Improving Teacher Professionalism Toward Education Quality in Digital Era

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Abstract. Teachers are an important component in improving the quality of education. It can even be said that teacher is a strategic key for the development of quality education. How important role of teachers in education, so it is not surprising that the Emperor of Japan, Hirohito after the defeat of Japan from the allies asked how many teachers are still alive. It was on the teacher's shoulder that Emperor Hirohito put his trust in rebuilding Japan through education and succeeding. The method used in this paper is library research (library research). The study finds that one of the progress of education in various countries such as Japan, China, Korea, India, which later became the instrument to solve the nation's problems is through the improvement and development of professional teachers. In Indonesia the effort to improve the professionalism of teachers is done through training called Teacher Professional Training (PLPG) and Teacher Professional Education (PPG). By building professional teachers the reinforcement of developer-based and discovery-based philosophical aspects make a significant contribution to improving the quality of education in Indonesia.

1. Introduction

Teachers are a very important component in education. In fact it can be said that teachers are the most strategic key for the development of quality education [1]. So important is the role of the teacher in education, it is not surprising that the Japanese Emperor Hirohito in the post-Japanese defeat of the Allies asked how many teachers were still alive. It was on the teacher's shoulder that Emperor Hirohito put his trust in rebuilding Japan which was destroyed through education and succeeding.

The findings of [2] and [3] reveal that the progress of education in Japan one of them lies in the commitment of the Japanese government to improve the quality of teacher professionalism. By building professionalism the teacher will produce advanced education as an instrument to solve the problems of the Japanese nation in the 21st century [4]. [5] records at least three things that encourage the development of teacher professionalism in order to successfully contribute meaningfully to the advancement of education.

First, education offers teachers the opportunity to develop professional communities of inquiry, with ownership of the improvement effort, a commitment to inquiry, shared goals, and a sense of responsibility to their colleagues and students [6].

Secondly, while progress is often slow at the start, the process can evolve over time with teachers beginning by weaving “some of the simpler components of education such as collaborative lesson
planning in with their existing practices, and only later grasping the significance of other ideas such as developing a lesson rationale and documenting their own learning.

Thirdly, education enables teachers to build on their efforts and refine their understandings. In the case reported by [6], teachers on their own initiative decided to continue to meet to further revise their lesson to allow colleagues to observe the research lesson and collect data. This is not an uncommon occurrence in Japan education. Finally, as [7] pointed out in their comments, the experience of developing teacher professionalism: "may stand a better chance of survival than specific instructional reforms because it is a means for bringing practice into line with goals that can be used flexibly to support various reform ideas".

In Indonesia efforts to increase teacher professionalism have been carried out by the government. Starting from the policy of improving the quality and professionalism of teachers through various training and special education to providing incentives for high achieving teachers. The policy of providing training and special education for improving the quality and professionalism of teachers is mainly carried out through the PLPG (Education and Teacher Professionalism Training) program and PPG (Teacher Professionalism Education).

The teacher certification program basically gives high hopes, that teachers who really meet the requirements will be able to pass the certification. Those who graduate are categorized as professional educators, so that the quality of education in Indonesia is expected to increase because they have good educators. But in reality there was a gap between expectations and reality in the teacher certification program in the field.

2. Literature Review and Method

2.1. Building Teacher Professionalism

Kks Teacher professional development is driven by the need to either expand or to renew teacher knowledge, teacher skills and commitment. Stimulation for these needs may begin with changes in curriculum, new technology, progress in pedagogy, or all of this. However, the underlying effort is to improve outcomes for students, whether they will focus on understanding, skills, attitudes, or involvement. Unfortunately, however, research evidence shows that, although money, time, and various efforts have been made to develop teacher professionalism, the results obtained are not always as expected.

A report on the results of research conducted on systemic changes in initiatives based on teacher improvement, notes that "professional development sessions designed to deepen teacher content knowledge and support needs during implementation sometimes fail to observe content designed for professional development, because of concerns. more urgent teachers such as material management or pedagogy ". This means that rarely the authorities involve teachers to be invited to participate in improving teacher professionalism. There is an impression that increasing teacher professionalism is the realm of educational bureaucracy.

This is not surprising so that international attention is more directed to learning how to develop teacher professionalism in Japan through the practice of Lesson Study in Japan. In seeking a successful example of the development of teacher professionalism, [8] show that the relationship between student outcomes and the development of teacher professionalism is reciprocal in the sense that "students are more successful at learning, the more likely it is that teachers will adopt practices that encourage successful learning further". In the same vein, [9] argues "what we know to be true for students also applies in terms of developing teacher professionalism. That is, that teachers learn best by doing and building their own understanding rather than being told. Experience becomes very valuable knowledge".

