THE POLICY OF TEACHER IN-SERVICE TRAINING (TST) IN INDONESIA

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ABSTRACT

Teachers are one key element in the education system, particularly at schools. In fact, there is growing public awareness that no teachers, no formal education. There is no qualified education without the presence of professional teachers in sufficient number. One of the ways for teachers who were already employed to gain access to new developments in education is to receive TST. This article aims to; analyze the policy of TST, identify factors influencing effectiveness of TST, and develop of model TST in Indonensia.

The study result shows that there are two paths of training and development of teaching profession in Indonesia; the first is professional training and the improvement of various teacher's competencies; second is career training and development. The factors influencing the effectiveness of TST in Indonesia include suitability of teacher qualifications and competencies, mastery of education and teaching technologies, presentation of training program, and evaluation technique. Some things to be developed in the future to improve teacher quality in Indonesia includes high standard recruitment system, professional development by research-based, integration of technology in teacher education and professional development, and effective evaluation system.

Keywords: Educational Policy, Teacher In-service Training, Professional Development

INTRODUCTION

Education is one of the important aspects in the development of a country. Abiogu (2014) explains that education is the foundation of the development of every country. Education is also seen as a determinative factor in shaping social economic, scientific, and technological developments. In other words, growth and development targets of every country should be preceded by good education planning. Similarly, UNESCO (2014) explains that education is not only a human need basic, but also an important aspect in achieving sustainable development of a country. Education plays a role in reducing poverty, improving nutritional and health, empowering and equalizing genders, ensuring sustainable energy and resources, economic growth, and many other sectors.

The success in achieving education goals is affected by many factors, including quality of teacher. Farstrup & Samuels (2011), explains that improving and maintaining the quality of teachers are important components to reach the established education goals. McKinsey & Co (2007) argue that the quality of teachers will certainly determine the quality of education system, so if the quality of teachers is low, the quality of education system will not exceed it. Moreover, to realize effective teaching practice, the quality of teaching staff should be improved first because the only way to have maximum education outcomes is teachers' effective teaching method.

Quality of teachers can be improved by professional training and development program. In fact, the needs for teacher training program performed in service should not be underestimated. TST is a necessity to improve teachers' performance and motivations. The absence of training program will set back the growth of teaching professionalism, creating discrepancy between demands and level of teacher achievement. TST   can be performed by various activities such as seminar, workshop, conference, learning activity in classroom, exhibition, further study, training, etc.. The activities are designed to enable teachers to develop them selves and improve their competencies (Osamwonyi, 2016).

Indonesian education is undeniably left far behind internationally. Efforts to improve the education quality, hence are inseparable with the efforts to improve the teachers quality. Nowadays, there are a number of issues related to teachers' condition in Indonesia. *The first* is the diverse teachers' abilities in the learning process and knowledge mastery; *second*, the absence of accurate measurement in determining the teachers' abilities; *third*, the coaching done is not reflecting the needs, and *fourth*, the inadequate teachers' welfare. If those mentioned are left unaddressed, it will yield impacts on the poor quality of education. Based on this condition, this article will analyze the policy of TST in Indonesia.

THEORETICAL FRAMEWORK
1. Teacher In-service Training
Theories, strategies, methods, technologies and curricula on education change over time. Teachers require of Teacher in-service training (TST) in order to adapt themselves to these changes (Demirtaş, 2010). In order words, one of the ways for teachers who were already employed to gain access to new developments in education and educational technologies is to receive TST. Teacher In-service training is performed as an effort to achieve the criteria of quality teacher. Goe & Stickler (2008) propose four aspects which can be used to determine and assess the quality of a teacher, which are:
a. *Teacher Qualification*: teacher's credential, knowledge, and experience when performing teaching activity in classroom.
b. *Teacher Characteristic*: attitudes and attributes carried by teacher when performing teaching activity in classroom.
c. *Teacher Practice*: teacher-student interaction and teaching strategy
d. *Teacher Effectiveness*: "added value" showing that classroom teacher contributes to the students' learning achievement, as shown by student's improvement and higher than expected academic learning outcomes.
Therefore, aspects showing the quality of a teacher are usually defined as teacher competencies. Among a number of teacher's competencies, professionalism is one of the competencies which should be supported by developing sustainable professionalism. Kennedy (2005) proposes nine teaching professionalism development models which can be used as basis for Teacher In-Service Trainings. The nine models are below.
a. *Training*: focuses on skills and given by people with greater expertise.
b. *Award bearing*: usually related with scholarship grants for further education in college institutions.
c. *Deficit*: services to solve the deficit in each individual teacher. However, the method doesn't seem to be good for teachers' confidence and doesn't support collective development in school environments.
d. *Cascade*: development model which can be performed by relatively cheap resources, but doesn't really involve collaborative element in its implementation.
e. *Standard-based*: development model which assumes there is effective teaching system, but can be too narrow and limited and not flexible.
f. *Coaching/mentoring*: constructive development of relationships, requiring facilitators who can communicate well.
g. *Community of practice*: forming groups based on similar knowledge for cooperation, but may cause unsolvable issues and slow development because the members have the same abilities.
h. *Action research*: model which enables teachers to try different method in teaching, especially when performed collaboratively.
i. *Transformative*: combination of several other models by considering the issues at hand.
Beside the nine models above, Luneta (2012) summarizes a number of teaching professionalism development models.

