

## Academic Supervision Model Based On Video Conference For Teacher Of Smk Negeri In Wonosari Sub-District, Gunungkidul Regency

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### Abstract

Academic supervision is a supervisory assistance service to teachers both individually and in groups. The number of supervisors who are not proportional to the number of teachers as well as limited time and space are the obstacles that exist in the implementation of academic supervision. The objectives of this research are (1) to know and analyse the factual model of academic supervision; (2) to develop hypothetical model of video conference-based academic supervision; and (3) to know and analyse the feasibility of the use of video conference-based academic supervision model. The method used in this research is RnD (Research and Development). The subject of this research is supervisors and teachers of SMK (*Sekolah Menengah Kejuruan*- Vocational School) in Wonosari sub-district, Gunungkidul regency. The data are analysed quantitatively and qualitatively. The final model of video conference-based academic supervision is obtained by describing the factual model of academic supervision, developing conceptual models, validating conceptual model, testing the hypothetical models, and formulating a final model of video conference-based academic supervision. The result shows that the factual model of academic supervision is less optimum because it is constrained by the number of teachers, limited time and quite wide location. At the development stage, it produces hypothetical models that have been validated by experts and practitioners. Then, the final model with feasibility test for supervisor and teacher resulted in very good category model. The conclusion of this research is that the model of academic supervision based on video conference is very feasible to be implemented. This research suggests that supervisors could immediately adopt a conference video-based academic supervision model to solve the current problems; the number of teachers to be guided, the limited time and the wide location.

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## INTRODUCTION

The low quality of education in Indonesia is a major cause of the low quality of Indonesian human resources (Widodo, 2007). Therefore improving the quality of education is a top priority besides equity, relevance, efficiency and effectiveness. The quality of education is very essential and its achievement is largely determined by the teacher as a learning manager. Teachers as a component of the school have an important role even called the spearhead of educational success (Guntur, Raharjo, & Lestari, 2016).

Academic supervision is a series of activities to help teachers develop their ability to manage the learning process to achieve learning objectives. Supervisors conduct academic supervision as one of the instruments that can measure and ensure the fulfillment of quality of learning implementation to help teachers understand better their role in school and improve the way of teaching. Zepeda (in Eliani, 2014) says that the aims of academic supervision are to promote teacher professional growth and development, to facilitate problem solving, and to build teachers' professional capacity.

Zahro in Muhajirin (2017) mentions that professional teachers are teachers who are able to manage themselves in carrying out the task of learning. Supervision conducted by supervisors aims to help teachers identify problems and obstacles encountered in performing their tasks, and find solutions to such problems. Hence, it is expected that teachers can improve their performance and professionalism in managing learning process to improve the effectiveness of student learning achievement outcomes (Hartoyo in Sugiyono, 2014).

Dalawi (2013) states that the supervision of academic supervision by supervisor is not yet optimum due to limited time and there are still teachers who have not been supervised by school supervisor. In the preliminary study (December 1, 2016), it was found that the implementation of academic supervision by supervisors of individual teachers was conducted randomly because of the huge number of assisted teachers. Academic supervision at the school level is carried out and coordinated by the principal.

The implementation of academic supervision, especially the supervision of learning, has not been

implemented to all teachers. This is due to few numbers of school supervisors. Preparation of academic supervision instruments and schedule have not involved teachers because of some constrains such as the number of supervised teachers, time, place and other school activities other than supervisory. Surya, Samsudi, & Prihatin (2015) confirmed that supervision does not yet meet the expectation of teachers. Factually, supervisors do not have regular schedule for supervisory and they never distribute questionnaires to capture data and information from teachers and students. They have no continuous and sustainable supervisory activities.

