

Method of Visiting Group Works Based on Discovery Learning in Academic Supervision Teaching

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The Academic Supervision by the Principal of their teachers is often not as expected. This is because the Prospective Principal's training program organized by the Principal Development and Empowerment Institution (LPPKS), especially the Academic Supervision training program, is not well implemented. Many problems arise because of poor classroom management and lack of delivery of learning objectives. Therefore, this research seeks to develop effective learning methods for Academic Supervision training courses in order to make this training course learning truly meaningful and fully mastered, by prospective principals participating in the training. This method is called visiting group works based on discovery learning. The use and effectiveness of this method is examined from both a qualitative and a quantitative methodology. It is expected that in the future all of the education and training subjects taught can apply this method in their teaching and learning.

Key words: *Learning Methods, Visiting Group Works, Discovery Learning, Academic Supervision.*

Introduction

How to implement and use the results of Academic Supervision properly is the main material at the Training of Prospective Principals (PPCKS). Academic Supervision includes basic competencies that must be mastered and which are needed by all Principals in the framework of their function of carrying out the professional guidance of the teachers in the schools they lead. Masaong (2013) concluded that there were several important aspects of this supervisory

role: (1) assistance and services to the principal, teachers and staff; (2) for the development of teacher's self-quality; (3) for teacher professional development; and (4) to motivate teachers. All of these aspects must be present and appear when conducting academic supervision in the school environment (Rahabav, 2016; Nordentoft et al., 2013 Vehviläinen, 2009;)

The problem is that in teaching and learning the Academic Supervision program in the training for Prospective Principals is not delivered as expected. Many problems arise because of poor classroom management and lack of delivery of learning objectives. Therefore, this research strives to develop effective learning methods for Academic Supervision training courses in order to make this training course learning, truly meaningful and such that it can be fully mastered by prospective principals who participating in the training. The method that the authors developed here, follows what was mentioned by Asghar & Ahmad (2014). Asghar & Ahmad (2014) state that a method must be developed that is: 1) contextual, 2) science-based, 3) participatory and collaborative, 4) integrative, 5) reflective and analytical, and 6) democratic.

The principle that the author uses as a grand theory in research on the development of this method is derived from the theory of social constructivism, because according to Moore (2013). This principle is suitable for use by adult learners and also, this principle is in accordance with the needs of school principals (Khan et al., 2009; Lestariningsih, 2011). After the learning principle is determined, then the supporting concepts must be chosen. Therefore, in this research a round robin method and the discovery learning method were adopted. The round robin method was chosen because it can support active participation and collaboration between the principal and other principals; and between the principal and supervisors (Kagan & Kagan, 2009; Mackinnon, 2004; Haimah, 2019). The next adaptation is taken from the discovery learning method. The basic reason for choosing this method is because with this method, principals are required to construct their own understanding through social interaction with other principals, and this method proves to be very productive if applied to adult learners (Fauziati, 2014; Alfieri et.al., 2011; Hammer, 1997; Balim, 2009; Svinicki, 1998; Saab, 2005).

According to Launer (2006) and Halpem & McKimm (2009), the supervision method must be able to foster: 1) a climate of exchange of ideas, 2) curiosity, 3) the right context, 4) the suitability of the material with participants, 5) creativity, 6) compliance with applicable rules, and 7) care. Based on the problems faced by the principal in academic supervision, the reference standard for developing methods, indicators of good academic supervision, and also the principles and concepts that will be developed in the method; the researcher conducts research and development on the teaching methods of academic supervision to improve the ability of principals in this field. In this research, the method conceptualized and investigated is termed 'Visiting Work Group Based on Discovery Learning' method.

The procedure for developing the method, presented in Table 1 below, is:

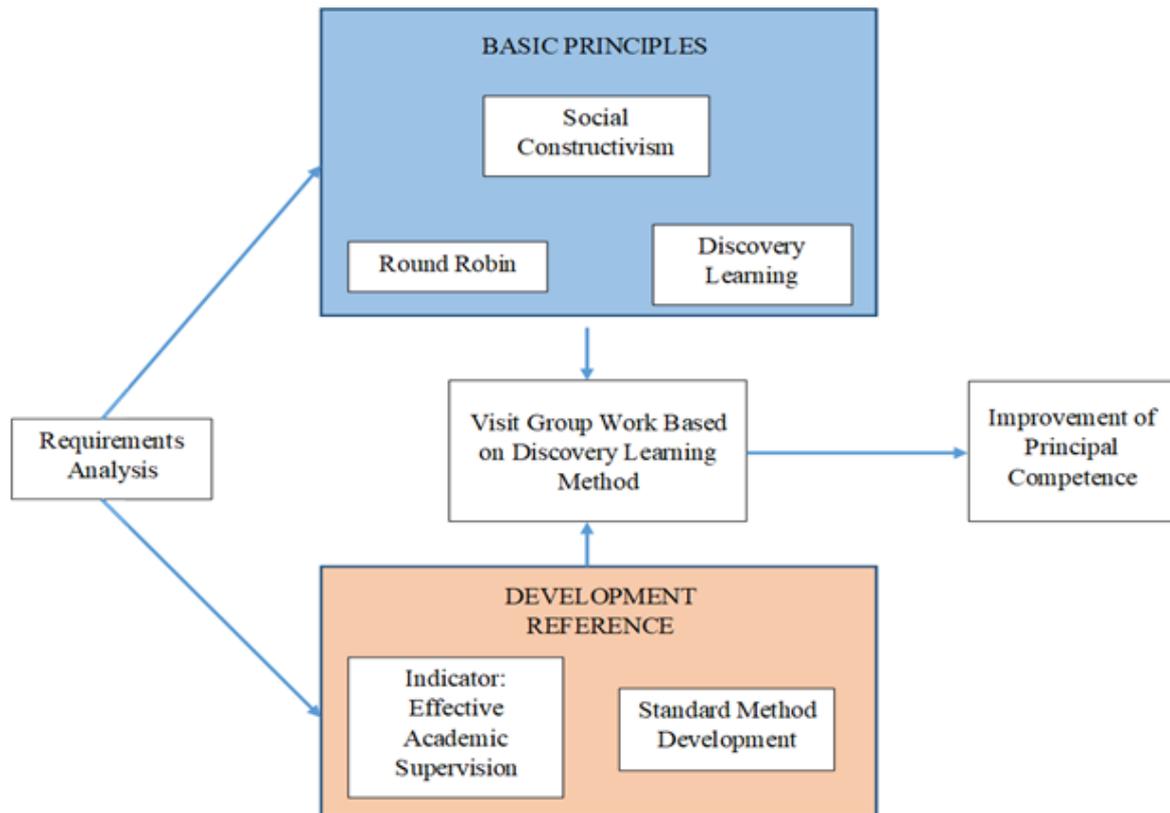
1. Phase I: Carry out a needs analysis study of the limited scope of the Principal's training in LPPKS, to describe the current conditions of academic supervision learning, and capture the need to develop a method of groupwork visit based on the findings needed.
2. Stage II: Determine the basic principles and supporting concepts of the 'visiting work' method so that it is in line with the needs of the principal.
3. Phase III: Develop a prototype of the visiting work method in teaching academic supervision that is adjusted to the standard development of methods and indicators of effective academic supervision.
4. Stage IV: Carry out research on the effectiveness of the discovery-based group work method in teaching academic supervision.

Table 1: Specifications of the 'Visiting Group Works Based on Discovery Learning' Method

Component	Aspects	Explanation
Concept	a. Definition	a. Method of Visiting Work Group Based on Discovery Learning is a way of teaching in class which is formed into a number of groups consisting of at least 6 people, with group assignments adjusted to the presentation of sub-subject matter then between groups make visits to clarify the results of other groups working together, which does not rule out each individual organizes himself involved, especially in the use of mental processes in discovering some concepts or principles that were previously unknown.
	b. Procedure	b. Preparing learning into the Training Design and Learning Plan (RBPM) and lesson plans (RP) with scenarios for the use of learning methods 'visit group work' which conditions the class to be class based on discovery. Discovery-based learning includes several stages: <ol style="list-style-type: none"> 1) Training participants are divided into groups, consisting of at least 3, maximum 6 people; 2) Stimulation (providing preliminary facts to be observed through the media: supervision principle word cards and video observations of learning in class) to all training participants, which are then discussed and worked out by each group; 3) Identification of problems (classifying the proposed facts);

