

Coaching Model To Certified Junior High School Math Teachers In Yogyakarta

Agustina Sri Purnami
Majoring in Mathematics Education
Sarjanawiyata Tamansiswa University
Email: purnami_mat@yahoo.com

Abstract

The study do have a purpose: to know the factual model of teacher training that has been applied to the junior high school mathematics teachers who have been certified in the city of Yogyakarta and created a conceptual model for the development of certified math teachers at junior high Yogyakarta. Penelitian City is a preliminary study of Research and Development (R and D). This initial research to create a conceptual model for the development of mathematics teachers who are already certified junior in the city of Yogyakarta. The approach used is descriptive qualitative, by seeking tendency math teacher performance. Moreover, this study highlights the need for the development of models of interest to teachers. Results obtained are as follows. Students as respondents, students perceived the classroom climate with a mean of 66.76 with a tendency of being. Teachers as respondents, self-assessment of teachers with average 174 with a low inclination. Professional competence of teachers as measured by the mean of 43 695 math problems with a very low tendency. From the research result is that the model of interest development is a model teacher training, namely mathematics coaching program (MCP). School principals as respondents, assessing teachers are: the tendency of social competence and social competence is very high, the tendency being pedagogic and professional inclination is high. Later in this coaching, math teachers are given the opportunity to present issues related to mathematics learning, for further discussion, guided and nurtured to resolve the problem at the end of each meeting in coaching, math teachers were given the task to implement a model of learning that alternative solutions problems encountered in the field. The learning model that has been implemented, then evaluated to see the effectiveness of the chosen model. Here the teachers have been doing research and gain knowledge of teaching methodology and have to develop their professionalism. In the next coaching meeting, the results of these studies are discussed, and so on. Keywords: Performance of teachers, guidance teachers, MCP

A. Introduction

Current problems faced by Indonesia is the high number of residents with low competitiveness. The number of human resources (HR) is very high, but can not compensate and even can not manage natural resources (NR) optimally. This phenomenon puts human resource development becomes important and should be prioritized. Conditions in 2010, Indonesia's population reaching 242 968 342 residents, which is the first in ASEAN and is the fourth in the world after China, India, and America. Human resource development can be evaluated according to two aspects, namely the quantity and quality. Development of human resources in terms of quantity means pertaining to the amount of human resources should be increased, while the development of human resources in terms of quality related to human resources development is determined by education, health, and economy.

New paradigms of development has shifted moment. If the first development only focused on economic development, but is currently focused on the development of education. With education will be able to develop human resources in order to have the ability to manage natural resources.

This paper has been presented at International Seminar on Innovation in Mathematics and Mathematics Education 1st ISIM-MED 2014 "Innovation and Technology for Mathematics and Mathematics Education" Department of Mathematics Education, Yogyakarta State University Yogyakarta, November 26-30, 2014

Talking about education which can not be separated from the teacher. Because the teacher occupies an important position in education and provide a high contribution to improving student learning outcomes. Teachers still be at the forefront of education, the government through the Law of the republic of Indonesia Number 14 Year 2005 on Teachers and Lecturers (UUGD) states that teachers and lecturers has the function, role, and a very strategic position in national development in the field of education.

In an effort to increase competitiveness, the quality of education needs to be improved. Improvement of the quality of education depends first of all on the improvement of recruitment, training and development, social status, and working conditions of teachers (Delors, 1996). Furthermore, improving the quality of education depends on the performance of teachers, especially teachers who are already professionals, so that teachers who are already professionals must constantly improve themselves in performing their duties. In this study the quality of education seen limited improvement of teacher development efforts that have been certified.

In UUGD teachers are required to have academic qualifications, competency (pedagogic, personality, social, and professional), certified educators, physical and spiritual health, as well as having the ability to achieve national education goals. Academic qualifications gained through higher education degree program or diploma program four. While the competence of teachers obtained through professional education. Until the year 2013, the government conducted professional education through direct, portfolio and track Teacher Education and Professional Training (PLPG).