Referring to the importance of class observation conducted by supervisors to assisted teachers in which the the same time, technology has developed fast, people can make use of its sophisticated technology to help them gather information and establish communication one another without limited time and space. It means that the constrain of the minimum interaction between supervisors and teachers can be solved. Supervisory model using video-based conference is considered to be more effective to cope with time and space because supervisors can give their supervisory activities without phisically available at the similar place Juaini, Rusdarti, & Made (2016). The main excellent service indicator that can be implemented is related to its precision and accuracy on information. It is in line with the model of real time virtual supervision model.

In this case, supervisors assume that the model of technology-based supervision and information are very effective due to the limited time the supervisor have meanwhile there are many teachers who must be assisted in an area. Taqizar (2018) states that the lack of direct interaction between the supervisor and the teacher, and the limited time and place of supervision will be easily solved by the virtual system. Virtual-based supervision model is considered very effective and efficient because a supervisor can monitor the activities of teachers not only at school. Further, the supervisory can be conducted without time, place and distance constraints.

Based on preliminary studies and previous literature analysis, it is necessary to develop a model of video conference-based academic supervision that is expected to assist supervisors in

carrying out academic supervision tasks. The model of video conference-based academic supervision aims to: (1) describe and analyse the implementation of academic supervision; (2) design and produce a video conference-based academic supervision model; (3) know and analyse the feasibility of the video conference-based academic supervision model.

This research is expected to: (1) provide new insights and knowledge for school supervisor about the implementation of online academic supervision using video conference; (2) be a reference on the possibility of developing an academic supervision model for supervisors; and (3) assist supervisors to be more effective in performing academic supervision tasks.

## METHOD

Research method used in this research is research and development (R & D). The steps in this study are in accordance with the steps that have been modified by Samsudi (2009 : 89), which are grouped into three steps:

### Preliminary study

The literature study was conducted intensively using relevant sources of information from textbooks, journals, articles, research reports and research results related to the implementation of academic supervision. Field studies were conducted by carrying out interviews and distributing questionnaires to find the factual conditions about the implementation of academic supervision. The data source from the introduction phase is the informants consisting of 3 supervisors of SMK (*Sekolah Menengah Kejuruan*- SMK) and 3 principals. Further, the other respondents are 45 teachers of SMK.

### Development Stage

This stage includes the following steps: (1) formulating a conceptual model that refers to the results of the identification of needs and the factual model; (2) validating conceptual models by experts and practitioners; (3) developing a conceptual model into a hypothetical model based on the results of validation and revision by experts and practitioners. Data source at development stage is empirical data of preliminary study result. Experts and

practitioners involved in the validation of the conceptual model are two UNNES education experts and three vocational supervisors of Gunungkidul Regency.

### Evaluation Stage

The evaluation phase includes a limited trial and perception test. A limited trial aims to determine the effectiveness of the hypothetical model, while the perception test intends to determine the practicality of the hypothetical model.

## RESULT AND DISCUSSION

The results of the study discusses the stages of the research and development; the stage of preliminary study, development, and evaluation.

### Preliminary Study Stage

Academic supervision planning that has been implemented seems to be not in accordance with the principle of academic supervision which is a democratic principle. It is found that in preparing instruments, school supervisors' intensity involving teachers is 4.4% fall into the category of always, 15.6% are into the category of frequently, 33.3% are occasionally, and 46.7% fall into the category of never.

Nana Sudjana (2011 : 59) says that school supervisors should not dominate academic supervision, but they must actively involve their teachers. Therefore, the academic supervision program is planned, developed and implemented together cooperatively with the teacher. Based on the data related to the agreement of supervised teachers on the academic supervision schedule, 37.8% of them fall into category of always and 31.1% were in the category of often. However there are as many as 24.4% fall into the category of sometimes and 6.7% fall into the category of never. Further, Imawati (2014) states that programs should be jointly designed by supervisors and teachers. Supervisors involve teachers in identifying problems facing by the teachers. Therefore, by involving teachers, programs created by supervisors will be appropriate to meet the need of the teachers to solve the existing problems.