	c. The Elements	<p>4) Produce allegations about the purpose of the facts given;</p> <p>5) Data collection, visits between groups by seeing / observing, correcting / comparing, clarifying the work of groups;</p> <p>6) Proof (analyzing facts by looking for patterns in order to know right from wrong);</p> <p>7) Facilitating sharing of alleged results between groups</p> <p>8) Encourage training participants to conclude and reflect.</p> <p>There are 6 components:</p> <p>1) The component of the learning objectives with the group's work visit method is to increase the understanding of the basic concepts of academic supervision in the training of Prospective Principals (CKS) in LPPKS.</p> <p>2) The educator component is the education and training instructor who provides academic supervision learning by utilizing the group work visit method.</p> <p>3) The student component that is specifically shown in the development of the group work visit method is the CKS training participants in LPPKS.</p> <p>4) Curriculum component in learning is the subject matter of academic supervision by utilizing the group work visit method, which is made by the developer of the RBPMD and RP format in accordance with the desired syntax.</p> <p>5) The media component in learning is the word card about the principles of academic supervision and the media of audio video learning tools in class to practice filling out the academic supervision instruments.</p> <p>6) Evaluation component is evaluating the final learning outcomes after utilizing the group work visit method.</p>
Hardware	The physical product	RP, RBPMD, technical guidelines on the use of the method of discovery-based group work, the Media Card for Academic Supervision Principles, and Academic Supervision Instrument Sheets.