In this UUGD government is obliged to provide guidance and teacher development that includes coaching and professional development and career. Coaching and professional development include pedagogic competence, personal competence, social competence, and professional competence. Guidance to the teachers who have passed the certification necessary because the development will have an impact on performance.

Coaching and teaching profession by PERMENNEG PAN RB NO. 16 OF 2009 Article 1 Item 5 on Continuing professional development (CPD) mention that the development of professional competence of teachers who implemented according to the needs, gradual and sustained to improve professionalism. Sustainable professional development, including the development of self-PKB abbreviated scientific publications, and innovative work. Self development includes functional training and teacher collective activities. scientific publication activities include presentations at scientific forums, scientific publications on the results of educational research, and publication of textbooks, enrichment books and a teacher's guide. While innovative work includes finding the appropriate technology, finding / creating artwork, create / modify lesson tools / props / prktikum, and follows the development of drafting standards, guidelines, matter.

With regard to this study, the research problem is formulated as follows.

- 1 teacher coaching model as appropriate whether applied to the junior high school mathematics teachers who have been certified in Yogyakarta?
- 2 How is the effectiveness of the product to be produced, related to efforts to improve teacher performance

Research will be carried out later to have the following objectives.

- 1 Knowing the coaching teacher models appropriate factual applied to junior high math teachers who are certified in Yogyakarta
- 2 Creating a conceptual model for the development of mathematics teachers who are already certified junior high school in Yogyakarta

Education is a conscious and planned effort to create an atmosphere of learning and the learning process so that learners are actively developing the potential for him to have the spiritual strength of religious, self-control, personality, intelligence, noble character, and the skills needed themselves and society. (By Law No. 20 of 2003, Article 1, paragraph (1)). Philosophically, Ki Hajar Dewantara (KHD) wrote that education efforts to humanize humans humanely. This means that students should be guided in accordance with the nature of nature. Education merely facilitate the development of the talent of the students, in accordance with the existing nature, and keep destructive elements from outside which can inhibit or even kill the talents of the students themselves. (Tauchid., 2004; 20).

Educators are qualified educational personnel as a teacher, lecturer, counselor, officials learned, lecturers, tutors, instructors, facilitators, and other appropriate designation with specialization, as well as participate in education. (Section 1, paragraph 6) by Law No. 20 of 2003). Teachers are professional educators with the primary task of educating, teaching, guiding, directing, train, assess, and evaluate students on early childhood education, formal education, primary education, and secondary education. Section 1 paragraph (1) by Law No. 14 of 2005)

Competence of teachers is a qualitative description of the nature of meaningful teacher behavior, that is behavior that is rational to achieve the required objectives in accordance with the expected conditions (Mulyasa, 2007: 25). In essence, competency standards and certification of teachers is an attempt to get a good teacher and a professional, who has the competence to carry out the functions and objectives of the school in particular, and the purpose of education in general. (Mulyasa. 2007: 17). Professional competence, the mastery of teaching science. The better mastery of the field of science, the better a teacher delivering the lesson material.

Teacher coaching is an effort to improve the quality of teachers is done effectively and efficiently to obtain better results in the learning process. Teacher coaching aimed at developing the competence of teachers will be the fourth, which will support the professional development of teachers, that is pedagogic competence, personality, social, and professional. Basically coaching memenuhi held for the needs of teachers in order to support career.

Coaching is a conscious effort, systematic, and continuing to improve and develop the quality of teacher professional development conducted in an effort to achieve a professional teacher, dignified and prosperous, so that teachers can participate actively to establish Indonesian people who have fear of Almighty God, excel in science knowledge and eknologi, has a soul aesthetic and ethical, noble character, and personality.

