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Development of Instrument For Academic Supervision The School Superintendents -Based CIPPO

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Article Info

Abstract

Data from Education For All (EFA) Global Monitoring Report 2011: The Hidden Crisis, Armed conflict and Education issued by UNESCO March 1, 2011, Indonesia ranked 69th out of 127 countries with an education development index (EDI) index of 0.934. Data from The Learning Curve Pearson in 2014, the quality of Indonesian education ranks the last of the 40 countries surveyed. Similarly, the results of a survey conducted by the Organization for Economic Co-operation and Development (OECD), put Indonesia's quality of education in the order of 69 out of 76 countries surveyed. The low ranking of Indonesia in the field of education is the responsibility of all parties who are related, including the implementation of academic supervision of school supervisors that has not been maximized. The school supervisor's academic supervision instrument has not been developed as needed. The academic supervision instrument of the school supervisor in this study was developed using the CIPPO concept (context, input, process, product, and outcome) which is expected to produce an academic supervision instrument that effectively measures teacher performance. The objectives of this study were to: (1) describe and analyze academic supervision instruments (2) describe the development of CIPPO-based school supervisors / madrasah academic supervision instruments, and (3) test the validity, reliability, and practicality of Semarang-based Ministry of Religion supervisor's academic supervision instruments CIPPO. The research method used in this research is instrument development research. This study uses a research design development product performance instrument with nine steps, namely: (1) Determining Instrument Specifications with preliminary studies. (2) Writing Instruments. (3) Determining Scale. (4) Determining the Scoring System. (5) Reviewing instruments. (6) Assembling instruments. (7) Product testing & analysis. (8). Carry out Measurements, and (9), Analyze Final results. The steps are modified and divided into two important stages, namely: Preliminary Study Phase, and Development Study. Academic supervision instruments developed with CIPPO-based (hypothetical instruments) are carried out by evaluating instrument analysis assembled based on context, input, process, product, and outcome so that it fits the needs of teacher performance assessment in terms of preparation of RPP and implementation of teacher learning. And CIPPO-based school supervisors / madrasah academic supervision instruments are more effective than conventional academic supervision instruments

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INTRODUCTION

The 2014 Learning Curve Pearson data cited by Bhataramedia.com (2016) states that the quality of education in Indonesia ranks last among the 40 countries surveyed under Mexico, Brazil, Argentina and Thailand. Similarly, the results of a survey conducted by the Organization for Economic Co-operation and Development (OECD) put the quality of Indonesian education in the order of 69 out of 76 countries surveyed, far below Sinngapura and Hong Kong which ranked first and second.

The low ranking of Indonesia in the education sector is the responsibility of all related parties to form a chain, both central and regional education stakeholders, the underlying policy tools made by the government and the education objectives formulated by education units, including school supervisors / madrasa as one of the components of education quality assurance (Waters & Marzano, 2006: 11).

Educational quality improvement programs can be achieved if the teaching and learning activities in the class can take place well, effectively and efficiently (Ali Sudin, 2008). Improving the quality of education can be carried out if it is supported by efforts to improve the ability of teachers by principals and supervisors through continuous and continuous academic supervision and supervision.

School superintendents as professional education staff have a large contribution to the quality of education. School / madrasah supervisors function as educational supervision implementing elements which include academic supervision and managerial supervision. Academic supervision is related to the task of fostering teachers in improving the quality of the learning process, while managerial supervision is related to the task of fostering school principals and other education personnel in the aspects of school management and administration.

In carrying out supervision, the school superintendents uses a measuring instrument in the form of a supervising instrument which has been known as the Teacher Performance Evaluation Instrument of IPKG). Amhal Kaefahmi's research on the performance of teachers of Islamic Education

(PAI) in East Semarang Elementary School (SD) using IPKG (2015) shows that the acquisition of administrative score (RPP) and implementation of the learning process has not been satisfactory as the following table

Table 1. Score of RPP Compilation

Score	Quality	Category	Frequency	Percentage (%)
85 - 100	4	Very good	-	0
65 - 84	3	Good	3	21.43
51 - 64	2	Enough	7	50
0 - 50	1	Less	4	28,57

Table 2. Obtaining the ability score of the learning process

Score	Quality	Category	Frequency	Percentage (%)
85 - 100	4	Very good	-	-
65 - 84	3	Good	3	21.43
51 - 64	2	Enough	4	28,57
0 - 50	1	Less	7	50

Teacher performance is still low due to several reasons, namely the quality of supervision that academic staff of schools / madrasas do not meet the needs as professional teachers (Ambarwangi, 2015) and at the assessment stage, supervisors do not use instruments that have been planned or assessments carried out directly (Inayah, 2015). Teacher performance is the result of work achieved by a teacher in carrying out his duties (Novitasari, Agus Wahyudin, Rediana Setiyani, 2012).

