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THE DEVELOPMENT OF SUPERVISION MODEL OF COMPETENCY BASED TEACHER TO MATHEMATICS TEACHER

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Abstract

The main problem of this research is how the competency-based supervision model of effective teachers to improve the competence of teachers of mathematics. The purpose of this research to 1) identify the profile of supervision conducted for math teachers, 2) developing a competency-based supervision model of effective teachers to improve the competence of teachers of Mathematics. This research uses research and development (research and development). Referring to the overall measures developed Borg and Gall, in this study the steps are simplified into three stages: 1) phase of the study, 2) the development stage, and 3) model validation stage. Data collection techniques used in this study were 1) in-depth interviews (in depth interviews), 2) participant observation (participant - observation), and 3) documentation (documentation). Instrument used is human and to analyze the data using analytical techniques descriptive. The results are completion of a competency-based model of supervision of teachers for effective math teachers to improve the competence of teachers of mathematics.

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INTRODUCTION

One of the main factors that determine the quality of education is the teacher. According to Mukhtar Sucipto and Iskandar (2009:166) teachers is a determinant of educational success through performance on institusioanl and experiential level, thereby improving the quality of education must start from the aspect of the teacher.

Basically every human resources at the school has potential in improving himself. In this case the role of management education has a role to help improve each individual in it. The increase was to carry out the functions - functions of management, Teryy (1997:16) mentions the four management functions that must be implemented, namely Planning, Organizing, Actuating and Controlling.

Planning refers to how the program improvement plan, Organizing refers to how the plan should be implemented, and the necessary elements - elements in improving the resource driven (actuating) to achieve the goal, and all activities must be controlled in Controlling function. Based on the function of controlling the activities of supervision should be carried out to the measures and improvement plans (Hasibuan 2003:22).

Supervision is a process of helping teachers to improve and enhance learning and curriculum (Oliva 1984), so the embodied meaning that supervisors should help teachers, individually or in groups, to improve teaching and the curriculum. Oliva still adding one field supervisor, that aspect of teacher development. While Neagly and Evans (1980) emphasizes aspects that aid teachers in teaching and student learning, in addition to curriculum improvement.

Sahertian (2000) states that the purpose of supervision is to provide services and assistance to improve the quality of teaching and teachers in the classroom, which in turn to improve the quality of student learning. Supervision is not only improve teaching skills but also develop the potential of teachers. Sahertian (2000) also stated that the problems faced in implementing supervision in the primary education is how to change the mindset that is autocratic and corrective actions to be constructive and creative attitude, the attitude that creates situations and relationships in which teachers feel safe and accepted as a subject that can grow on its own. For that, the supervision must be carried out based on data, facts objectively.

Supervising the control measures should be implemented at the school to be used by teachers to improve and refine the plan if teachers find errors in the field. On the other hand the function of supervision become a standard for teachers to measure their performance in order to improve their competence.

Teaching supervision activities are activities that must be carried out in education. Generally regarded as the principal supervisor in the school, because it is responsible for coordinating all of the teaching program (Lovell and Eiles 1983). Therefore, the teachers hope that the principal use most of the time for the repair and improvement of teaching. According to Government Regulation No. 19 of 2005 on National Education Standards chapters 39 and 40 contained the term educational unit supervisor in charge of supervising the formal education and training unit supervisors assigned to conduct surveillance on non-formal education. In Article 55 asserted control education unit includes monitoring, supervision, evaluation, reporting, monitoring and follow-up results. With the replacement of the term supervisor to supervisor or overseer impact of a shift in the meaning and implementation supervision.

Based on the above, the implementation of the supervision in Indonesia, supervisor, superintendent and head of the education unit (principal) to act as a supervisor. In the era of regional autonomy, procurement supervisor, superintendent and principals the authority of the head area. This means that selection could occur because the person selected received approval from the head area is not necessarily a competent person. On the other hand, people who are usually appointed as supervisor, superintendent or principal is older teachers,

experienced and considered able to occupy that position. Though senior teachers do not have enough stock to be given the competences supervisor a different teacher competencies possessed by a supervisor. This causes the implementation of the supervision is not in line with expectations for competency requirements, recruitment and selection, and evaluation and promotion to supervisory positions did not reflect the great attention to the importance of the implementation of supervision at the root of education is teaching and learning interactions in the classroom.

On the other hand, there is missmatch because the educational background supervisor improper subjects taught by teachers who supervised. This clearly reduces the scholarship missmatch supervision and pose new problems in the implementation of supervision.