Various coaching directed to develop teacher professionalism consisting of: self development, scientific publications, and innovative work (PERMENNEGPA and RB No. 16 of 2009 ps. 1 Item 5). Self-development consists of: functional training and teacher collective activities. Examples of functional training is a course, training and

upgrading. Examples of collective activities of teachers are attending seminars, workshops and panel discussions as well as participants and speakers.

Mathematics Teacher coaching program (Mathematics Coaching Program) Guidance in the Mathematics Coaching Program (MCP), as in other coaching programs, intended to prepare the long-term teachers who are able to develop a high quality and professionalism MCP coaching approach is based on the concept of coaches and teachers who work together to enhance the mathematics learning for their students (West.2003: 1). This cooperation includes cooperation in the development of lessons, team teaching, collaborative debriefing focused on student learning, and the continuation of this cycle of reflective practice. The coach brings team of experts who have their own experiences as well as their professional development to assist teachers in conducting the investigation, based on the discovery, and problem-based, student-centered learning of mathematics, as well as learn from professional teachers to teach mathematics content.

The ultimate goal of coaching in the MCP approach is to increase student achievement in math, instructional strategies MCP-not endorse the experiment. These strategies are based on simple descriptive research, reform-based teaching methodology that has been known to help students better learn, understand and apply the mathematics. While providing professional support in collaboration with colleagues, coaches MCP also gain knowledge about classroom learning methodology, mathematics content and professional development. The idea of coaching is not something new. But if the seriousness of learning combined with a deep understanding of knowledge, the right coaching focused on specific knowledge to be taught and learned

B. Research Methods

1. Research Approach

This study was later divided into two (2) parts, the initial research to produce a conceptual model and continued development to obtain the final results of the model guidance for junior high math teachers who are certified in the city of Yogyakarta. In the initial study, the approach used is descriptive quantitative, that is by looking at the performance of junior high math teacher who has been certified and see trends. Overall approach used in this study is a Research and Development (R & D), and to test the effectiveness of the model will be a quasi-experiment.

2. Population and Research Sample

The population of this study are all junior high math teacher who has been certified in the city of Yogyakarta. The sample of the study was divided into: junior high math teachers who are certified in public schools, private schools affiliated religious and private schools nationwide. For public schools, two randomly drawn from 16 junior high schools, that is junior high school SMP N 6 and N 7 of Yogyakarta, which happens to be the school with a medium ranking among public schools in the city of Yogyakarta. For religious-affiliated private schools, private Islamic schools selected SMP PIRI 1 and SMP Muhammadiyah 2 Yogyakarta, private Catholic schools selected SMP 1 Pangudi Luhur Yogyakarta, a private Christian school junior selected BOPKRI 1 Yogyakarta and private schools affiliated selected national junior Mature Mother

Garden Pawiyatan Yogyakarta. So from 34 private junior high schools in the city of Yogyakarta, 7 schools selected for the study conducted

3. Research Variables

The variables of this study are: The independent variable was the teacher training and the dependent variable is the performance of teachers

4. Data Collection Techniques

Teacher Guidance is intended to improve teacher performance. Because the teacher's performance can be observed from the four competencies, that is pedagogic competence, personal competence, professional competence, and social competence, the effectiveness of coaching can be observed from the performance. Data was collected using test techniques, questionnaires, and interviews. Test techniques are used to retrieve data about the professional competence of the interview techniques used to extract data about personal competence, social competence and reveal the factual data on which the model is done LPMP. Questionnaire technique used to retrieve data about the pedagogic

5. Data analysis techniques

Data analysis techniques in this study were divided into 2 (two). In early studies, data analysis using descriptive analysis quantitation. While in development (development) need to look at the effectiveness of the resulting model and to prove the performance difference sigifikansi after coaching with the resulting model, it will be statistically tested by t-test correlated.

For this beginning of study will look average teacher performance and trends that can be observed from his own teachers, students and principals, to make a five-point scale table

6. Subject and Object Research

The subjects in this study were junior high school math teachers who have been certified in the city of Yogyakarta, while the object of this study was the performance of junior high school math teacher certified.

