The Effect of Academic Supervision and Participation in MGMP and Training on the Competency of the Social Science Teachers of Junior High schools in Sleman, Indonesia

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Abstract—This study aimed to reveal the effect of academic supervision and, teacher participation in subject matter, teacher forum (MGMP) and training on the competency of the social science teachers in District of Sleman, Indonesia either partially or simultaneously. This research was quantitative and associative causal research with the ex-post facto approach. The population was 183 social science teachers in Sleman. A sample of 85 teachers was established using the purposive sampling technique. The data collection used a questionnaire and teacher competency test. Technique validity testing was performed through expert judgment and Confirmatory Factor Analysis with SPSS support, while the reliability testing used Cronbach’s Alpha. The data analysis used the multiple regression analysis (MRA). The result of the research shows that there are positive and significant effect of academic supervision, teacher participation in MGMP, and training on SMP teacher competency in Sleman either individually/ partially or simultaneously. The implementation of maximal academic supervision can improve teacher competency well. Teacher participation in MGMP activities and active training also able to increase teacher competency maximally. So, the academic supervision, teacher participation in MGMP, and training can be applied well to improve teacher competency. All of program very important for teachers for the present and future to increase knowledge, skills, attitudes and productivity of teachers in 21st Century

Keywords—academic supervision, participation in MGMP, training, teacher competency

I. INTRODUCTION

Low quality education is a long-standing educational problem in Indonesia. This 21st century wave of globalization is felt very strong and open. Technological advances provide awareness that Indonesia needs to align its position with other countries that can start by looking at the quality of education. In line with the low quality of education in Indonesia, many efforts have been made by the government, but still far from expectations. One of the factors causing the low quality of education is an incompetent teacher [1].

In the view of UNESCO [2], teachers are the most important factor in determining the quality of education that children receive. Voluntary Service Organization also maintained that teachers ‘’ motivation is fragile and declining and teachers’’ performance in contributing to learning is strongly effected by teacher motivation. The issue of teacher motivation is important because of its correlation with the quality of education [3].

The 21st century feature according KEMENDIKBUD is the availability of information anywhere and anytime (information), the implementation of the use of machines (computing), able to reach all the work routine (automation) and can be done from anywhere and anywhere (communication), during the last 20 years there has been a shift in educational development towards ICT as one of the 21st century education management strategies that include institutional and human resource governance [4].

The teacher is a noble profession that is not just anyone capable of carrying out such professional work. Being a teacher requires a special skill [5]. Because the expertise is special, the teacher has a mission that is very important in determining the quality of education of a nation. The expertise that teachers must have in particular is what distinguishes it from other professions that lie in its duties and responsibilities. Teacher's duties and responsibilities are closely related to the basic competencies that support their duties. To know the extent of teacher competency development, the Government does it through Master Competency Test (UKG).

UKG in [6] stated that implementation guidelines is a measure to measure teachers' ability to be adapted to the field of study (professional competence) and mastery of learning in the classroom (pedagogic) using test / exam questions. Based on the results of the Teacher Competency Test/ Uji Kompetensi Guru (UKG) in 2015, the description of pedagogical and professional competence of teachers in Indonesia is still not fully said. According to the Centre for Data Statistics Education and Culture, nationally the results of UKG are still below expectations (nasional.tempo.co.id)

Yogyakarta Special Region (DIY) is one of the provinces that is able to prove the title that has been held so far as "Kota Pelajar" with the highest UKG score of 62.36 from the Minimum Criteria of Achievement/ Kriteria Capaian Minimal (KCM) in 2015 of 55.

However, based on the analysis of teacher images implemented by the Ministry of Education and Culture Center of Education and Education Statistics Data states that in the Province of Yogyakarta is identified many teachers who have not graduated/ under KCM especially on the ability to master professional competence. The results of the UKG will
ultimately be linked to student achievement through National Test/ Ujian Nasional (UN).