Based on the ideas and the facts required a development model of supervision appropriate to account for the above problems. The hope with the development of targeted supervision models can solve the problems of learning so that the end result can improve the quality of education in Indonesia.

METHOD

This research uses research and development (research and development). Jenisini dipilihkarenaberkaitan with the common goal of research is to develop a model of supervision that is suitable for achieving the appropriate mathematics teacher professional standards expected. Thus, this study seeks to produce a component in the education system, through the development and validation.

Conceptually pendekataan research and development includes ten common steps, as described Borg & Gall (1983), namely 1) research and information collecting, 2) planning, 3) develop a preliminary form of the product, 4) preliminary field testing, 5) play product revision, 6) playing field testing, 7) operational product revisio, 8) field operational testing, 9) final product revision, and 10) disemination and implementation. Referring to the concept mentioned above, in this study the steps are simplified into three stages: 1) phase of the study, 2) the development stage, and 3) model validation stage. The three phases are basically covers the entire step Borg and Gall developed, and the plot can be made in the following chart.

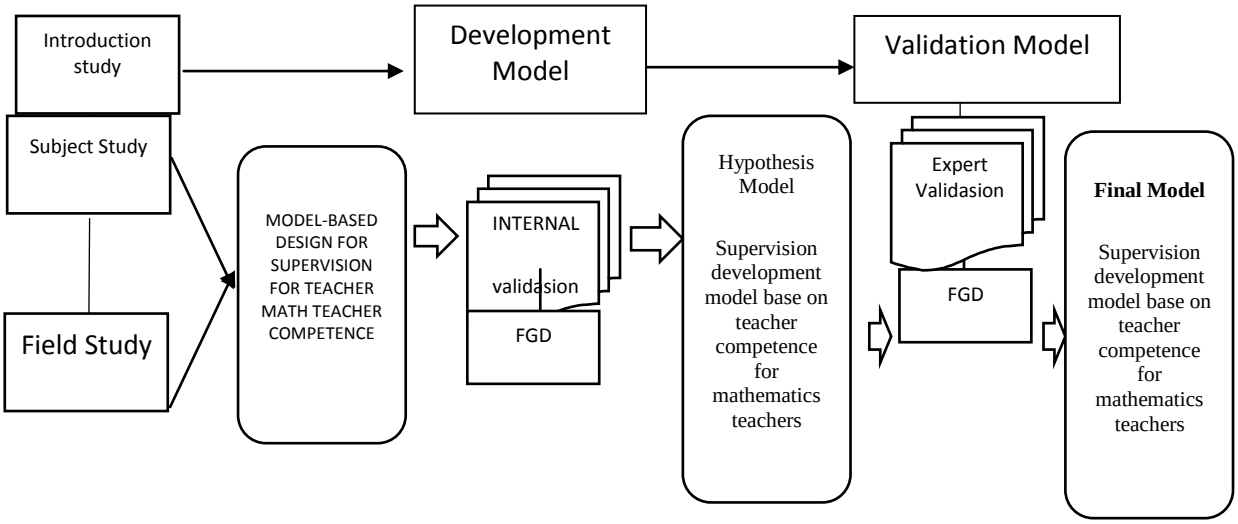


Chart 1. Chronology of Events Research Competency-Based Supervision Model Development for Teachers of Mathematics Teachers

In more detail, the three phases are described as follows.

(1) phase of the study, a combination of research and collecting information planning

At the stage of preliminary studies conducted studies literature on supervision and professional competence of teachers. Then conducted a field study to find a model of supervision that exist today. Furthermore, the findings are described and analyzed so as to find a model factual. In this stage, the formulation of supervision related to the problem and determine the objectives to be achieved at each stage.

(2) stage of development, is a combination of product develop preliminary form, preliminary field testing, main product revision, playing field testing, operational product revision, field operational testing. Based on the model of the design model of supervision is factual then made preparations and supporting components dilakukanforum discussion. Further group made revisions to the initial product generated by discussion group forum. After repeated improvement of the obtained models have a design hypothesis that the operational model of supervision. This is a validated model of supervision.

(3) model validation phase is a combination of revision and the final product in semination and implementation. In the final refinement step is to develop a model of supervision in order to produce the final product (final) through an expert validation and conducted group discussion forum. Further dissemination of supervision models developed in the world of education.