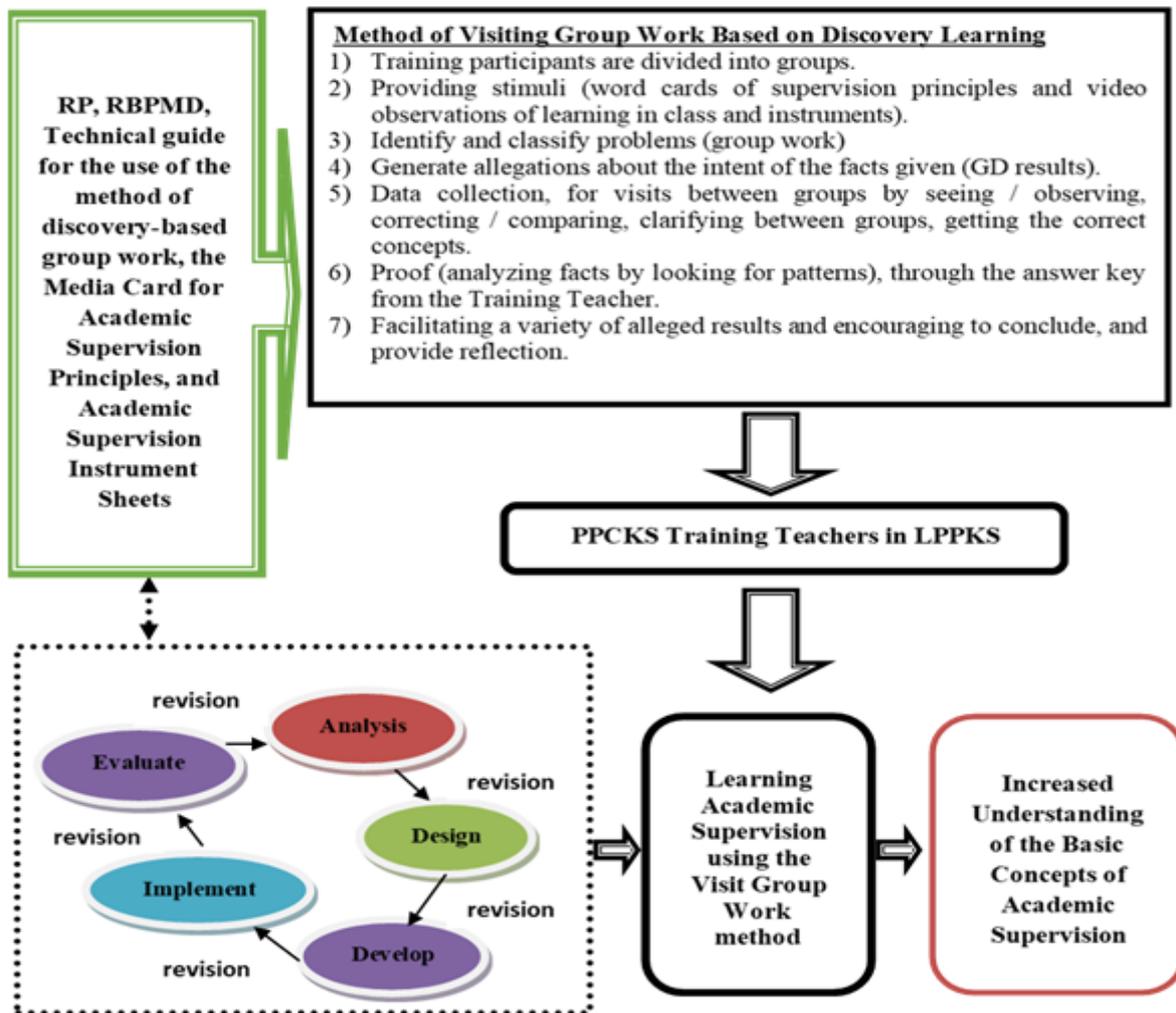
Figure 1. Framework of Thinking



Hypothetical Model Learning Visiting Group Work Based on Discovery Learning

The model offered by the discovery-based group work method is expected to be a solution to the problems of learning academic supervision in the form of finished products and is represented in Figure 1 above and Figure 2 below.

Figure 2. Model Method Visiting Group Work Based on Discovery Learning, (K3BP)



Methods

Type of Research

This type of research is 'research and development', in order to develop solutions to the problems of academic supervision in CKS training. This research and development will also produce a technical procedure product 'visit group work' along with a handbook on the use of the method. This research is in observing the underlying phenomena and the phenomena that occur are used qualitative methods through technical observation, interviews and Focus Group Discussion (FGD) (Kuna, 2006; Wolf, 1987; Schensul et al., 1999; Driscoll, 2011; Mishra, 2016). Meanwhile, to determine the effectiveness of the group work visit method model the difference in power (quantitative methods) was tested. In addition descriptive methods, evaluative methods and experimental methods were used during the implementation of this research and development. Köksal (2013:1) argues, "Experimental methods have a

discrete place due to their effectiveness to establish cause effect relationships and, to make manipulations and to provide control over the variables."

Research / Development Procedure

Research and development procedures are the main part, in order to complete the research which contains stages and operational technical steps as presented in Table 2 below.

Table 2: Research Development Steps

Stages	Preliminary studies	Development Study	Evaluation
	<i>ANALYSIS</i>	<i>DESIGN AND DEVELOPMENT</i>	<i>IMPLEMENT AND EVALUATE</i>
1.	Literature review	Model Design	Pretest
2.	Field Study	Model Devices	Model Implementation
3.	Description and Analysis of Findings	Limited Trial	Posttest
4.		Evaluation and Improvement	
5.		Expanded Trial	
6.		Evaluation and Improvement	
7.		Hypothetical Model	

a) Stage I: Preliminary Study

In the first stage, a preliminary study is conducted covering library study activities, then followed by a field study observing academic supervision learning, which is followed by an analysis of findings, which then produces a draft model.

**b) Stage II: Model Development Stage
Development Model (Product Design)**

The Discovery-Based Group Work Method will be developed following the ADDIE (Analysis, Design, Develop, Implement, Evaluate) model, with the following details:

- 1) Analysis: analyzing the need for learning methods in the learning process of Academic Supervision in CKS training which is held by LPPKS. Analyze and determine the competency word card media material and the principles of supervision as well as the instruments in academic supervision, realizing it in preliminary research with literature studies and field studies that produce a description of the findings and design of a draft model of the group work visit method.