The development of the school supervisor / madrasah academic supervision instrument in this study was developed using the CIPPO concept (context, input, process, product, and outcome) which is expected to produce an academic supervision instrument that effectively measures teacher performance.

The objectives of this study were to: (1) describe and analyze academic supervision instruments (2) describe the development of CIPPO-based school supervisors / madrasah academic supervision instruments, and (3) test the validity, reliability, and practicality of Semarang-based Ministry of Religion supervisor's academic supervision instruments CIPPO.

METHODS

The research method used in this research is research on developing instruments with research design development of teacher performance instrument products, beginning with analyzing and evaluating academic supervision instruments that have been used by school supervisors (conventional / empirical instruments) then developed with analysis and evaluation using CIPPO thus becoming a hypothetical instrument of academic supervision.

Hypothetical academic supervision instruments based on CIPPO were analyzed and evaluated by looking at instrument context regarding the suitability of instrument content, input based on stakeholder input from instrument users, processes based on filling instruments as they should, products sought so that the instruments produced were in line with expectations of supervisors to assess teacher performance, outcome concerns the usefulness of the instruments that have been produced.

The steps for developing the instrument are divided into two important stages, namely: Stage of Preliminary Study, and Development Study. In this preliminary study phase there are steps that must be taken including: Literature Studies, field studies, needs analysis and description of findings analysis (Factual models). The preliminary study phase aims to collect various kinds of information about the needs in the development of academic supervision instruments. Information is obtained through needs analysis, namely the study of literature and documents, and field studies by discussing with school / madrasah supervisors.

Development Studies consist of Draft Findings, Assessment Design Arrangements (scales, scoring), Limited Trials, Revisions & Product Improvements. At this stage, the development of academic supervision instrument products is preceded by analysis and evaluation of empirical (conventional) academic supervision instruments used by Semarang City Religious Affairs school / madrasah supervisors and hypothetical instruments are assembled and arranged based on the CIPPO model.

Development of instruments on context elements is carried out to describe and detail the environment, needs that are not fulfilled in conventional instruments adapted to the curriculum used to measure teacher performance in learning. In the input element, it is done to describe the existing sources, plans and strategies to achieve the needs of academic supervision instruments that are prepared based on input from stakeholders, namely, supervisors, principals / teachers, and teachers.

The process element in the development of academic supervision instruments is directed at the activities carried out and the obstacles encountered to suit the needs in accordance with the needs of the instruments that can be used to measure teacher learning. The development of academic supervision instruments on product elements is developed on things that show changes that have occurred and results that have been achieved, namely, the results of the development of academic supervision instruments of school supervisors / madrasas in accordance with expectations that can measure teacher performance. Whereas the outcome element is directed at the impact and usefulness of academic supervision instruments that can be used to measure teacher performance in preparing the administration of learning and the implementation of learning.

The research subjects in this study were all 2017 supervisors of the Semarang City Ministry of Religion which numbered 22 supervisors. The subject of this study was tested on a small scale which was carried out on 4 supervisors from madrasah supervisors and PAI supervisors. While on a large-scale trial carried out to all supervisors of the Ministry of Religion of Semarang, which amounted to 22 supervisors.

The technique of collecting data is in the form of qualitative data and quantitative data. Qualitative data is obtained through observation techniques, interviews, document studies carried out in the Semarang Ministry of Religion and validation by experts / experts. While quantitative data was obtained through analysis and validation of instruments both in small scale trials and in large-scale trials. Quantitative analysis carried out is to look at the characteristics of the instrument consisting of the validity and reliability of the instrument.

RESULTS AND DISCUSSION

The factual condition of the academic supervision of school supervisors / madrasas in the Semarang Ministry of Religion is done by means of individual meetings and group meetings. Individual meetings through class visits and private meetings with the teacher. Group meetings are conducted with regular meetings that have been scheduled by schools and madrasas as well as requests from supervisors.

Planned class visits are carried out by the supervisor to obtain an overview of the teaching and learning process carried out by the teacher, including the learning tools. Personal meetings at the time agreed upon between the school / madrasah and the teacher to solve specific problems are carried out by direct dialogue with the teacher. Regular meetings are held by supervisors to provide general assistance through regular meetings.

Academic supervision by the Semarang City Ministry of Religion school / madrasah supervisors was carried out to verify, validate, and assess the administrative completeness of learning and the implementation of teacher learning. The supervision procedure is carried out by referring to the supervisor workbook issued by the Ministry of Education and Culture. The supervision carried out by the supervisors has not yet had the same instrument of academic supervision. The supervisors make their respective supervision instruments adapted to their individual needs and capabilities so that there are no

standard instruments that meet the levels of validity, reliability and practicality.