This research was conducted in the city of Pekalongan with the object of research supervision. Subjects were high school math teachers, principals, and supervisors of schools selected Dindikpora.Untuk entire SMA N Pekalongan city by 4 high schools, namely: SMA N 1, N 2 SMA, SMA N 3, and SMA N 4. Informants were selected from all the math teachers in high schools, high schools in all heads and all supervisors Pekalongan SMA Dindikpora Pekalongan. Selected high school math teacher for high school math teachers have an educational background that Mathematics Education minimal S1 competence in accordance with what is written in the Law of Teachers and Lecturers No. 14 of 2005.

Procedures or data collection techniques in qualitative research are classified into two methods: interactive and non-interactive, which is interactive with interviews and participant observation, while the non-interactive without participating included the observation and analysis of documentation (Sutopo, 1988). For that data collection techniques to be used in this study were (1) In-depth interviews (in depth interviews), (2) participant observation (participant - observation), and (3) Documentation (Documentation).

The instruments used are human, this is due to the qualitative research study researcher is the instrument because of his position made him the things in the whole research process. According Moleong (1999) researchers are planning, implementing data collection, interpretation of data, and in the end he became a reporting research results. Referring to the opinion of the presence of the researcher in the field of qualitative research is required.

According to Guba and Lincoln (1981) in order to be a good instrument then a qualitative researcher must pick the traits - characteristics: (1) responsiveness, (2) to adapt, (3) emphasize integrity, (4) based upon the expansion of knowledge; (4) processing the data as soon as possible, (6) take the opportunity to clarify and recapitulate, (7) take the opportunity to look for unusual responses and idonsinkratik.

Qualitative researchers try to interact with the subject of research in the natural, not prominent, and in a way that is not forced. The purpose of qualitative research by trying to uncover the natural background, therefore the presence of researchers in the field should be fair and try not to look in treating subjects as research subjects studied so that the resulting morbidity.

Patton (1980) defines data analysis as the process of arranging the order data, organize data into a pattern, category, and description of the basic unit. While Bogdan and Taylor (1982) defines data analysis as the process of detailing the formal effort to find a theme and formulate a

hypothesis (idea) as suggested by the data, and in an effort to provide assistance to the theme and hypothesis.

Moleong (1999) combines both the opinion that defines data analysis as the process of organizing and sorting data into patterns, categories, and a description of the basic unit in order to discover themes and working hypotheses can be formulated as suggested by the data.

The purpose of the analysis of the data to find meaning and eventually turned into a theory. This is because, in principle, qualitative reasoning is finding the going theory.

In this study, analysis of data using descriptive analysis techniques which, according to Miles and Huberman (1984) carried out through three interrelated activities with each other. The three activities are: (1) reduction of data (data reduction), (2) exposure data (data display), and (3) drawing conclusions and verification (conclusion drawn / verification). These three activities are carried out during and after data collection.