Social Science [7] (IPS) is an integration of various social sciences such as economics, history, geography, sociology, politics, etc. IPS has a very wide range of material and dynamic / evolving according to the changing times. But ironically, IPS is not included in the subjects to measure students' ability in the National Exam. Although IPS does not participate in National Examination, the fact that IPS teachers in DIY prove their ability in UKG with good value. The UKG results of IPS subjects at the junior high school in Yogyakarta 2015 are described in Table I.

<table>
<thead>
<tr>
<th>Rank</th>
<th>District</th>
<th>Σ</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sleman</td>
<td>242</td>
<td>65.89</td>
</tr>
<tr>
<td>2</td>
<td>Yogyakarta</td>
<td>149</td>
<td>64.75</td>
</tr>
<tr>
<td>3</td>
<td>Gunung Kidul</td>
<td>232</td>
<td>64.14</td>
</tr>
<tr>
<td>4</td>
<td>Bantul</td>
<td>261</td>
<td>62.18</td>
</tr>
<tr>
<td>5</td>
<td>Kulon Progo</td>
<td>153</td>
<td>61.26</td>
</tr>
</tbody>
</table>

Source: Lembaga Penjaminan Mutu Pendidikan (LPMP) DIY

Based on the results of UKG subjects matter IPS, Sleman regency was ranked top with an average score of 65.89. As a mapping of Teacher Performance and Competency Assessment/ Penilaian Kinerja dan Kompetensi (PKK), the government encourages teachers to continue to improve their competencies, given that the UKG's assessment/ KKM standards will be raised annually. In 2016 KKM UKG rose to 65, and in 2017 KKM UKG rose to 70 (m.harnas.co). The competence tested in UKG is pedagogic and professional competence.

As a reflective activity to improve teachers' ability. Based on the result and problem, teachers play an important role in improving education standards through their competence. So there needs to be an effort to increase competence through various activities closer to the teacher, that is academic excellence, teacher participation in MGMP forum, and training.

Hasan in [8] stated that conclude that as professional teachers, they evinced to have exemplary behaviour and attitude as characters outside and inside of the classroom among the students and colleagues. Toward the profession, the characters encourage in exhibiting their commitment and responsibility to do self-improvement as real contribution for students learning.

Based on the result of the study of the problem, it can practically be used as a consideration to conduct further research by reviewing teacher competency especially professional and pedagogical competence through academic supervision, teacher participation in MGMP, and training in IPS teacher in Sleman. The reason for choosing Sleman as a research location because Sleman is the Regency that has the top rank for the mastery of professional and pedagogic competence in DIY. Therefore the researcher intends to conduct research "The Effect of Academic Supervision, Participation in MGMP, and Training on Competence of IPS Teachers of Junior High School in Sleman District".

The rest of this paper is organized as follow: Section II presents related works/literature review. Section III describes material & methodology of this research. Section IV presents the obtained results. Finally, Section V concludes this work and highlight future research.

II. RELATED WORKS

A. Academic Supervision

Academic supervision is an attempt to stimulate, coordinate, and guide the growth of teachers in schools, in order to stimulate and guide the growth of each student in order to be able to participate in a democratic society. Glickman in [9] stated that explains the meaning of supervision requires knowledge, interpersonal skill, and technical skill. This is adapted by the supervisory of direct assistance to teachers, curriculum development, professional development, group development, and action research.

These statements make it clear that effective supervision requires interpersonal knowledge and skills and technical skills, all trained, developed through teacher supervision tasks, curriculum development, group professional development and action research classrooms will all support the goals of the organization and the needs of teachers and improvement of learning” It means that effective supervision requires

Supervision is aimed at the improvement and development of the learning process, not only to improve the quality of teaching and learning, but also the development of the profession in the broadest sense, including the provision of services and services, leadership and coaching human relations is good for all parties involved [10]. Through educational supervision activities expected to occur improvements and developments in the process.

The principles in the implementation of the supervision of the scientific, democratic, upholds the above discussion, cooperative / partnership, the entire staff can work together, develop a business in the "create" a learning situation and working conditions are better, as well as the constructive and creative, fostering initiative staff / teachers and encouraged to actively create an atmosphere where everyone feels safe and can develop their potential. These principles should be the main reference supervisors in supervising produce optimal supervision outcomes. Reality on the ground is still found supervisors in performing the duties of supervision, to expect quick results and prioritize the value of learning rather than improving the learning process, and more administrative in nature rather than fostering academic aspects.