- 2) Design: make a draft model method based on needs analysis, which is already referring to the sub subject matter of competence, the principles of supervision and the training of subject matter instruments for Academic Supervision. This stage creates a Technical Outline of the Group Work Visit Method and a Handbook for the Use of the Group Work Visit Method.
- 3) Develop: The process of producing and carrying out limited and wider trials and the results as a guide and guide for revising the product. Finished product in the form of Technical Method of group work visits based on discovery and Handbook of Utilization Method of group work visits and their devices to be tested limited and widely in PPCKS in the LPPKS of the KS training program for the Academic Supervision training, followed by filling out questionnaires to the Training Teachers and Training Participants after completion of activities academic supervision learning process.
- 4) Implement: Carry out the final product testing Method of visiting group works by conducting experimental research at two CKS training places. These two CKS training venues differ from one regency / city area to the second. One CKS training center as a control and one CKS training center as an experiment were given treatment using the group work visit method. The CKS experiment training center was measured for the level of understanding of the basic concepts of Academic Supervision through questionnaires and tests both at the beginning and at the end of the academic supervision learning process. Whereas the CKS training place which as a control does not need to be given such treatment, it means that learning goes as it usually does, the teacher does it with the RBPMD and RP from the LPPKS but also implements pretest and posttest.
- 5) Evaluate: This is the final step in the development of the Discovery Learning Method Based on the Discovery Learning Group based on the results of the implementation that has been done. This step collects data from the activity site then evaluates and analyzes statistically with the T-test. By comparing the final results of the two KS training activities as a control or an experiment, there will be evidence obtained about the effectiveness of the developed model.

Design Validation

Design validation is conducted by means of expert testing on the content and substance of academic supervision material and on methodical didactics in learning andragogy.

Design Revision

The revision and evaluation of the product is carried out from the beginning of manufacture until the process of developing the product components of the group's work in constant consultation with experts.

Product Trial Trial Design

The trial design of the 'group work visit method' product was carried out in two stages: limited field trials and expanded field trials.

Trial Subject

The trial location was limited and the trial expanded at this stage of development was carried out at 3 CKS training sites located in 3 different regency / city areas.

Data Type

This research data is in the form of both quantitative data and qualitative data: quantitative data was obtained from the results of the analysis and visiting instruments of the group's work, while qualitative data was obtained from the description of the analysis of observations, interviews, and discussions. The data for the development phase in the trial is limited to empirical information about the attractiveness and accuracy of the group work visit method. While the data from the trial was expanded in the form of questionnaire score data and initial and final tests.

Data Collection Instruments

The instruments used in data collection use a questionnaire distribution technique, both for Education and Training Teachers and Training Participants. This questionnaire contains the attractiveness of the group work visit method during limited trials. In order to ascertain the validity and reliability of the instrument, the instrument was tested for CKS training in the Java region.

From a number of instruments that will be used in limited trials and trials that are extended and have tested the validity of the instrument items, a number of valid instruments will be selected for use. Further to that, the content validity test was also carried out by consulting the experts, then the reliability test was made to select appropriate and good fit instruments.

Data Analysis Technique

Data analysis was performed after the data was collected from both limited trials and expanded trials, the technique used was descriptive qualitative analysis, statistical analysis with the T-test to find out the differences before and after learning by utilizing group work visit methods.

Product Revision

Product revisions were made if during a limited trial there are many suggestions and input to the developer. Then the trial was expanded with the results of two CKS training places in different districts / cities.

Evaluation and Improvement

The process of repairing and revising until finishing in perfecting the product is described at this stage. All components and elements that are repaired and revised need to be documented as physical evidence of the stages of evaluation and improvement.

Hypothetic Model (Final Model Revised Results in the Model Development Stage)

The hypothetical model is a guarantee of the results that have been made, through several previous stages that have been adjusted to the desires in the framework of thinking in this research and development.

Stage III: Model Evaluation / Testing Stage

This hypothetical model will already be able to be produced and devised, so that the model can develop and be applied in real conditions for a wider scope, in any district / city in the entire Republic of Indonesia. Finished model testing is carried out using the experimental method and it is possible for a revision or finishing of the discovery-based group work method.

Results and Discussion

Preliminary Study Results

Literature Review

The analysis of the need for appropriate and appropriate academic supervision teaching and learning methods aimed at providing the participants of the CKS training, to be able to understand the concepts and planning of academic supervision, supervision techniques and steps, feedback and follow-up results of academic supervision can be achieved. Based on a literature study it was found that the use of the group work visit method was carried out in order to achieve the learning objectives.

***Field Study (Learning Survey)
Observation of RBPMD and RP***

Learning activities in the supervised training class are first made by the Education and Training Design Plan (RBPMD) as the curriculum, and the Lesson Plan (LP) as a preparation tool for teaching in class with 9 jp for PPKS Training Teachers. Both of these learning tools already exist and are made by LPPKS, so that Diklat Teachers refer to these learning tools in the learning process in the classroom, so not the obligation of each Training Teacher to make them.