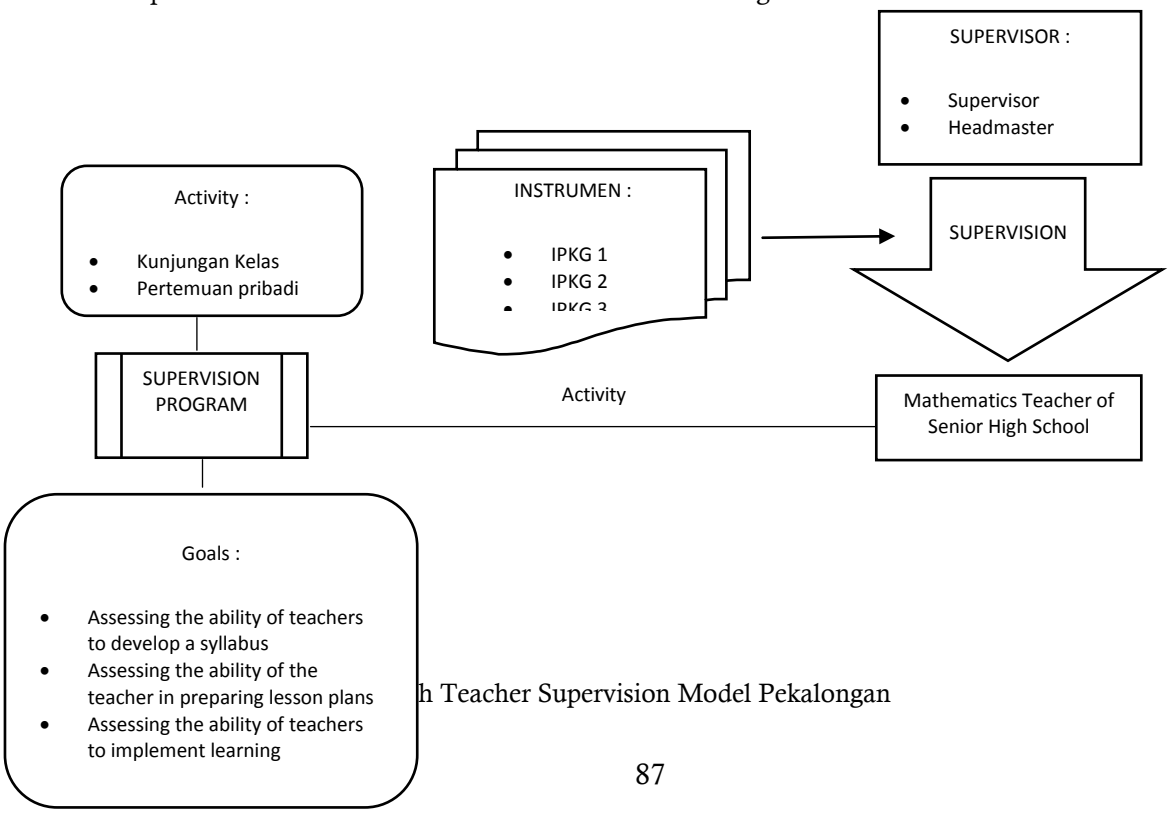
RESULTS AND DISCUSSION

The study was conducted in accordance with the planning Pekalongan. The results are as follows.

1. Based on interviews of Supervisors, Principals and Teachers Mateamtika use Interview Guide, profiles supervision conducted for high school mathematics teacher Pekalongan can be described as follows.

Supervision programs for mathematics teachers already in the work program supervisor and work programs Trustees who held at least once a year. Supervision conducted by Dindikpora Supervisor and Principal. Supervsi supervision visits carried class is using Capability Assessment Instrument Development Master Syllabus (IPKG - 1), Instrument Rating Capability in the Development Master Plan Implementation Study (IPKG - 2) and Capability Assessment Instrument Teachers in the Implementation of Learning (IPKG - 3) a more emphasis on teacher assessment paperwork so there is no follow-up supervision activities. Teachers do not get any input or feedback appropriate based on what is observed in the classroom so that the teacher's supervisor did not increase competence. Based on these things, then running for supervision is not effective.

Supervision model runs can be illustrated in the following chart.



h Teacher Supervision Model Pekalongan

Based on field data, also found that the obstacles in the implementation of supervision had been caused by busy supervisors (supervisors and principals.

2. Model of effective supervision to meningkatkankompetensi math teacher is Teacher Competency-Based Supervision Model for Teachers of Mathematics. Supervision programs using this model is based on a needs analysis. Teachers and supervisors held an initial meeting to discuss supervision to be carried out so that the supervisors understand what kind of help is needed teachers. Direct students to the supervisor of the feedback, especially on the overall assessment of teacher competence is not currently carried supervision only. Senior teacher in the same subject helps the implementation of supervision to address issues arising from the mismatch because the educational background supervisor improper subjects taught by teachers who supervised.

Once implemented supervision using this model, the teacher will increase their competence and become a professional mathematics teacher. Professional mathematics teacher interact in Congress Subject Teachers (MGMP) Mathematics. MGMP is a forum for sharing activities of teachers matters related to learning mathematics. Each teacher has their advantages and uniqueness. By interacting, communicating and discussing inside MGMP then the teachers will get new things that can be used to solve problems in mathematics learning. Increased competence of teachers of mathematics will enhance the quality of learning mathematics. This means that there is also an increase in the quality of teaching and learning in the classroom and the learning of mathematics.

Learning outcomes are feedback to teachers so that teachers can make improvements from prencanaan and prepare a needs analysis. Based on the needs analysis, teachers can return to plan supervision with supervisors. This will take place on an ongoing basis so that it is directly improve the quality of education in Indonesia.

Teacher Competency-Based Supervision Model for Teachers of Mathematics can be illustrated in the following chart.