Its same with the result of the research that found the competence of the school principals positively affects the teachers' work motivation. The principal' competence positively affects the teacher performance. The competence of the school supervisors positively affects the teachers' work motivation. In addition, the competence of the school supervisors positively affects the teachers' performance in Junior High Schools in Maros [7].

B. Participation on Teacher forum (Deliberation Subject Matter/ MGMP)

Newstorn, et al. in [11] stated that participation is the mentality and emotion of the parties in group situation that encourage them to contribute to group goals and share responsibility for them. It means that participation is a mental and emotional involvement of individuals within a social group that encourages the ability to develop in accordance with the group's objectives.

In MGMP, there are many activities aimed at positively for teachers [12] there are (1) an improved understanding of the curriculum, (2) the development of the syllabus and lesson plan; (3) development assessment system, (4) development of remedial programs and enrichment, (5) develop active learning, innovative, creative, effectiveness and fun or, (7) develop and carry out the tools of learning tools, (8) develop and implement programs for computer-based learning, or ICT, (10) as well as developing the media in carrying out the process of teaching teach. With their program activities within the program MGMP above, is expected to be a solution for subjects, school environment, curriculum implementation, methodology and adjustments to the development of science and technology. In addition, activity in MGMP is expected to improve the competency of teachers, especially the professional competency, which in terms of capability of teachers in preparing, implementing, and evaluating programs in teaching and activities.

As a teacher, participation in an organization is necessary to add the experience of various educational solutions and increase knowledge. By participating in MGMP, teachers will also be easier in developing their competencies if they are willing to learn and exchange ideas among teachers because, the problems faced by each teacher differ from other teachers.

C. Training

Training is a coaching of government in addition to other efforts. Training is a process of teaching and learning in order to improve the ability of human resources in carrying out its duties. While the task is to show the position, responsibility, authority, and rights of someone in the organization [13]. Education and training are important because they are the means by which the organization maintains, maintains and nurtures employees and increases employee skills to improve productivity.

There are several training goals Hasiburah in [14] stated that are: (1) teacher work productivity will increase; (2) improving the efficiency of workforce, time, and materials; 3) opportunities to improve career will be better; (3) teacher will have a better leadership spirit. James [15] also said that teacher must be experts in various task. So, therefore training is very important for teachers because not only knowledge and skill development, but teachers also able to deal with unexpected problems.

D. Teacher’s Competency

Musafah [16] defines competency as a person's ability that includes knowledge, skills, and attitudes, which can be manifested in real work that benefits both the self and the environment. Payoung [17] also believes that competency is a person's ability as a result of education, training, and certain informal learning experiences that cause a person to perform certain tasks with satisfactory results. So, the competency of teachers is the ability that includes a set of knowledge, skills, and behaviors that must be possessed, experienced, mastered in carrying out professional duties properly, and able to establish communication with students well, so that learning objectives can be achieved well.

Type of competency [18] that must be owned by the teacher are 4 (four), there are personality, pedagogical, professional, and social competency. Four competencies must be mastered by the teacher in running main tasks and functions. The four competencies that can be explained are:

a) Professional Competency

Professional competency is the ability of dealing with the adjustment of tasks and competency of lecturers is very important because it relates to the performance shown and understanding the material lessons to be presented for students.

b) Pedagogic Competency

Pedagogic competency is the ability of a person to exercise or perform a job or task that is based on the skills, knowledge and attitudes supported by work in accordance with the demands of the job

c) Personality Competency

Personality competency concerns the competency of a steady, mature, wise, so that can be role models of students.

d) Social Competency

Social competency involves relationships with other people, for example, between teachers and students, between teachers with parents, between teachers with their fellow professions, and between teachers with the community.

In this study, the competency to be research focus on the ability of teachers in the mastery and development of the material, the concept of science subjects IPS (professional competency) and the ability of teachers in the mastery of class/learning activities (pedagogical competency) widely and deeply.