The survey results generally show that the Academic Supervision curriculum has fulfilled the elements and components of learning tools. In the component method, there are already several methods that must be implemented during learning (introduction, core, closing). Analysis of the methods suggested to the Teacher Training includes, brainstorming, question and answer, case studies, group discussions, individual assignments, simulations, see Table 3 below.

Table 3: List of Media in the Academic Supervision RBPMD

Media / Tools used in class
LCD, Laptop, Short-duration learning video show material; Plano Paper; Marker.

The lesson plan (RPP) survey in the core activity scenario is depicted in Table 4 below:

Table 4: Scenarios of Core Activities in the Academic Supervision RP

2.1 Educational Assessment
Exploration by observing and asking questions to understand facts and concepts, planning and academic supervision techniques
Group discussion of academic supervision issues
Question and answer about academic supervision
Presentation of the results of the discussion. Each group presents the results of the discussion, participants respond, the facilitator clarifies
Make conclusions from the discussion
2.2 Attitude assessment
Exploration by observing and asking questions to understand facts and concepts, techniques and planning.
Group discussion of academic supervision problems in learning both conceptually and practically, its causes, and finding alternative solutions.
Watching videos
Question and answer about academic supervision
Presentation of the results of the discussion. Each group presented the results of the

discussion, the facilitator made a clarification
Make conclusions from the discussion
<i>ICE BREAKER</i>
2.3 Assessment of the realm of knowledge
Exploration by observing and asking questions to understand the facts in the video.
Group Discussion of problems in pairs to assess videos using instruments.
Question and answer about the results of group discussions
Presentation of the results of the discussion. Each group presented the results of the discussion, the facilitator made a clarification

The core activities in the Academic Supervision RP are seen to be divided into 3 domains of assessment, education assessment, attitude assessment, knowledge domain evaluation. This stage is intended as possible for the assessment of training participants. As observed in the core activity scenario, the method used most is discussion, questions and answers are general throughout the academic supervision material and interspersed with icebreaking. The use of the method is not elaborated in detail in sub subject matter of academic supervision.

Observation in the CKS Supervision Academic Training Class

Observation Result

The Implementation of CKS training courses for Academic Supervision training:

- 1) On September 8, 2018, in Badung Regency, Bali Province, IN 1 PPKKS Education and Training Activities, at the Mahajaya hotel Denpasar Bali.
- 2) Name of Training Teacher: Drs. Suyono, M.Pd. (PS Dikmen of East Java province).
- 3) Class Administration Staff: Nur Hidayat, S.Pd.
- 4) Number of Training Participants: 31 Teacher Candidates for Badung Elementary and Middle School Principals, who have passed the substance selection by LPPKS.
- 5) The committee is assisted by staff of the Education and Sports Office of Badung regency of BALI province.
- 6) Notes during observations in class:

Preliminary Activities

The instructor introduces and explains the expected results of the academic supervision program, giving a description of the teacher's professionalism related to teacher certification and its allowances. Efforts to improve teacher professionalism through supervision.



The teacher explains that supervising the teacher aims to find out the quality of the learning, explaining the problems that often arise in the classroom while teaching. The learning is filled with brainstorming and teaching experiences of the instructor.

Core Activities

The instructor gave the CKS some instruments to be filled. The emphasis on filling out the instruments was not discussed in detail, and explored as a guide for training participants when supervising junior teacher practices.

Education and Training teachers do not focus on assessing instruments and discussing them (the instruments are soft files; teacher's lesson plans are also soft files) so they need word program computer skills.

After that, continued the lecture about the follow-up supervision of the class with discussion, focusing on brainstorming, interspersed with the personal story of the instructor of the training, not on the basic concept of filling in the follow-up instruments.

Closing Activities

There are no conclusions or feedback about academic supervision instruments (sub-subject matter).

Results of Interviews of Training Participants' Representatives

Interview results of several training participants: no detailed discussion about instruments, more brainstorming, and a too relaxed teaching style.

Description and Analysis of Findings

Collecting data through field surveys through activities, examining and analyzing learning tools (RBPMD, RP) and observing learning in class, interviews with representatives of training participants have been completed by getting the findings. Findings that need attention and review for improvements and solutions to improve understanding of the subject matter of future academic supervision, as follows;

Lesson Plan

The LP has a slight deviation (less relevant) to the RBPMD, which should be interconnected or complementary. It seems that the learning scenario in the LP has not indicated learning

according to the RBPMD, it can be seen from the description of the method that does not refer to per sub subject matter.