Results and Discussion

1. Results

- a. Portrait of junior high school math teacher performance which has been certified in Yogyakarta
- b. Model factual has been done for junior mathematics teachers who have been certified in Yogyakarta, until the report is made, there is no coaching junior high math teacher who has been certified in Yogyakarta
- c. Creating a conceptual model of coaching for junior high math teachers who have been certified in the city of Yogyakarta, that is the Couching Mathematics Program (MCP)

Results for teacher performance as follows.

Portrait of Teacher Performance

- 1). Junior High School Mathematics Teacher Performance Has Been Certified in Yogyakarta

To see the performance of teachers of mathematics can be seen from:

- a). Classroom climate that was created when the learning takes place, by the students

- b). Self-assessment of professional teacher by the teacher, the ability to solve math problems and needs guidance
- c). Assessment of the immediate supervisor, in this case by the principal

a). Climate Classroom

By using the interval scale of five, with a mean of 66.76 in considerable tendency

b). Self-Assessment

For this aspect of the result by 174 in the low tendency

(1). Problem Solving Ability (Professional Competence)

For this aspect of the results with the average of 43.695 in a very low tendency

(2). Guidance needs

From the results obtained from the questionnaire closed and open questionnaire about coaching needs, then the results of the questionnaire covered are as follows.

1. Coaching seminars obtained a mean 3.95 with a high propensity
2. Model development tutorials averaged 3.78 obtained with a high propensity
3. Coaching model obtained monitoring the mean is 3.87 with a high propensity
4. Coaching model simulations obtained with a mean of 3.78 high propensity
5. Training coaching model obtained a mean 4.48 with a very high propensity

For the results of the questionnaire is open, then the junior high school math teacher who has been certified expecting no training: Classroom Action Research (CAR), which refers to the problem of training problems and mathematical olympiad still needed on the implementation of curriculum 2013. One thing that deserves to be a concern that the results of the study showed that LPMP've never organized coaching for junior high school math teachers who are certified in Yogyakarta

c). Supervisor Direct Assessment (Principal)

For this aspect consists of three aspects, namely the competence of personality, social, pedagogic and professional. To aspects of personal competence and social with average 4.36 with a very high propensity, for pedagogic competence with the tendency being mean 3.32 and 3.47 with a mean of professional competence with high inclination.

2. Discussion

a. climate Classroom

Classroom climate that is beneficial to the students in the tendency of being, meaning that teachers still have to try to improve its performance in front of the class. Although teachers already feel optimal in performing their duties, but students still feel less guided in the learning process. That is what has been done is considered optimal by the teacher to help students in learning, but still pay attention to what is perceived by the students. Means that the teacher still continues to improve in assisting students in the learning process

b. Self-Assessment

In this aspect, the tendency of self-assessment by the teacher in a low tendency. Teachers also feel is still not optimal, because the teacher was not task-based learning research. Moreover, teachers are still not optimal in ushering students in handling matters that are not routine and refer to mathematical olympiad problems.

Aspects of professional competence certified math teacher in a very low tendency. Weakness teacher teacher in a math problem lies in the opportunities, the teacher solve problems is incomplete and less accustomed to solving math olympiad.

From the research result that teachers prefer a coaching training. In this case Mathematics coaching program (MCP).

The results above are very understandable because apparently there has not been coaching for mathematics teachers who are already certified SMP in the city of Yogyakarta.

c. Assessment Supervisor Direct

School principals provide an assessment of personal competence, social, pedagogic and professional. The result of teachers not accustomed to using research findings as the basis for carrying out their duties. Principal as the direct supervisor member appreciation to teachers, it is evident from the principal assessment showed the following results. Personality and social competence with very high tendency, with the trend being pedagogic competence and professional competence with high tendency.