III. PROPOSED METHOD

This research is an ex-post facto research as well as a causal associative analysis with a quantitative approach. Ex-post facto research is a study aimed at uncovering facts without manipulating data on independent variables, but revealing facts based on measurements of symptoms that have occurred in previous respondents. This research is also causal associative, because this research is intended to know the effect of free variables (X1, X2, X3) with dependent variable (Y).

The population in this study are IPS teachers in Sleman District who are incorporated in the IPS Subject Teachers MGMP (MGMP) consisting of the core board and members of MGMP. Population of teachers in this study there are 183 people. The sample in this study was chosen using purposive sampling technique.

The considerations in determining the sample in this study are: 1) Teachers who are members of MGMP IPS Sleman District and 2) teachers who have less UKG scores than KCM 70 and are obliged to follow the training. The teachers who are
obliged to follow the training are numbered 85 teachers. So the sample in this study is 85 teachers who are also the subject of research. Data collection techniques used in this study is a questionnaire and teacher competency test tests.

IV. RESULT AND DISCUSSION

A. Description of Result Teacher Competency Test

The IPS teacher competency data obtained through a written matter with the number of questions as many as 50 questions tested to 85 respondents. Problems given to the teacher is an evaluation or usefulness of activities that have been implemented by teachers during the service, both the result of supervision, participation in the MGMP, and education training (training). The assessment standards shown are: a) control of pedagogic competencies such as; master the characteristics of learners, design of learning in the classroom, technology utilization, and development of evaluation tools assessment, b) mastery of professional competence tangible ability to master SK-KD IPS and mastery of science material in IPS lessons. The data obtained are:

**TABLE II. RESULT TEACHER’S COMPETENCY**

<table>
<thead>
<tr>
<th>Category</th>
<th>Teacher’s Competency (Pedagogic &amp; Professional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 85 Teacher</td>
<td></td>
</tr>
<tr>
<td>Max</td>
<td>92</td>
</tr>
<tr>
<td>Min</td>
<td>72</td>
</tr>
<tr>
<td>Mean</td>
<td>83.0353</td>
</tr>
<tr>
<td>Median</td>
<td>84</td>
</tr>
<tr>
<td>Modus</td>
<td>88</td>
</tr>
<tr>
<td>StdDev</td>
<td>4.58374</td>
</tr>
</tbody>
</table>

Based on the Table II above can be explained again that of 85 teachers who answered questions on the question of teacher competence (pedagogical and professional), the highest score is 92 and the lowest score is 72. While for the mean (mean) is 83.0353. The Table II shows the overall results of overall teacher competence (pedagogical and professional competence), the following is a separate teacher competency comparison as depicted in Figure 1.

![Fig. 1. Comparison Pedagogy and Professional Competency](image)

These results explain that the competence of teachers dominated in the mastery of professional competence of 52.26%, while pedagogic competence of 47.74%.

**TABLE III. CONTRIBUTION EFFECTIVE AND RELATIVE**

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Contribution</th>
<th>Effective</th>
<th>Relative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic Supervision</td>
<td>25.50%</td>
<td>50.99%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Participation in MGMP</td>
<td>18.54%</td>
<td>37.08%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Training</td>
<td>5.97%</td>
<td>11.94%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>50.01%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Based on result of data analysis in Table III, it is concluded that academic supervision give contribution to professional competency of IPS teacher in Sleman regency as big as 25.50%. Furthermore, the contribution of participation in MGMP is 18.54%, and training contribution is 5.97% which means that the three variables donate 50.01% to teacher competency. Furthermore, the above calculation results can be concluded that academic supervision gives greater effect on teacher competency than participation in MGMP IPS and Training.

B. The Effect of Academic Supervision (X1) on Teacher Competency (Y)

Academic Supervision is a program or business service or guidance in a professional manner as an aid in developing learning situations in a better direction in order to improve the quality of teacher work in the field of teaching, so this study was conducted to determine the effect of the implementation of supervision program on SMP IPS teacher competence in Sleman Regency.