- a) Facilities and Infrastructure. The media and tools for each sub subject matter do not yet reflect the treatment methods (discussion, question and answer) of the sub-subject matter Academic Supervision, so that the Teacher Training can be out of control in teaching or according to the wishes of the instructor (what they likes).
- b) Learning Steps. The learning scenario for core activities in the RP occurs ambiguously because it is in the information, as follows:
 - (1) Assessments (education, attitudes, knowledge) because there is no detailed description of its activities, including in the material or sub-material section, or the activities of the Teachers' Training which are separate from the subject matter.
 - (2) The description of the activities carried out by the Diklat Teachers as well as the activities carried out by the Training Participants cannot yet be explained in a clear and detailed and applicable manner.

Teaching Observation

Observations of learning in the classroom are more focused on the treatment of the Teachers in facilitating and presenting the subject matter of Academic Supervision (teacher center), not indicating the student center. There are findings that indicate that Education and Training Teachers still do not understand and prepare themselves through the RBPMD and RP provided by LPPKS. The findings in classroom learning, as follows:

- a) Preliminary activities that exceed the time allocation in the RP is 10 minutes, participants are more engrossed in brainstorming, sharing information.
- b) Group discussion activities are used more for working on LK and brainstorming between participants and instructors and vice versa. Discussing sub subject matter or supervision concepts through instructor innovation media is less visible.
- c) Ice breaker for more than 5 minutes, thus reducing the time of further sub-staples.
- d) The practice of filling in instruments is out of focus because sharing the soft file wastes time and the individual task of practicing these instruments via a laptop. Obstacles to training participants for elementary school level there are still some people who are not proficient in Information and Communication Technology (ICT) or are not proficient in operating computers / laptops.
- e) Teachers' time management does not adjust to what is stated in the RBPMD and RP, for example, at the 5th hour there is only Work Sheet-1 assignment completion.
- f) Teachers in presenting the subject matter of academic supervision seem relaxed and straightforward. This is reinforced by the confirmation to the participants through

interviews that the results, the instructor has not emphasized and given the opportunity to practice for participants for supervision instruments, instructors support learning more lectures / stories, relaxed style as they are in teaching.

Statistical Analysis of the Trial Data

Normality Test

The results of the normality test showed that all significance values or p-values both in the pretest and posttest indicate all data are normally distributed.

Paired Sample T-Test

The paired sample t test results showed that both the control class and the experimental class have a significance value or p-value <0.05 so it can be concluded that there are significant differences in the pretest and posttest values in the control class and the experimental class.

Independent T-Test

Test results are presented below in Tables 5 through 8 below.

a. Pre-test Value

Table 5: Results of Pre-test in Experiment and Control Group

Group Statistics					
	Group	N	Mean	Std. Deviation	Std. Error Mean
Pretest	Experiment	24	6,4583	1,53167	,31265
	Control	24	5,8750	1,45400	,29680

From the table above it can be seen descriptive statistics of the pretest scores in the experimental and control classes. When viewed from the average pretest value in the experimental class is higher than the control class. To find out whether the difference is significant, the following independent sample t test is performed:

Table 6: Results of Independent Sample Test of Pre-test

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Pretest	Equal variances assumed	.055	.816	46	.183	.58333	.43109	-.28441	1.45107
	Equal variances not assumed			45.876	.183	.58333	.43109	-.28447	1.45114

Based on the results of the independent sample t test in the above table it can be seen that: the significance value or p-value $0.183 > 0.05$ so that it can be concluded that there is no significant difference in the pretest value between the experimental class and the control class.

b. Post-test Value

Table 7: Results of Post-test in Experiment and Control Group

Group Statistics						
	Group	N	Mean	Std. Deviation	Std. Error Mean	Error
Posttest	Experiment	24	8,0417	1,45898	,29781	
	Control	24	6,9583	2,07426	,42341	

From the table above it can be seen the descriptive statistics of the post-test scores in the experimental and control classes. When viewed from the average post-test value in the experimental class is higher than the control class. To find out whether the difference is significant, the following independent sample t test is performed:

Table 8: Results of Independent Sample Test of Post-test

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Posttest	Equal variances assumed	2,468	,123	2,093	46	,042	1,08333	,51765	,04135	2,12532
	Equal variances not assumed			2,093	41,283	,043	1,08333	,51765	,03813	2,12854

Based on the results of the independent sample t test in the above table it can be seen that: the significance value or p-value $0.042 < 0.05$ so it can be concluded that there is a significant difference in the post-test value between the experimental class and the control class.