The development and improvement of teacher competencies as referred to in Article 47 paragraph (1) is carried out through a continuous teacher development and professional development system that is linked to the acquisition of functional job credit figures (Article 48). Article 48 paragraph (2) states that the activity to obtain functional job credit numbers as referred to in paragraph (1) is obtained by the Teacher at least through: (a) the teacher's collective activities that enhance the competence and / or professionalism of the Teacher; (b) education and training; (c) apprenticeship; (d) scientific publications on the results of research or innovative ideas; (e) innovative works; (f) presentations at
scientific forums; (g) publication of textbooks that pass assessment by the National Education Standards Agency; (h) publication of enrichment books; (i) publication of teacher manuals; (j) publication of field experiences in special education and/or special service education and/or (k) awards for achievement or dedication as teachers provided by the government or regional government.

2.2. Certification
The implementation of Teacher Certification is a manifestation of the implementation of Law No. 14 of 2005 concerning Teachers and Lecturers. The year 2011 is the fifth year of teacher certification which has been implemented since 2007. Referring to the implementation of the year certification previously, improvements in the implementation of teacher certification continued to be carried out so that they could be accounted for and provided great benefits to the improvement of the learning process.

The teacher is a professional educator with the main task of educating, teaching, directing, training, evaluating and evaluating students in early childhood education through formal education, basic education and secondary education. Professionals are jobs or activities carried out by a person and become a source of life income that requires expertise, skills or skills that meet certain quality standards or norms and require professional education.

Teacher certification is the process of awarding educator certificates to teachers as formal evidence as recognition given to teachers as professionals. As professionals, teachers are expected to function to improve the dignity and role of teachers as learning agents and function to improve the quality of national education. Teacher certification as an effort to improve teacher quality is expected to improve the quality of learning and the quality of education in Indonesia in a sustainable manner.

2.3. Research Method
This study was conducted using a qualitative method supported by a quantitative approach. The research design uses case studies in Central Java (Sukoharjo Regency and Surakarta City) and West Java (Depok City and Cimahi District). Data collection is done by interviews and questionnaires. Respondents numbered more than 1540 teachers who had been certified with various educational backgrounds. Data analysis was carried out with descriptive quantitative analysis.

3. Result
3.1. Teacher After Certification
An overview of the results of studies on teachers in the study area revealed some interesting things. First, certification has been obtained improve teacher welfare, dignity, discipline and pedagogical competence, with a 95% confidence interval. There were 1,540 respondents who gave statements of 1,410 teachers who were members of PGRI in Central Java and West Java from 20 types of schools in 4 districts/cities in Central Java and West Java. The increase occurred in 1,344 respondents (95.3%), 66 respondents (4.7%) gave records casuistically (depending on each teacher). Secondly, the problem of teachers who have been certified in relation to pedagogic core competencies can be described in the following conditions:

| Mastery aspect                                                                 | Unable (%) | Less Fortunate (%) | Able (%)  |
|--------------------------------------------------------------------------------|------------|--------------------|----------|
| Mastering the characteristics of students from the physical, moral, spiritual,   | 0,71       | 5,15               | 94,13    |
| social, cultural, emotional and intellectual aspects.                           |            |                    |          |
Third, this study found a relationship between the type of graduation certification and teacher professional competence. The findings of this study reveal that qualitatively the graduation of certification through PLPG has a higher frequency distribution of abilities than the teacher who receives the educator certificate either directly (PSPL) or the awarding of educator through portfolio (PSPF). This happens, because the ability of teachers who pass certification or through portfolios is already in a high position, so that the existence of certification has not changed much. Unlike teachers who pass certification through PLPG, they are in a lower ability position compared to teachers passing certification directly or through portfolios. Therefore, with the existence of PLPG certification there was a very significant change to pursue higher abilities.

Fourth, the findings of this study reveal that the age and ability of teachers to fulfill the components of teacher performance are related, it is seen that the higher the teacher's age, the greater the ability to fulfill the teacher's performance components, but in terms of the number of teachers, the increase occurred between 41 and 50 years of age. At the age of 51 years and above, there is a tendency for the number of teachers to decline, partly due to retirement.

Fifth, there is a tendency for the development of teacher performance polarization at three levels, namely: (a) there is a small change in the level of performance that is low/down (poor), namely those who have just received the certificate, (b) relatively constant at the level of intermediate performance (quite good), because they are in a high position, so that there seems to be no change, (c) there is a very significant change with a relatively small amount in the high and very high level of performance (very good). Changes that occur in aggregate (together), so that when read partially it will feel as if there is no difference or even decline, so also if the information giver is the subject of research.