The implementation of learning supervision or classroom observation that has been being

implemented is considered ineffective. The results of the analysis of 45 teachers of SMK Negeri in Wonosari sub-district, the frequency of the supervisors in monitoring teachers' classroom activities is 4.4% entered in the category of always, 15.6% into the category of often, 44.4% fall into the category of sometimes, and 35.6% are in the category of never.

Based on the results of the research related to the implementation of academic supervision, it shows that the implementation of supervision of learning in the class has not run optimally. This is because the school supervisor has not implemented the learning supervision to all assisted teachers. The data illustrate that there are 35.6% of teachers have not carried out the learning supervision in the classroom. Supervisors cannot monitor all the targeted teachers because of the huge number of teachers, limited time and many other activities other than the supervisory tasks.

Due to the imbalance number of supervisors with the assisted teachers, it is not possible to do supervisory activities on their own, so that they are represented by the principal at each school. Mahendrawati (2012) suggests that because of some problems making it not possible for supervisors to monitor the activities, it requires to find a solution that is by coordinating with teachers who are considered senior or called peer supervision.

In the evaluation phase, the school supervisor evaluates the implementation of learning supervision through assessment of learning planning and its implementation. This evaluation will result in mapping of teacher competency. This will be used as a reference for follow-up coaching activities in the coming semester. Teacher competency maps need to be followed up to have a real impact on improving teacher professionalism (Sumardi, 2015). According to the analysis of 45 teachers, the results revealed the fact that the competency map of teachers in the target schools has not been made optimally by supervisors.

This is because school supervisors have not implemented learning planning assessments to all the targeted teachers; 57.8% fall into the category of occasionally, and 11.1% fall into the category of never. School supervisors have not assessed all teachers about the skills to implement the lesson, 35.6% fall into the category of occasionally, and 28.9% fall into the category of never. Further, the

supervisor has not assessed the skills to all teachers in evaluating the learners' learning outcomes, 48.9% are in the category of occasionally, and 22.2% are never. To conclude, it can be said that competency mapping for teachers in SMK Negeri in sub-district of Wonosari, Gunungkidul regency, is considered not optimum.

This is because school supervisors have not implemented the learning planning assessments to all supervised teachers. Factually, school supervisors have not assessed all teachers' skills to implement the learning activities and evaluated the learners' learning outcomes. Evaluation of teachers is one of the stages to find out how far the ability of teachers in teaching and learning in the classroom. The assessment and evaluation of teacher performance in managing learning process is a way to predict teacher's performance quality in managing learning activities (Aedi, 2014 : 183).

### **Development Stage**

The result of the analysis revealed that the planning of academic supervision carried out in SMK Negeri in Wonosari sub-district, Gunungkidul regency is not well run because the supervisors and the teachers do not work together in making the schedule and the instrument of academic supervision implementation. Hopefully, by applying this video-based academic supervision model of conferences, the supervisors and the teachers jointly undertake the supervision schedule and determine several aspects related to the instruments to be used in academic supervision activities.

Nana Sudjana (2011:59) mentions that supervisors are not allowed to dominate academic supervision, but they are supposed to actively involve the teachers. Therefore, the academic supervision program is planned, developed and implemented together cooperatively with the teacher.

Then, related to implementation of academic supervision carried out in SMK Negeri of Wonosari sub-district, Gunungkidul Regency, it is found that supervision of learning in the classroom still uses the sample of some teachers due to huge number of teachers to supervise. Therefore, the supervisors do not carry out supervision of learning in the classroom themselves to all targeted teachers.

By applying this video-based academic supervisory model, supervisors can do the their

tasks at a time to more than one teacher supervision in different classes. Duygyu Candarli & Yuksel (2012) stated that video conferencing technology is now considered as a lucrative way to connect with people anywhere in the world. This technology will improve learning by meeting people who were previously inaccessible due to some issues such as time and place.