In this study supervision focuses on teachers' perceptions of supervision performed by supervisors with class visits. Based on the results of simple calculations and categorization, it indicates that teachers who have readiness, implementation, and follow-up high academic supervision of 79 teachers or 94% of 85. In the medium category there are 6 teachers or 7.06% while for the low category does not exist. In addition, the contribution of academic supervision (X1) to teacher competence is 25.50%. Based on these results explain that the teacher has a good readiness to face supervision, both on planning, supervision, and follow-up post-supervision.

Result of hypothesis test show there is effect between academic supervision (X1) to teacher competence (Y). Estimation of the effect can be seen from the value of beta coefficient 0.288. The result proves that the regression coefficient is positive. Thus it is stated that there is a positive and significant effect between the academic supervision on the competence of IPS SMP teachers in Sleman District, while the calculation of coefficient of determination shows the contribution of academic supervision participation (X1) to teacher competence (Y) is 25.50%.

Partial test result of academic supervision variable shows positive effect and significance to teacher competency. Thus it states that academic supervision can be a step to increase the competency of teachers viewed from; 1) the planning aspect implemented by the teacher starting from the pre-supervision of teachers pre-supervision and learning device planning that can be said good, 2) on the implementation aspect, the teacher is also able to provide mastery of the material and the good
C. The Effect of Participation Teacher in Teacher’s Forum (MGMP)

Participation is a series of systematic and structured activities involving a person to take the initiative of both mind and energy in the decision-making process, program implementation, evaluating and benefiting from a program. Participation in the MGMP means the participation of teachers in a teacher organization which can be seen from the extent to which a person has been involved in both the mastered and the educational issues at his or her level.

In this study, participation in the MGMP explored three (3) aspects / indicators namely: activity in implementation, participation in decision making, and usefulness received by teachers during participation in the MGMP.

Partial test results of teacher participation variables in MGMP showed positive and significant results on teacher competency. This means that teachers 'active participation in MGMP activities is able to give a good effect on teachers' competency as seen from: 1) teacher activeness aspect which shows that teachers follow MGMP activities, such as workshop, material development, teaching materials, media, and evaluation of learning, 2) on decision-making aspects teachers also participate to take steps on every issue discussed in the MGMP, 3) and lastly on the aspect of usefulness, teachers give a good perception in their participation in the MGMP which is seen on the usefulness of the preparation of teaching materials and so on.

Thus it is stated that the participation of teachers in the MGMP really give a good effect in improving teacher competency. The calculation of the coefficient of determination also shows the contribution of the participation variable in MGMP (X2) to the teacher's competency (Y) of 18.54%.

D. The Effect of Training on Teacher Competency

Training is a planned program that can help teachers in solving problems and improving the quality and career of teachers. In this study, the training tries to explore the aspects / indicators, namely: a) the relevance of teacher education, b) the intensity of training participation, c) the level of teacher understanding in absorbing the training materials, d) the effectiveness of the training and e) the usefulness of the training.

Result of hypothesis test show there is influence between training (X3) to teacher competence (Y). Estimation of the influence can be seen from the value of beta coefficient is 0.260. The result proves that the regression coefficient is positive. Thus it is stated that there is a positive and significant influence between the training on the competence of SMP IPS teachers in Sleman District, whereas the calculation of coefficient of determination shows the contribution of training (X3) to teacher competence (Y) is 5.97%.

Positive influence on the quality of teacher competence through the implementation of the training will be better if the teacher is able to always be active and take the time to understand the material in the training, so that the training can be effective and provide benefits for the teacher. If the teachers follow the training seriously and the implementation is effective, then the training will be able to be a real step in improving the competence of the teacher itself.

The results of partial test of the training variables showed a positive and significant effect on teacher competency. That is, the training is able to improve the competency of teachers by looking at aspects; 1) the relevance of education. The relevance of teacher education that is not all based on integrated IPS has no great effect on teacher competency, 2) intensity and level of training able to give effect to the ability of mastery of training materials, and 3) effectiveness and usefulness of the training gets a good perception for teachers to develop their competency.