From the above discussion it is written that there is no factual models, because the teachers have not been getting coaching from LPMP. Coaching is obtained only from MGMPs by inviting speakers from LPMP. So that there is no factual models. And conceptual models are offered, in accordance with the needs of the teachers are Mathematics coaching program (MCP).

Physically and quality, achievement until this report are uploaded in accordance and consistent with the written research proposal.

References

- Djamarah, Syaiful Bahri. 1994. *Prestasi Belajar dan Kompetensi Guru*. Surabaya: Usaha Nasional.
- Edward Sallis. 2009. *Total Quality Management*. Jakarta
- Eka Prihatin. 2011. *Teori Administrasi Pendidikan*. Bandung. Alfabeta
- Fairholm, Matthew R. 2009. *Leadership and Organizational Strategy*. Vermillion: *The Innovation Journal: The Public Sector Innovation Journal*, Volume 14(1), 2009
- Fred N. Kerlinger, 1986, *Foundation of Behavioral Research*, New York: Holt, Rinehart and Winston.
- Flippo, Edwin B. 1990. *Personal Management*. New York: McGraw Hill Book Company
- Hersey, Paul, Kenneth H. Blanchard, dan Dewey E Johnson. 1996. *Management of Organizational Behavior*. New Jersey: Prentice Hall, Inc.
- Juhara, Erwan. 2005. *Peraturan Pemerintah No. 19 tahun 2005 tentang Standar Nasional Pendidikan*. Jakarta: CV. Eko Jaya.

-
- Tauchid, M. 2004. *Pendidikan*. Yogyakarta: Majelis Luhur Persatuan Tamansiswa
Laporan *Trends in International Mathematics and Science Study (TIMSS) tahun 2010*
Laporan Program for International Student Assessment (PISA) tahun 2010
- Mangunsong, Leonard. 2008. *Pengaruh Kompensasi yang Diterima Guru dan Penilaian Guru pada Kecemasan Siswa Terhadap Kinerja Guru*. Jakarta: Indraprasta PGRI
- Martinis Yamin. 2011. *Profesionalisasi Guru & Implementasi KTSP*. Jakarta: Gaung Persada Press Jakarta.
- Mulyasa. 2007. *Standar Kompetensi dan Sertifikasi Guru*. Bandung: PT Remaja Rosdakarya
- Mustofa kamil. 2010. *Model Pendidikan Dan Pelatihan*. Bandung: Alfabeta.
- Pearce. John A. & Robinson. Richard B. 2010. *Manajemen Strategik*. Tangerang: Binarupa Aksara
- Pidarta, Made. 2004. *Manajemen Pendidikan Indonesia*. Jakarta: P.T. Rineka Cipta.
- Sahertian, A. Piet. 2008. *Konsep Dasar dan Teknik Supervisi Pendidikan*. Surabaya: Usana offset Printing.
- Slavin,R. 1997. *Educational Psychology Theory and Practice*. Fifth Edition. Boston : Allyn and Bacon.
- Sumarna Surapranata. 2006. *Representations of Teacher Quality, Quantity, and Diversity in a National Mathematics and Science Program*. Journal of Educational Research & Policy Studies. Volume 6, number 2
- Syaiful Sagala. 2010. *Manajemen Strategik dalam peningkatan Mutu Pendidikan.*: Bandung: Alfabeta
- Totok Sumaryanto F. 2011. *Kajian Pelaksanaan Sertifikasi Guru dalam Jabatan*. Semarang: Jurnal.
- Udin sraefudin Saud. 2010. *Pengembangan Profesi Guru*. Bandung: Alfabeta.
- West, L. dan Staub, F. C. 2003. *Content-Focused Coaching*. Heinemann. University of Pittsburgh
- Wibowo. 2011. *Manajemen Kinerja*. Jakarta. Rajawali Pers
- Wibowo, Mungin Edy. 2004. *standardisasi, sertifikasi, dan Lisensi Profesi Pendidik dan Tenaga Kependidikan*. Surabaya: Seminar Nasional Pendidikan