Next, the analysis related to evaluation of academic supervision that has been carried out for teachers of SMK Negeri in Wonosari sub-district, Gunungkidul Regency, reveals that supervisors in conducting the evaluation of academic supervision still use samples of some teachers due to their huge numbers, so that the supervisor does not conduct evaluation of academic supervision to all their supervised teachers.

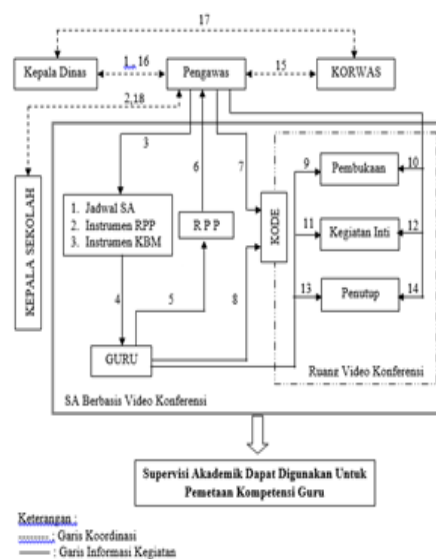
By applying the model of video-based academic supervision of this conference, the supervisors can see the RPP (*Rencana Pelaksanaan Pembelajaran- Learning Implementation Plan*) uploaded by the teachers for assessment or evaluation. Baecher et al. (2014) argue that supervisors play an important role in assisting teachers in the implementation of their learning. Video-based supervision offers a promising alternative because supervisors have the opportunity to examine and evaluate teacher's learning implementation in the classroom. Similarly, when teachers implement learning in the classroom, supervisors may conduct evaluations of teachers with online classroom observation or virtual real time, at the same time and different places. Hence, supervisors can carry out more classroom observations for more than one teacher.

Video conferencing technology is now considered a profitable way to connect with people everywhere in the world. This technology will improve learning by meeting people who were previously inaccessible due to some issues such as time and space constraints (Duygyu Candarli & Yuksel, 2012).

Related to the analysis of the need for academic supervision, based on the distributed questionnaires, it can be identified as follow: (1) 66.7% of the respondents stated that they strongly agree on the scheduling of academic supervision agreed by the supervisor with the teacher either face-to-face or through online media; (2) related to academic supervision plan used for academic

supervision along with instrument of learning planning and its implementation, states that 66.7% of supervisors strongly agree they need to involve the teacher; (3) related to the need for media to anticipate the number of assisted teachers in terms of guidance of supervisory learning plan, supervisor states that 100% strongly agree, while related to monitoring the implementation of learning in supervisory class also they stated 100% agreed. Then, 66.7% strongly agree on the evaluation from the supervisors; (4) Supervisors stated that 66.7% strongly agree with the existence of media that can assist to map the competence of teachers in each of the target schools as a reference for follow-up and guidance in the next semester at the school they assist.

The hypothetical model which is the conceptual model (the result of factual analysis and need analysis) that has been validated by experts and practitioners as follows:



**Figure 1.** Model of Hypotetic for Video-based conference academic supervision

Figure 1 reveals the process of academic supervision using video-based conference at SMK Negeri for teachers in sub-district Wonosari, Gunungkidul Regency as follows:

Supervisors GURU receive a decree from the Head of local government, then coordinate the approval of the implementation schedule and administrative files (step 1). Then, supervisors coordinate with the principal about academic supervision (step 2); Supervisors upload schedules and assessment instruments to supervised teachers (step 3); Next,