Thus it is stated that the correct training has a positive and significant effect on teacher competency. The calculation of the coefficient of determination also shows the contribution of variable diklat (X3) to teacher competency (Y) of 5.97%.

E. The Effect of X1, X2, X3 to Y Simultaneously (multiple regression)

Based on the results of hypothesis test above, partially and simultaneously all the variables mutually positive and significant effect. Furthermore, also calculated relative contribution and relative contribution. There are to knowing the contribution every predictor to criterion for predictive purposes. To know relative donations and effective donations can be seen from the following analysis:

Thus, academic supervision (X1), participation in MGMP (X2), and Training (X3) simultaneously have a positive and significant impact on the competence of IPS junior high school teachers in Sleman District. Other things indicate that academic supervision, teacher participation in MGMP, and training are able to contribute to the improvement of teacher competence with a large contribution of 50.01%, and 49.99% determined by other factors not examined. Thus, if the three variables are done better and maximum, then the competence of teachers will increasingly have a positive impact.

The low level of teacher competence (Y) is not merely the benchmark of academic supervision level, participation in MGMP, and good / effective training program. These three things become part / factor that can improve teacher competence. This can be likened to if the teacher is effective in the participation in the training, and the level of active in the MGMP, he will get a lot of knowledge and experience that can be used as capital in the implementation of supervision. With the effectiveness of the implementation of the training and activeness in the MGMP activities did not rule out the teachers get a lot of input in developing competence, wealth of knowledge, and development of learning tools that will be used in supervision. So that the participation and experience in supervision can be a lesson to evaluate themselves related to teacher competence.

The results of the analysis in this study are in line with Moreno's research titled "Effective Teachers-Professional and Personal Skills" (Journal ENSAYOS, 2009: 35-46) [19]. The study concludes that effective and professional teachers not only have good knowledge competencies, but also the participation of organizational teachers, management skills,
communication skills and instruction, able to provide appropriate evaluation, and able to create conducive class conditions that can create an atmosphere of learning in interactive classes.

V. CONCLUSION AND RECOMMENDATION

Based on hypothesis test result and contribution result indicate that academic supervision, participation of teacher in MGMP, and training give positive effect and have good contribution to teacher competency. With the existence of that effect, if quality supervision is improved, it will increase the contribution also to teacher competency Score/ level of teacher’s competency (Y) is not merely the benchmark of academic supervision level, participation in MGMP, and good / effective training program. These three things become a part/ factor that can improve the teacher competency. This can be likened to if the teacher is effective in the participation in the training, and the level of active in MGMP, they will get a lot of knowledge and experience that can be used as capital in the implementation of supervision. With the effectiveness of the implementation of the training and activeness in MGMP activities also, did not rule out the teacher gets a lot of input in developing competency, wealth of knowledge, and development of learning tools that will be used in supervision. So that the participation and experience in supervision can be a lesson to evaluate themselves related to their competency. Based on the results of research, Education Authorities of Sleman can make the results of this study as a consideration in making decisions related to activities in improving teacher’s competency. It is expected that the education authorities will be able to support teachers' activities in MGMP as needed, not only the activities are carried out but the essence / results are not obtained.

Based on the results of the research indicates that academic supervision, teacher participation in MGMP, and training shows a positive and significant effect. Therefore, teachers should engage more actively in order to increase competence. In addition, training providers are able to foster participation / participation of teachers in the training both in the delivery of materials and in the use of time, so that the training can run better in supporting the improvement of teacher competence. Through the knowledge gained by teachers through the evaluation of academic supervision, activities in the MGMP, and training, in this 21st century teachers should be able to utilize the help of information and communication technology. In addition need to develop the concept:

- **Quantum learning** is to apply learning methods tailored to the workings.
- **Cooperative Learning**, ie learning that uses groups as an effort to foster inter-cooperation.
- **Society Technology Science**, an interdisciplinary concept applied to integrate problems in science, technology and society.
- **Accelerated Learning**, which develops the ability to absorb and understand information quickly so as to improve learning ability more effectively.

REFERENCES