### 3.2. Teacher professional development

For the benefit of developing professionalism, certified educator teachers are given a questionnaire regarding the participation of teachers in activities related to professional development. In this study

| Activity                                                                 | Performance | Teachers |
|--------------------------------------------------------------------------|-------------|----------|
| Mastering learning theory and learning principles that educate.          | 0.42        | 2.19     | 97.39   |
| Developing a curriculum related to the subject being taught.             | 0.42        | 5.30     | 94.28   |
| Developing a curriculum related to the subject being taught.             | 0.28        | 1.77     | 97.95   |
| Organizing educational learning and communication technology for learning purposes. | 1.19%       | 24.88    | 73.99   |
| Facilitating the development of potential students to actualize various potentials. | 0.42        | 13.41    | 85.46   |
| Communicate effectively, empathetically, and politely with students      | 0.28        | 1.39     | 98.38   |
| Organizing assessment and evaluation of learning processes and results.   | 0.28        | 1.20     | 98.52   |
| Utilizing the results of assessment and evaluation for the benefit of learning | 0.28        | 2.33     | 97.39   |
| Reflective action to improve the quality of learning                     | 0.35        | 4.02     | 95.62   |
what is meant by professional development is defined as activities that develop individual skills, knowledge and other characteristics as teachers. The answers given by the teachers only consider professional development after predicate as a teacher. The question asked in the questionnaire is for the last 18 months, have you participated in any of the following types of development activities professional, and what is the impact of these activities on the development of you as a teacher?

Table 2. Participation in Teacher Professionalism Development Activities

| Participation in Teacher Professionalism Development Activities | Yes (%) | No (%) |
|---------------------------------------------------------------|---------|--------|
| Educational Course or Workshop                                | 17.85   | 82.15  |
| Involved in the Conference                                    | 28.57   | 71.43  |
| Other School Visits                                           | 39.28   | 60.72  |
| Engage in MGMP                                                 | 67.85   | 32.15  |
| Research Activity                                             | 14.29   | 85.71  |
| Peer Observation                                               | 25      | 75     |

Source : Primer data

Table 2 explains that during the past 18 months, there were only a few teachers who were certified educators who participated in activities for professional development. There are 6 questions that must be filled by filling in the yes and no answers which indicate the teacher's involvement in various activities. In the course/workshop activities related to the subject or method and/or other topics related to education only 17.85% were actively participating in this activity and the remaining 82.15 chose passively not involved in the workshop with various arguments.

For educational conferences or seminars where teachers and/or researchers present the results of their research and discuss the issue of education, the teacher does not participate much. The reason stated by the teachers was that there was no time to write because they were preoccupied with administrative work, limited funding, lack of courage to present the results of their research, and other reasons such as lack of ability to use computers and mastering scientific writing techniques as well as limited opportunities to attend conferences.

To improve learning management, teachers are often given opportunities for comparative studies. Teachers also always get the opportunity to make observation visits to other schools. In this comparative study program, it is prioritized to observe how fellow teachers in schools that are considered good are able to graduate students with good grades, have many extracurricular activities, advance in the field of sports, succeed in many activities and become a favorite school in the area. For visits to other schools, almost 40% of teachers did it.

The most activities for the development of teacher professionalism are the Subject Teachers Meeting (MGMP). The majority of teachers, nearly 70% of teachers were involved in this activity. In addition to direct benefits, the reason stated is that it can be various experiences and mutual knowledge. This MGMP activity aims to equalize perceptions and solve problems faced in their respective teaching places. The majority of respondents participated in the MGMP as a place for teachers' activities to improve their professional skills so as to be able to improve the quality of education. By increasing professional ability of teachers, it is expected that it will impact on students because teachers play an important role in education, especially when implementing the learning process in the classroom.

The teacher's professionalism development activity that is the least done is research. The research referred to in this paper is individual or collaborative research on interesting topics to improve teacher professionalism. The reasons for teachers not conducting research include:

1. To conduct research, teachers are required to read a lot, while currently there are many teachers who are less fond of reading.
2. In addition to being less fond of reading, teachers do not like writing because of lack of insight because they do not like reading.
3. Low ability and methodology in research activities
4. Lack of funding if research must be carried out independently

Another activity that is less carried out by teachers is observing peers as part of school policy. Teachers who have experienced themselves feel disturbed if there is a colleague who observes.
Moreover, those who observe are younger, even though their academic abilities are higher. Or conversely the teacher does not want to learn from other teachers because he feels that his teaching method is in accordance with daily habits. Instead of observing fellow teachers, principals and supervisors, the more important obligation to supervise is rarely to carry out supervision, especially those done suddenly with the reason of believing in the teaching teacher.

3.3. Discussion

Based on descriptive analysis it turns out that the majority of teachers who already have educator certificates are still not maximal in developing their professionalism outside of teaching. Teachers are still preoccupied with administrative work especially for those who teach classes a lot like in middle school or high school. In its effort to master the characteristics of teaching materials and students needed learning methods and strategies ideal learning methods and strategies of course cannot be equated between one class and another. Teachers are not only as teachers but also as educators who can make adjustments to teaching materials and students.