Table 1. Teaching Professionalism Development Model

Model	Presentation Method	Purpose
Off-site programmes	Presented in universities based on lectures, teacher workshop, skill development model, and project-based model	Suitable for improving teachers' qualification and knowledge
School-based	Class observation, mentoring program, teacher workshop, seminar, action research, case study, skill development model, project-based model, coaching.	Most effective for improving learning strategy
School-focused	School workshop, action research, group discussion, observation on the best learning practice, project-based model, skill development model, coaching, mentoring, and lesson study.	Refreshing and improving content knowledge and teaching skill based on teachers' knowledge
Distance Education	Long-distance lecture, ACE, PGCE.	Suitable for improving teacher's qualification and content knowledge

Osamwonyi (2016), said that TST can be defined in simple terms as activities and trainings which are relevant and usable for teachers to improve their professional knowledge, skills, and competencies in the teaching profession. Therefore, TST covers all forms of education and training given to teachers who have been assigned positions in teaching. Moreover, TST is also defined as sustainable education designed to retrain, instill skills again, and renew teacher workforce's knowledge.

TST is performed by considering the following principles:
a. In-service program is applied by considering the needs of school and society
b. All school personnel require in-service education or training
c. Good supervision can be used to accelerate the improvement of in-service professionalism
d. In-service training must produce improved teaching quality
e. In-service education and training leads to sustainable examination and improvement process on education programs. The activities also support participants involved to assess themselves in terms of their competencies, achievements, and positions.
f. In-service education and training must be considered by state agencies, school boards, universities, and school administrators and teachers.
g. Supervisor in training must create an atmosphere which supports teachers to develop themselves during in-service training.
h. In-service training program must be performed based on research and support educational progress.
i. In-service training program is most effective if planned and performed cooperatively.
There are many types of TST, including:
a. Institutes: a series of lectures designed to give participants as much information as possible in a short time, usually in two or three days.
b. Conference: an activity which gives participants opportunity to ask each other and discuss the presented ideas.
c. Workshop: an activity performed by medium group, each person is given a problem to solve. The problem is closely related with their field.
d. Staff meeting: for in-service teachers, this activity is usually used to introduce teachers to administrative and policy users.
e. Committee: an activity involving several people as members to solve problems which can't be solved by the entire staff together.
f. Professional reading: an activity performed with the help of study group library.
g. Individual conference: depending on mutually supportive definition and abilities among teachers and supervisors.
h. Visit and demonstration: an activity which enables participants to observe real learning implementation by experienced teachers.

Base on that explains, TST is as an effective method of increasing the knowledge, skills and positive beliefs of teachers. It is a process used to continue the teachers'education once they have received their certification in teaching and are employed in a professional position.

2.   Benefits of TST

TST undoubtedly benefits the development of the professionalism of related teachers, application of learning activity, and learning outcomes achieved by students, and overall benefit for education. Osamwonyi (2016) said that with these programs, teachers will maintain their knowledge and follow developments/changes in methodology and curriculum. Moreover, teachers will regularly know which motivation they can do to develop their professionalism. The ultimate aim of TST programs are to ensure the effectiveness of teachers in the classroom and to increase student achievement consequently (Hewson, 2007). A directly proportional relationship was determined between the professional experiences of teachers and their participation in IST programs (Balta, 2014). It is also known that the more teachers participate in TST programs, the more student success will be achieved (Damar, 1996).

