed according to the level of competency of student attitudes, (3) Supervision of learning devices in schools that contains the characteristics of knowledge competencies, (4) Supervision of learning in schools that are developed according to the level of knowledge competence of students, (5) Supervision of learning in schools that contain characteristics of skills competencies, (6) Supervision of learning devices in schools that are developed according to the level of skills competencies students, (7) Supervision of the suitability of the level of competence and scope of material in school subjects, (8) Supervision of the number of aspects of the curriculum that are carried out in local content in schools, (9) Supervision of the types of curriculum tools available and socialized in schools lah, (10) Supervision of stakeholder involvement in developing curriculum in schools.

## 2) Process Standards

The results of the research of 21 (twenty one) junior high schools in the city of Bima can be seen in the fulfillment value and the criteria have reached the process standard, namely (3.9926). The review of Process Standard Indicators shows that the indicators that meet are: (1) Supervision of the form of the Learning Implementation Plan (RPP), (2) Supervision of activities carried out by teachers in schools while carrying out learning, (3) Supervision of the learning methods used in schools, (4) supervision of learning media used in schools, (5) supervision of learning resources used in schools, (6) supervision of activities carried out by teachers in schools to improve the learning process, (7) supervision of aspects and tools Authentic assessment used by teachers in schools, (8) Supervising the form of supervision documents in the learning process in schools, (9) Supervision of learning plans to refer to the syllabus that has been developed, (10) Supervision of learning in order to strengthen the use of scientific approaches.

## 3) Assessment Standards

The results of the study of 21 (twenty one) junior high schools in the city of Bima can be seen in the fulfillment value and the criteria have reached the assessment standards, namely (3.8867). Assessment Standards Indicators that meet many requirements are: (1) Supervision of the steps taken by teachers in schools in assessing the learning process and outcomes, (2) Supervision of the range of assessment techniques available in the educational assessment guidelines prepared by schools, (3) Supervision to the consideration of determining the Minimum Mastery Criteria (KKM) in schools, (4) Supervision of the suitability of students' knowledge competency assessment in schools based on basic competency characteristics, (5) Supervision of suitability assessment of students' skills competency in schools based on the characteristics of basic competencies, (6) Supervision to the assessment techniques used by teachers in schools to measure attainment attitudes, (7) Supervision of the follow-up conducted by teachers in schools on the results of learning assessment, (8) Supervision of the form of learning outcomes assessment reports that are prepared by teachers at school, (9) Supervision of the types of assessment techniques, yes n used objectively and accountably, (10) Supervision of the assessment procedure is carried out based on the domain to be assessed.

## 4) Graduate Competency Standards

The results of the research of 21 (twenty one) junior high schools in the city of Bima can be seen in the value of fulfillment and the criteria have reached the graduate competency standard, namely (3.8823). Assessment Standards Indicators that meet a lot are: (1) Supervision of students' attitudes to have behavior that reflects the attitude of faith and piety to God, (2) Supervision of students' attitudes to have behaviors that reflect character's attitude, (3) Supervision of students' attitudes to have behaviors that reflect disciplinary attitudes, (4) supervision of students' attitudes so that they have behavior that reflects polite attitudes, (5) supervision of students' attitudes so as to have healthy physical and spiritual behavior, (6) supervision of students' attitudes to have factual knowledge, procedural, conceptual, metacognitive, (7) Supervision of students' attitudes in order to have productive thinking and acting skills, (8) Supervision of students' independence in school in working together for learning / student activities, (9) Supervision of students' attitudes to have thinking skills and acting collaboratively, (10) Supervision of student attitudes so that mem have communicative thinking and acting skills.

Based on the results of data processing on individual variables, not all sub-variables of academic supervision, both planning and implementing academic supervision, affect the educational standard achievement variables. Of the four dependent variables, only one has a significant relationship, which is the assessment standard. However, if based on the results of data in groups there is a significant



relationship between academic supervision of the achievement of national standards. If you pay attention to this relationship, it can be proven by calculating the four procedures from Pillais, Hotellings, Wilks, and Roys, obtained  $0,000 < 0.05$ .

For the most dominant variable based on data processing with canonical weight by only seeing function 1, namely X1 of 0.791 and Y3 of 0.848, the higher the contribution of planning, the higher the fulfillment of the assessment standard. Whereas in the canonical loading the most dominant variable number X1 is 0.714 and Y3 is 0.757 which is proven by a number that exceeds the correlation strength limit that is  $< 0.5$  in function 1. This means that the higher the contribution of planning, the higher the results of the fulfillment of the assessment standard.

## **Conclusion**

The conclusions of this study are as follows: There is an influence of the principal's supervision on the achievement of the National Standards of Middle School Education in the City of Bima. Based on the results of this study it is recommended that the implementation of the principal's academic supervision be maintained because it has a positive effect on the achievement of the National Education Standards.

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