Conclusion of Trials

As there are significant differences in the results of the pretest and posttest, both the control and experimental groups, and also the post-test results that are better than the pre-test, the development of the Learning Method of the Discovery Based Group Work can be continued.

Results of the Model Development Phase

The existing design has been validated by 2 experts who helped test this method, with steps that have been determined and consulted from the entire design process, through to the implementation and refinement of the group work visit method product. The two experts represented the substance of academic supervision and experts from the methodology of andragogy from the Faculty of Education, Sebelas Maret University (UNS). The design has been revised several times. This revision was carried out on the job during the work on the product, if there is anything that needs to be improved and revised, the developer immediately makes improvements in accordance with input from academic supervision experts and andragogic methodology experts. The final results of the revisions and

improvements made by the developer are already products that have been validated by experts.

The trial design of the group work method was carried out in two stages, a limited field trial that was carried out at PPKS Sukabumi Regency, West Java Province and an expanded field trial carried out in Samosir Regency, North Sumatra Province. The testing strategy used was the utilization of the group work visit method in the academic supervision learning process by the Training Teachers. Post the completion of the attractiveness of the product questionnaire method of group work by the Teaching and Training Participants, the data obtained was then analyzed as input for product revision and improvement.

Academic supervision learning has been carried out for 9 hours x 45 minutes by utilizing the techniques and procedures of visiting group work methods. Then at the end of the lesson before the Academic Supervision training team, a post-test and questionnaire were conducted with the participants and instructors of the CKS training. Preliminary test results and final tests were statistically analyzed and the results are that there are significant differences between district / city tests and between the initial test results and the final test. This shows that this product is effective in increasing the understanding of prospective principals participating in training.

This research data was collected in the form of both quantitative data and qualitative data; quantitative data was obtained from the results of the analysis and instruments of the group's work visit, while the qualitative data was obtained from the description of the analysis of observations, interviews, and discussions. All data, both qualitative and quantitative, have been obtained from 3 different cities, depending on where the CKS training was conducted by LPPKS.

Results of Model Evaluation / Testing Stage

This hypothetical model has been produced and defined. It is expected to be able to develop and be implemented in real conditions across a wider scope, in any district / city in the entire territory of the Republic of Indonesia. Finished model testing is carried out using the experimental method and it is possible for a revision or finishing of the discovery-based group work method.

The set of learning methods based on groupwork based learning methods consists of:

- 1) Education and Training Design (RBPM) for Academic Supervision training, ie 9 JP syllabus for CKS training;
- 2) Learning Plan for Academic Supervision training subjects;

- 3) Handbook for the Utilization of Visit-Based Group Work Method;
- 4) Media Card Word sub subject matter Principle Academic Supervision;
- 5) Instrument Sheet for the analysis of the teacher's Lesson plan to be supervised;
- 6) Instrument Sheets for observations / observations of learning in class for teachers whose lesson plan has been analyzed;
- 7) Interview Instrument Sheet for teachers after in class observation;
- 8) Follow-Up Instrument Sheet to reflect the final results of the academic supervision stage.

The completeness of the equipment and materials and tools for the groupwork method based on the above findings have been fully implemented in one of the PPCKS training places.

This hypothetical model trial showed good and effective results used in CKS training. Furthermore, broader development by conducting dissemination at the national level in CKS education and training activities throughout the district / city.

Conclusions and Suggestions

Based on the results of testing and developing, the method of 'Visiting Group Work Based on Discovery Learning' in several districts / cities in Indonesia, the authors conclude that this method is a very good model to use for teacher training materials, especially for the Supervision of Academic Supervision for the Prospective Principal (CKS). This method does indeed require improvements in order to perfect the design and model. It is hoped that in the future, this method can be applied in all training courses that require a good understanding of basic concepts of principal supervision of their teachers.



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