teachers download and review the schedules, the assessment instruments from supervisors (step 4); Then, teachers upload RPP (step 5); Afterwards, supervisors download for coaching and assess teacher learning planning skills (step 6); Next, the supervisor informs the code to enter the conference video (step 7); Teacher enters the conference room video code (step 8); Teachers carry out the opening activities of the learning in the classroom (step 9); Supervisors monitor and assess teacher's opening classroom activities (step 10); The teacher carries out the core activities of learning in the classroom (step 11); Supervisors monitor and assess core activities of classroom learning by teachers (step 12); Then, teachers carry out closing activities in classroom learning (step 13); Next, supervisors monitor and assess classroom closing activities by teachers (step 14); The school supervisor and the supervisory coordinator follow up the results of the academic supervision (step 15); School supervisors who get the direct data from academic supervision are forwarded to the local government as a report (step 16); The supervisory coordinator obtaining data from the school supervisor is forwarded to the local government as a report (step 17); Supervisors evaluate the implementation of academic supervision to create a map of teacher's competence in each target school to the principal (step 18).

### **Evaluation Stage**

Practicality test conducted to determine the feasibility and practicality to be applied as one of the models in the process of academic supervision. Respondents' perceptions of the practicality of the academic-based academic supervision model model are in very reasonable categories. The respondents' approval on the model used is important to note because the success of an innovation program is largely determined by attitudes to practitioners (Wong in Syarifudin, 2017).

Practicality test on the video-based supervision model shows that supervisor and teacher consider this model is very feasible to apply. Practicality test results show that the supervisor strongly agree to use the model in running the academic supervision. Then, the teachers stated that they strongly agree if the model is used for supervisors in conducting guidance and assistance to teachers. Further, teachers are also involved together to determine the schedule and socialization

of assessment instruments. Besides, teachers are also monitored to solve various problems during learning process in the classroom.

It is new way to overcome the problems related to academic supervision's obstacles such as the huge number of the teachers and the time constrain in which very limited. This new way is to apply the model of video-based academic supervision of the conference aiming to optimize the academic supervisory activities for teachers.

Through this video-based academic supervision model, supervisors and teachers can jointly undertake academic supervision planning. While making the schedule, assessment instrument, guidance, and teachers' learning planning can be conducted jointly by the supervisor and the teacher in the video-based conference for academic supervision model. It means that supervisors should not dominate their academic supervision.

The responsibility for improving the academic program is not only on the supervisor but also on the teacher. Therefore, academic supervision programs should be planned, developed and co-operatively implemented with teachers (Nana Sudjana in Bahri, 2014). Further, according to Baecher et al. (2014), supervisors play an important role in assisting teachers in the implementation of their learning. Video-based supervision offers a promising alternative because teachers have opportunity to examine their own lessons and thus, engage with supervisors at a more collaborative joint conference.

The benefits of this video-based academic supervisory model is it will be more optimum in terms of quantity when supervisors run academic supervision tasks for their targeted teachers. The implementation of video-based conference for academic supervision, supervisors can carry out classroom observations for assisting teachers in different classes at the same time. In the process of classroom observation, using video conference demanded diligence, precision and careful scrutiny. Further, after conducting a trial model of the video-based conference for academic supervision, supervisor stated that the model of this model is very effective to optimize the implementation of classroom observation.

In accordance with the result of the research conducted by Taqizar (2018) stating that the minimum direct interaction between supervisors

and teachers as well as the limited time and place, it will easily solved through the use of virtual system. Virtual-based supervision model will be effective and efficient because a supervisor can easily monitor teachers' activities in which not limited to place, time, and distance.

## CONCLUSION

The conclusions of this research and development study are as follows: (1) Academic supervision carried out during this stage of planning has not involved all the targeted teachers in determining the schedule and planning the assessment instrument used by the supervisor. Then, in the classroom observation stage, due to too many teachers are trained, the time is limited and the location is wide so that the supervisors take the samples on the teacher.

At the evaluation stage, the supervisor creates a teacher competency map for the sample teachers, not all of the assisted teachers; (2) The academic supervision that the supervisor needs is a video-based conference for academic supervision model that can overcome the problem of a few numbers of supervisors, limited time and large locations; and (3) The trial results of the model of the video conference-based for academic supervision model reveal that all supervisors and teachers are in excellent classification so that the model is very feasible to apply.

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