TST will keep developing as an inseparable part of sustainable teacher education. Although in-service training has been performed, there will be areas which require further development. TST will help closing the discrepancies in education. In sum, some of the benefits of TST are as follows.
a. Providing sufficient opportunities for serving teachers to renew their knowledge and skills to be better, without resigning from the current position.
b. Providing opportunities for school system to keep having trained and qualified teachers although in-service training program is in progress.
c. Enabling increased number of trained and qualified teachers at every education level.
d. Reducing financial burden for teachers who want to develop their professionalism, especially if their salaries can't cover the cost of further education and necessary trainings.
e. Providing a source of additional income for institution where Teacher in-service Training takes place.
f. Providing a source of additional income for staff involved in the program.
g. Providing opportunities for teacher education institutions to play a role in national development, especially by facilitating Teacher in-service Training.

RESULT AND DISCUSSION
1. Implementation of Policy of TST
a. Forms of TST in Indonesia
Teachers' participation in TST activities is aimed to reach teacher's professional competencies. The teacher's professional competencies include mastery of materials, structures, concepts, and scientific mindsets which support the subjects they teach; mastery of competency standard and basic competencies of the subjects/field of development they teach; creative development of learning materials they teach; sustainable development of professionalism by performing reflective actions; utilization of information and communication technology and self-development.

Teacher's self-development in achieving the competencies is performed by joining various teacher trainings provided by the government. Teaching professionalism development can be performed in three forms which are self-development (including functional training and collective activities of teachers), scientific publication, and innovative work development.

Beside education and training, other activities which can be used to train the professionalism of teacher in-service training include the following.
1) Discussion of educational issues: held regularly with topics related with issues at schools.
2) Seminar: teacher's participation in seminars and scientific publication training also can be a model of sustainable training of teaching professionalism in improving competency. This activity gives teachers opportunity to interact scientifically with their colleagues in the same profession regarding the latest issues to improve the quality of education.
3) Workshop: Workshop is performed to produce beneficial products for learning, improved competencies and career development. Workshop can be performed, for example, in curriculum analysis, syllabus development, RPP preparation, etc.
4) Research: Research can be performed by teacher in the forms of classroom action research, experimental research, etc. to improve the quality of learning.
5) Book/teaching material writing. Teaching materials written by teachers can be in the forms of dictate, textbook or book in the field of education.
6) Learning media creation. Learning media created by teachers can be in the forms of props, simple practicum tools, and electronic teaching materials (learning animation).
7) Technological work/artwork creation. Technological work/artwork made by teacher may be technological work which benefits the society and or education and artwork which has aesthetic value recognize by the society.

b. Evaluation of the Result of TST
Teacher performance appraisal is one of the steps to formulate teacher's competency improvement program effectively and efficiently. It's consistent with the decree written in the Regulation of the State Minister for Administrative and Bureaucratic Reform (Permenneg PAN dan RB) No. 16 of 2009. The performance appraisal is intended to determine teacher's real ability in teaching. Performance appraisal will also show the strengths an weaknesses of teachers in accordance with their responsibilities, whether classroom teachers, subject teachers, or counselor. Teacher performance appraisal is performed periodically and systematically to determine work achievement, including its development potential.

Beside obligation to join performance appraisal, the competency level of the teachers should be determined by competency test. Competency test is intended to collect information on teacher's real condition in educational and learning processes. Based on the result of competency test, teacher's competency profile is formulated by certain levels and the feasibility is determined. Therefore, the purpose of competency test is assessing and determining whether a teacher is competent or not based on the tested competency standards. Thus, teacher's competency improvement is rational and has strong empirical consideration. Teacher performance appraisal and competency test are essentially focused on the four competencies which teachers must have.