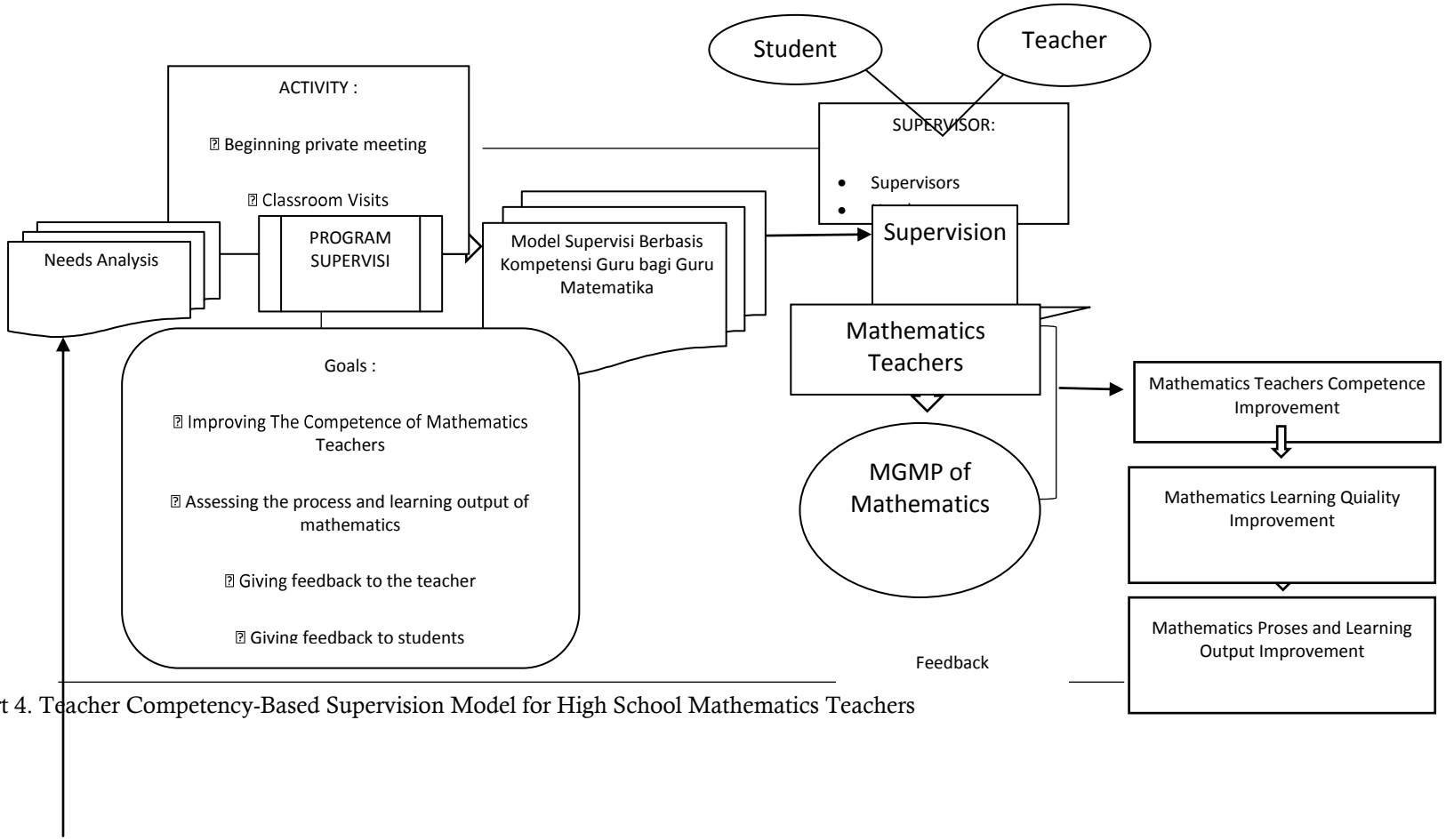


Chart 4. Teacher Competency-Based Supervision Model for High School Mathematics Teachers

CONCLUTION

This research resulted in the Competency-Based Supervision Model for Mathematics Teachers effective to improve the competence of teachers of mathematics. Competency-Based Supervision Model for Math Teachers can be implemented. Keunggulandari model is based on teacher competence so as to enhance the professionalism of teachers of mathematics as a whole, not focusing on the nature of supervision and administrative supervision of teachers do not view it as routine but as things to do and well planned. Supervision is carried out using a model based on a needs assessment so that teachers benefit from supervision activities to improve the quality of learning. Once teachers get feedback and input is expected increase paedagogik competence, personal competence, social competence and professional competence. This means that the full increase the professionalism of teachers. The increasing professionalism of teachers means increasing the quality of learning that will ultimately improve the quality of education in order to achieve national education goals.

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