In addition, the teacher still measures the level of welfare that is now obtained with the sacrifice that must be given. This is in line with the research conducted who looked at the teacher's perception of the Concept and Practice of Professionalism which stated that teachers still viewed that the main measure of increasing teacher professionalism was increasing teacher welfare. This means that the teacher considers that it is natural for the government to provide certification allowances, because all this time teachers' salaries are felt to be lacking especially for non PNS teachers.

From the results of this study, the number of teachers who attended the seminar as participants were still lacking and did not feel the great benefits of the seminar that was followed.

In the Guidelines for the Management of Sustainable Professional Development, it is stated that sustainable professional development is one form of the actualization of teacher's duties as a professional as a result of the issuance of National Education System Law No. 20 of 2003, the Law on Teachers and Lecturers No. 14 of 2005 and Government Regulation concerning National Education Standards No. 19 of 2005. The hope is that the government is able to facilitate teachers to always develop their professionalism in a sustainable manner so that they can improve competencies that can meet the needs and demands of the future related to the profession as a teacher.

The government realizes that it cannot necessarily require teachers to do professional development so that as a first step in the implementation of guidance and development of teacher professionalism, mapping teacher performance profiles is performed using a self-evaluation instrument at the beginning of the school year, the results of which are used as a reference in planning programs that will be carried out throughout school year. The implementation of sustainable professional development is carried out on teachers who have or have not achieved the established competency standards.

Although teachers have been certified can be assumed to already have the skills of cognitive, affective, and performance is adequate, but as a result of the development of science and technology and the demands of pembangung education present, then the teacher is required to continuously strive to improve their competence dynamically. The assumption of post-certification teacher professionalism should be a spring board for teachers to continuously manage their commitment to self-improvement in order to improve competence. Increased competence with the encouragement of self-commitment is expected to be able to improve the effectiveness of its performance in school.

Continuous professional development activities can be done starting from yourself. Teachers must be able to motivate themselves to develop professionalism, because teachers must theoretically be able to improve the quality of learning in the classroom by providing services to students to learn interactively, inspiratively, motivate, challenge and fun. If the teacher can start from himself, at least the teacher is able to carry out collective activities and share other teaching and development experiences.

While teacher participation in education and training still relies on funds from schools, even though the purpose of providing certification benefits is one of them so that teachers can attend education and training aimed at improving teacher competencies. While apprenticeship activities the number of teachers who know is still limited and do not know how this apprenticeship is carried out. Other
development activities such as scientific publications on the results of research or innovative ideas; innovative work; presentations at scientific forums; publication of textbooks that pass assessment by the National Education Standards Agency; publication of enrichment books; publication of teacher manuals; publication of field experience in special education and/or special service education and/or appreciation for achievement or dedication as a teacher provided by the government or local government, the majority of respondents have not done so.

Based on the explanation above, the implementation of teacher professionalism development has not been carried out well because the teacher has not been able to demonstrate adequate work performance. This shows that the teacher's performance has not been fully supported by an adequate degree of mastery of competence. Teachers often present themselves as 'omniscient' figures who cannot be mistaken while children-accidentally-are treated as 'omniscient' who cannot be mistaken. Mastery of competency is not an easy thing and requires a long journey to become a competent and professional teacher as desired by the competency standards stipulated in the RI Minister of National Education Regulation No. 16 of 2007 concerning Qualification of Academic Qualification Standards which states that teacher competency standards are developed in full from the four main competencies, namely pedagogic, personality, social, and professional competencies. The fourth competency integrated in teacher performance. Competency standards are expected to have a major impact on national teacher education programs.

Reviewing the teacher competencies regulated in the National Education Ministerial Regulation shows that there are so many competencies that must be possessed by a teacher in teaching, so that the teacher is expected to develop his/her competence before teaching students to find, explore and find their competence. However, if we go deeper into the contents of each type of competence, as conveyed by experts as well as in the perspective of government policy, it would be simple to become a competent teacher, to realize and improve teacher competencies requires real effort. truly and comprehensively.

4. Conclusion
In line with the challenges in the digital era, the roles and responsibilities of teachers in the future will be increasingly complex, thus requiring teachers to constantly make various improvements and adjustments to their competence mastery. Teachers must be more dynamic and creative in developing the learning process of students. The teacher in the future is no longer the only person who is most well informed about various information and knowledge that is developing and interacting with humans in the universe.

In the future, the teacher is not the only smarter person in the midst of his students. If the teacher does not understand the mechanism and pattern of information dissemination so quickly, he will fall professionally. If this happens, he will lose the trust of students, parents and the community. To face the challenges of professionalism in the digital era, teachers need to think anticipatively and proactively. That is, the teacher must continuously update his science and knowledge.

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