2. Factors Influencing the Effectiveness of TST
a. Teacher Qualification and Teacher's Competency
Teacher qualification and teacher's competency are regulated in the Regulation of the Minister of National Education No. 16 on Standards of Academic Qualification and Competencies of Teachers. According to this regulation, teacher's academic qualification in a formal educational unit differs consistent with the educational level being taught. Minimum academic qualification for teachers in Indonesia is bachelor's degree (D-IV) or

undergraduate degree (S1) of study program consistent with the subject they teach. Similarly, Fastrup & Samuels (2011) state that there are two main requirements to be fulfilled in quality teaching, i.e. all teachers should at least have undergraduate degree from accredited institutions and all teachers should join trainings in their respective assignment areas.

Meanwhile, the competencies which must be mastered by teachers include four main competencies which are pedagogical, personality, social, and professional competencies. Pedagogical competency is ability to manage students' learning, including understanding students, designing and performing teaching, evaluation learning outcomes, and developing students to actualize their potentials. Personality competency is solid, stable, mature, wise, and authoritative abilities, being a role model for students, and being noble. Professional competency is the ability to master teaching materials broadly and deeply to enable them help students achieve the competency standards established in the National Standard of Education. Meanwhile, social competency is educator's ability as a part of the society to communicate and interact effectively with students, fellow educators, teaching staff, student's parents/guardians, and local community.

The suitability of the qualification and competencies of TST with the qualification and competencies is an important factor for the success and effectiveness of teacher training in the future. It's because the basis of the success of a training system is teacher's ability itself. With suitable qualification and competencies, it will be easier for a teacher to develop their professionalisms further without being inhibited by factors related by the teacher themselves or administrative factor. To develop their professionalism, teachers who aren't qualified for the standard must join education in accordance with the requirements in effect. According to Nizam & Santoso (2013), the greatest challenge in teacher qualification program is related with Indonesia' geographic situation, transportation, infrastructures, and teacher's ability to maintain their performance.

b. Mastery of Technology in Education and Teaching
The importance of teacher's mastery of computer literacy and competency in online environment has been stated in many researches. In terms of the usage of technology related with computer in teaching in Indonesia, a study by Son etc. (2011) shows that generally teachers have limited time to access various computer applications. The mastered computer applications are generally word processors. Meanwhile, knowledge on database, concordance, and computer-mediated communication is lacking.
Moreover, a study by Inayati, (2015) also shows that teachers in Indonesia haven't fully recognized the potentials of social media technology in learning. Teachers are actually familiar with various types of social media, but few try to integrate it into learning. Many have never even integrated the technology to learning.
The findings imply that competencies related with ICT usage should be developed carefully in designing and implementing teacher training program. Teachers' experiences at various educational levels also vary in terms of computer and technology in learning. Therefore, there should be a training approach which can serve different teacher's backgrounds. With this kind of training program, each teacher can improve their personal abilities in using computer-based technology and apply them in teaching in classrooms.

c. Presentation of TST Programs
A number of new things should be noted regarding presenting training for the success of professional development programs. Some recommendations are as follows.
1) TST emphasizes effort to improve the effectiveness of teaching, solving practical issues in managing teaching and learning activities, and improving teacher's sensitivity to the individual difference of each student. The training programs must be well-coordinated, e.g. through Teacher's Working Group (Kelompok Kerja Guru-KKG) and Subject Teacher's Consultative Group (Musyawarah Guru Mata Pelajaran-MGMP). Moreover, teacher quality training program, for example through upgrade or other in-service trainings, should fully consider the issue by understanding students' conditions.
2) TST is performed to train teacher's sensitivity to students' backgrounds which naturally vary. Students' backgrounds also determine their motivations and learning achievements. Teacher's sensitivity to students' backgrounds and teacher's ability to handle them should be presented more in in-service education curriculum and trainings.
3) The role of education and training agencies should be optimized, supported by improving cooperation with The Institution of Education and Teacher Education (Lembaga Pendidikan Tenaga Kependidikan-LPTK), using workforce, developing curriculum and training software, and developing training accreditation system.
4) School's authority should be increased to determine the best for training teacher quality. The authority includes determining necessary activities and how to reach the purposes of the training.
Beside the suggestions above, the presentation of TST should consider the time required for a program. As we know, a training requires appropriate time to optimally reach its objectives. The result of the research by Osamwonyi (2016) shows that in adequate time for program presentation can be a problem for the

effectiveness of TST. The teaching hours for teachers in Indonesia are established in the regulation of the minister to be at least 24 teaching hours in a week. Due to long teaching hours, TST should also consider the adequacy of time allocation so that training objectives can be achieved as expected.