The academic supervision instrument used by the Semarang City Ministry of Religion school / madrasah supervisors to assess the ability of teachers to develop Learning Implementation Plans (RPP) is a Model 1. Teacher Performance Assessment Instrument (IPKG). The two conventional ECG instruments, the elements and indicators have not been adjusted to the current curriculum so that there are many discrepancies.

Indicators that are considered not meeting the needs of teacher performance assessment are reflected in the curriculum framework which still uses the 2006 curriculum while the school / madrasah curriculum currently uses the 2013 curriculum. The preparation is allegedly not through intensive input from users, namely school / madrasah officials, headmaster / madrasa, and teachers. The teacher performance assessment produced does not describe the performance of the teacher as a whole, especially in terms of administration and implementation of teacher learning.

Development of the CIPPO Model Academic Supervision Instrument

The development of CIPPO-based academic supervision instruments is produced through evaluation of a system, in the form of context evaluation (Context Evaluation), input evaluation (Input Evaluation), process evaluation (Process Evaluation), product evaluation (Product Evaluation), and impact evaluation (Outcome Evaluation). Analysis of the instruments of academic supervision with IPKG or so-called conventional (empirical) instruments are as follows:

1. Guidelines used (2006 Curriculum, Permendikbud No. 22 of 2007, and Supervisory Workbook of 2010);
2. Input in planning the preparation of instruments (the preparation has not been planned according to the needs of teacher performance and preparation has not been

planned according to the source of costs and time);

3. The process of drafting instruments (it is not known to process the preparation and the supervisor only uses existing IPKG instruments);

4. Components in the instrument (formulation of learning objectives, selection and organization of subject matter, selection of learning resources, learning methods, assessment of learning outcomes).

5. The usefulness of the instrument (less practical is used for follow-up coaching and improving teacher performance and is less effectively used for teacher performance appraisal).

The analysis of the Academic Supervision Instrument resulting from the development of the CIPPO-based (Hypothetics) is as follows:

1. Guidelines used in accordance with applicable regulations (2013 Curriculum, Minister of Education and Culture No. 22 of 2016, PMA No. 2 of 2012, and 2017 Supervisory Workbook);

2. Input in the preparation of instruments (planned based on teacher performance needs and planned based on the source of costs, time and personnel);

3. The process of drafting instruments (compiled by involving stakeholders namely, supervisors, principals, and teachers, and prepared through Forum Group Discussion (FGD) involving experts (practitioners and academics);

4. Components in the instrument (developed by loading KI, KD, Indicators, and time allocation, developed by containing learning objectives, developed by containing learning materials and teaching materials, developed by including learning models, methods, and approaches, developed by loading steps the learning step, developed by loading the student-centered learning paradigm, developed by loading learning resources, developed by including learning assessment,

developed by including a follow-up program, and developed by loading supervisory guidance notes);

5. Use of instruments (instruments can be used practically for teacher formation and effective in assessing teacher performance, and instruments can be used practically for school supervisors).

Practical validation is done by discussing each instrument by experts, input or discussion compared to the instrument grid to see its suitability. Validation using the Aiken's V formula which is used to calculate content-validity-coefficient, each instrument is assessed by two experts. The test results can be said that all instruments have a high coefficient value with an average of 0.89 to 1, the instrument can be said to be good. That is, the instrument is worthy of being used in the academic supervision of the school / madrasah supervisor.

Regarding the aspect of conformity with the supervisory guidelines, experts provide a very appropriate assessment, that the academic supervision instrument for developing the instrument indicator formulation is in accordance with the applicable supervisory regulations and work guidelines. In addition, the description of the scope of academic supervision material is in accordance with and contains aspects of the assessment of academic supervision.

An assessment of the appropriateness of the development instrument with the needs of teachers and principals / madrasas, the experts considered that the description of the instrument was in accordance with the objectives of academic supervision and the description of the instrument was appropriate explaining the competencies to be achieved in academic supervision. It is hoped that the academic supervision instrument of development results can be used to assess teacher performance in relation to the preparation of RPP and implementation of learning.

In the conformity aspect of the implementation of academic supervision, experts validate the development academic supervision instruments accordingly in explaining the strategies

for implementing academic supervision. In this aspect, the validator gives an appropriate assessment of the instrument because it is appropriate to explain the structure of the teacher's hypertension in making lesson plans with the appropriate material and academic supervision approach.

Academic supervision instruments related to the suitability aspects of academic supervision, experts validate according to the indicators needed in the implementation of academic supervision because they contain indicators of academic supervision, such as indicators of time and place of implementation, targets, and scores of competent teachers supervised.

Regarding the product aspect, the validator assesses that the academic supervision instrument is appropriate because it contains a description of the instrument that explains the follow-up program and guidance notes so that it can be used to measure teacher performance.

In the aspects of the usefulness and practicality of CIPPO-based academic supervision instruments, experts validate very well because practical development instruments are used to assess teacher performance. As a whole the items of school supervisors / madrasah supervision instruments that are analyzed using the Aiken's formula already have a validity value of 30 0.30 which can be said to have adequate content validity.

Table 3. Recap table of content validity by experts

No Item	Expert 1		Expert 2		∑S	Analysis Results Aiken's (V)
	Skor	S	Skor	S		
1	4	3	3	2	5	0.833333
2	4	3	3	2	5	0.833333
3	4	3	4	3	6	1
4	4	3	4	3	6	1
5	3	2	4	3	5	0.833333
6	4	2	4	2	4	0.666667
7	4	2	3	2	4	0.666667
8	34	2	4	2	4	0.666667
9	4	3	4	3	6	1
10	4	3	3	2	5	0.833333
11	4	3	3	2	5	0.833333
12	4	3	4	3	6	1
13	3	2	4	2	4	0.666667
14	4	1	4	1	2	0.333333
15	4	2	4	2	4	0.666667
16	3	2	4	1	3	0.5
17	4	3	3	2	5	0.833333
18	3	2	4	3	5	0.833333
19	4	3	4	3	6	1
20	4	3	4	3	6	1
21	4	3	4	3	6	1

Based on the recapitulation of content validation by experts on the academic supervision instruments resulting from the development, it can be stated that the academic supervision instruments for CIPPO-based development are in accordance with the needs of teachers and supervisors in relation to teacher performance appraisal in the preparation of RPP and teacher learning.

Expert judgment 1 on 21 items of instrument obtained number 80 with average 3.80952 having variance of 0.1619. Whereas expert judgment 2 obtained data, from 21 items of instruments obtained a score of 78 with averrage of 3.71429 having a variance of 0.21429. While for the difference test of expert judgment on 21 items of academic supervision

instruments based on CIPPO using ANOVA, the following data were obtained.

Table 4. difference test

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.095524	1	0.095524	0.50633	0.48086	4.08475
Within Groups	7.52381	40	0.1881			
Total	7.61905	41				

Based on the different test table data above, data is obtained that F hit <F Tab (5%). Thus it can be stated that there is no significant difference in assessment by experts on CIPPO-based academic supervision instruments. The School / madrasah Supervisory Academic Supervision Instrument that has been validated by the experts as described above, was piloted to all Semarang City Ministry of Religion / school supervisors. The instrument was tested on 21 school supervisors / madrasas of the City of Semarang Ministry of Religion through an exploratory factor analysis.

Data that meets valid criteria based on factor analysis procedures are KMO MSA value ≥ 0.5, then the data is feasible and can be continued to be analyzed. If the correlation of the charge of each indicator has a positive value, then the factor load (factor loading) has a coefficient> 0.3, it can be said that the data is valid and can be used as a reference to construct validity so that the indicator has a strong construct.

Based on the data above, it can be said that there was no significant difference between the experts who validated CIPPO-based academic supervision instruments. The reliability results of the CIPPO-based development academic supervision instrument described in each aspect of the CIPPO component using reliability statistics provided that if the cronbach alpha column is> 0.6, then it is considered reliable.

Regarding the practicality of CIPPO-based academic supervision instruments experts state practical because development instruments contain clear and easily adapted instructions for use in the need for academic supervision. In terms of scoring, the experts considered the academic supervision instruments as a result of the development to contain scoring instructions clearly accompanied by a rubric and clear and easy to understand scoring criteria. In addition, the supervisor is easy to carry out the examination process of academic supervision and is easy to interpret the results of academic supervision so that recommendations and follow-up of supervision results are easy to implement.

Final Product of CIPPO-Based Academic Supervision Instrument

Based on the test data as described above, it can be mentioned, academic supervision instruments developed using the CIPPO base can be said that all instruments have high coefficient values with an average of 0.89 to 1, the instrument can be said to be good. All items of school supervisor / madrasah supervision instruments analyzed using the Aiken's formula already have a validity value of 30 0.30 which can be referred to as a supervisory instrument for school / madrasah supervisors having adequate content validity. That is, the instrument is worthy of being used in the supervision of the academic staff of the school / madrasah.

CONCLUSION

Based on the results of the research and discussion as described can be summarized as follows,

The academic supervision instrument of the school supervisor / madrasah of the Ministry of Religion of the City of Semarang that has been used so far (empirical / conventional instruments) is not sufficient to be used to assess teacher performance in terms of preparation of Learning Implementation Plans (RPP) and implementation of teacher learning.

Academic supervision instruments developed with CIPPO-based (hypothetical instruments) are

carried out by evaluating instrument analysis assembled based on context, input, process, product, and outcome so that it fits the needs of teacher performance assessment in terms of preparation of RPP and implementation of teacher learning.

CIPPO-based school supervisors academic supervision instruments are more effective than conventional academic supervision instruments

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