Moreover, the presentation of TST program should also consider the suitability of the approach and technique. Due to the varying issues and objectives to be achieved by TST in Indonesia, they should also consider the approaches they use, appropriate technique to achieve training objectives, etc. Technical things related to program presentation also should be organized and planned well, e.g. by deliberation involving parties related to the program.

Another classic problem for teacher TST is availability of facilities, including facilities and infrastructures. Teacher in-service education and training may require classroom, laboratory, or other facilities to support the planned activities. Beside availability of facilities, readiness of facilities to accommodate the participants and the activities should be planned well so that it can run efficiently.

d. Evaluation Technique Used in Assessing the Result of TST
Assessment of a TST should be performed to determine whether the training is effective or not. It's because not all training practices in teacher in-service training are effective. Previous researches have shown that teacher in-service trainings may produce different results.

The study by Bando & Li (2014) shows that TST is effective and improves student's learning. Based on the research result, teacher training can maximize students' learning achievements because it enhances teachers' knowledge on materials (subject knowledge) and aspects of teaching (pedagogical knowledge). The result of the study by Fozdar et al. (2007) also shows that training program on in-service teachers is effective, as evident in teachers' satisfaction to the training materials and programs.

However, not all results of TST are effective. A study by Dhawan (2014) shows that TST is ineffective in instilling knowledge on life skill and action research. Similarly, the study by Suzuki (2008) shows that TST by Cascade model is ineffective. It's because the messages given through training activities are often not relayed well, and it's difficult to produce any significant change in learning in classrooms. One of the things to be considered to make teacher in-service training effective is evaluation technique or assessment. Good evaluation will maximize the measurement of the training result. In this case, what's being measured, the measurement instrument in use, and who's measuring can affect training result.

In Indonesia, assessment for the development of teacher professionalism consistent with the established qualifications and competences is performed by supervisors. Standard for supervisors which include qualifications and competencies are regulated in the Regulation of the Minister of National Education No. 12 of 2007 on Standard of School Supervisor. The main duties of school supervisors are regulated in Permenpan an RB No. 21 of 2010 on Functional Positions and the Credit Score. The duties of supervisors are classified into duties for junior supervisor (8 duties), middle supervisor (10 duties), and senior supervisor (12 duties). In these duties, the main duties of school supervisors include: (1) training principals and teachers, (2) guiding principals and teachers, (3) monitoring the implementation of 8 National Educational Standards, and (4) training principals in developing professionalism, e.g. by various trainings.

3. Development of TST Model
a. *Recruitment System and Preparation of High Standard Future Teachers*
Indonesia can developed TST with high standard and complicated recruitment system. The teacher qualification applied in Indonesia based on a minimum of master's degree for teachers teaching at primary and secondary levels. Pre-service education for teachers receives a lot of attention, as well as professional culture, teaching, and high interest in students and learning.

Tight and selective teacher recruitment system is also shown by the low intake compared with the much higher number of applicants. It's because teaching is a popular profession, and because interest on students and teaching and learning activities are old traditions. The recruitment system to accept teachers is open, and the evaluation does not follow external standard but standard developed internally by each school. Due to better recruitment system, teachers have good qualification and professionalism, able to work autonomously and reliably although the system doesn't emphasizes control.

Sahlberg (2011) explains one of the recruitment processes in Finnish schools. The acceptance system is very fierce, only 1 of 10 applicants will get further opportunity to learn and teach as a teacher. After going through

complex matriculation process, candidates are selected based on their achievement record in college, and other supporting achievements. Then, the candidates join written examination on theories of education and learning. The candidates also must be involved in observing learning activities and situation at schools, in which stage social interaction and communication skills are assessed. The top qualified candidates are then interviewed on various things, including their motivations to dedicate their careers in teaching. Next, the candidate with the best score will join pre-service education program with the expenses paid by the government.

Therefore, it's concluded that Indonesia applies a very organized system for teacher candidates. The system also includes teaching practice and observation which must be joined by teachers before serving. At this phase, the teacher candidates observe the learning process performed by experienced teachers, and perform teaching practice supervised by guiding teacher, professor from teacher education department, and lecturers. This teaching practice can take 15 to 25% of teachers' entire time in education. Most of the activities are supported by teacher training schools managed by universities, which have curriculum and teaching practice similar with public schools.

b. Research-based Teaching Profession Development

In addition, Indonesia can also developing teacher's profession based on research. Education for TST is performed based on combination of research, practice, and reflection. This means the whole process must be supported by scientific knowledge and focus on thinking process, as well as using cognitive skill in researching. TST in Indonesia can commitment in applying research-based teacher education means theories of education, research methodology, and practice play important roles and are used in the program. The curriculum used in teacher education and training program is designed in such a way as to be a basis of education knowledge development and skill development in research methodology. Therefore, every teacher deepens their understanding on the natures of education practice. Teachers who train in Indonnesia also learn to design, perform, and present result of education research, and theoretical aspects of education (Sahlberg, 2011).

Research-based teacher training in Indonnensia has been performed since teacher candidate education and training in universities. Since teacher candidates join training program in university teacher training schools, teachers' researching skill is sharpened and developed. Teacher training school supports and completes education for teachers by involving research process, in which the topics are adjusted with each education discipline. The policy is applied because theory and practice are conceptually inseparable. The integration of practice and theory is important and fundamental to support teacher's autonomy and professionalism. Therefore, applying education theories they have learned on research-based practice is also strongly emphasized (Raiker & Rautiainen, 2016).

Teachers can be trained to support each other in improving their professionalism by collaborative research. Teachers teaching the same subject are strongly encouraged to observe each other to benefit reflective researches such as classroom action research (in Indonesia Penelitian Tindakan Kelas/PTK) and lesson study (LS). Teachers also should be trained to write their research result into scientific paper which is presented at small scale, seminar, and other activities. Not only for in-service teachers, skills related with education research should be trained since education universities so that teachers are used to scientific activities when in-service.

c. TST Integrates Technology in Education and Teaching

One of the challenges due to changes in today's education world is the integration of information and communication technology (ICT) into teacher education. Teacher education in Indonesia is more oriented to research. Moreover, teachers there are used to researching by using ICT (e.g. computer-assisted research). In this case, the teachers are trained to use technology in collecting data, processing information from various sources, and prioritizing the usage of ICT for scientific reasoning. The teachers also encouraged to use ICT to find solution in learning management system, use audio/video technology in teleconferencing, and learning via internet (Meisalo et al., 2010).

Indonesia also keeps encouraging the teachers to grow their skills and mastery of technology in education and learning. For teachers in Indonesia, ICT competency is developed by two innovative ways which are: (1) trying ICT-based learning methods and ICT-based learning methods in teaching activities in classrooms, by class-tutoring or peer-training; and (2) sharing results of using ICT in learning in education festival which is held at regional scale (Petrelius et al. (2016:229). It will be easier for teachers to integrate ICT into learning if their colleagues help. Moreover, sharing experience in teacher association meetings can provide beneficial insight and information based on their experiences.

Furthermore, a number of recommendations are given Meisalo et al. (2010:58) based on research on the usage of ICT in teacher education and training. Some of the recommendations are below.

1) There should be clear indication and description of objectives related to the usage of ICT in learning. It should be understood by teachers in terms of ICT integration in learning activities in classrooms. Teachers also should be instilled by the concept that the usage of ICT can facilitate the achievement of learning objectives in students. Teachers today should be able to use advancement in ICT in facilitating the creation of learning community.

2) ICT must be integrated into all lectures and teaching practices since the education of teacher candidates and other accompanying programs. There should be good planning on the types of ICT to be used, tools to be applied, how to use ICT in learning, etc.

3) The usage of ICT in training also should note research-based aspects such as reflection and collaboration. Therefore, teachers will get in-depth knowledge.

CONCLUSION

Based on the result and discussion, it can be concluded that there are two paths of teaching profession training and development which are professional training and development and career training and development. Teaching profession training and development cover training for various competencies to be mastered by teachers.

Factors influencing the effective of TST in Indonesia include suitability of teachers' qualifications and competencies, mastery of technology in education and learning, presentation of in-service training program, and evaluation technique in use.

To improve the TST model in Indonesia is including high standard recruitment system, research-based professional development, integration of technology into teacher education and professional development, and effective evaluation system.

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