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The Development of IPED Model as an Effort to Improve Productivity Performance for the Certified Teachers in Indonesia

ABSTRACT: Education is a main factor for shaping of the strong nation, self-sufficient, independent, and dignified. By making education a major component, the strength of a nation, namely the Human Resources (HR), will be on top of other components. Meanwhile, the teacher is an educator and producer who scores the strength of human resources through the school institutions, both formal and non-formal, ranging from early childhood education to higher education levels, as well as spearhead for educational success. Teacher professional certification program in Indonesia, which gives the teachers’ financial increased impact, should in line with the quality and quantity of teacher performance productivity. Therefore, the model of IPED (Integrated Performance Educators Development) becomes an alternative model to measure the level of success of professional teachers in Indonesia. Results of this model is to find the IPPKG (“Indeks Prestasi Produktivitas Kinerja Guru” or Achievement Index of Teacher Performance Productivity), in which if the grade is above 0.7, then the teacher is said to be worth as a professional teacher. Conversely, if the grade of IPPKG is below 0.7, then the teacher is said to be less viable as a professional teacher; and, therefore, should improve the quality and quantity of productivity performance in order to be productive and professional teachers.

KEY WORD: Model of IPED, achievement index of teacher performance productivity, teacher certification program, work productivity, professional teachers, and the feasibility of a professional teacher.


KATA KUNCI: Model IPED, indeks prestasi produktivitas kinerja guru, program sertifikasi guru, produktivitas kerja, guru profesional, dan kelayakan guru profesional.

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INTRODUCTION

Education is the frontline in efforts to improve the quality of the nation and the state. With the power of education, meaning that as efforts to strengthen human resources in Indonesia. The strength of a country lies not from natural resources, it is also not located on military force, even trade. The strength of the country lies on the strength of human resources. With strong human resources retention of any state to be a destination country will inevitably happen with the real stages. Strong human resources will undoubtedly continue to grow and make the whole country into good asset for the nation-state (Conway et al., 2006).

Based on the report of the WEF (World Economic Forum) in 2014 that Indonesia’s competitiveness ranking is ranked 38, and still lower when compared to some neighboring countries such as Singapore (ranked 2), Malaysia (ranked 24), and Thailand (ranked 37). If these conditions are not immediately corrected, of course, the potential of this nation will only be used by other countries. Indonesia will only be a market for surplus production of other countries and will trigger Indonesia’s trade balance became worse off (WEF, 2014).

As a determinant of the direction of the country’s success, any teacher levels ranging from early childhood education teachers, elementary school teachers, secondary school teachers, high schools teachers, and lecturers at the higher education institution level, it becomes very important for the development of teacher quality, good personal qualities, professionalism and quality of a teacher, because the teacher is an educator, lead, protect, and provide an example to the students. When a teacher does not have the quality and underperforming, then, the behavior and performance of teacher will be directly imitated by his/her pupils. If a teacher’s performance is good in teaching and learning process, then, the results would be good also to the students, and vice versa (Willms, 2000).

The question now is whether the teacher’s performance is good, whether the provision of training to increase the professionalism of teachers, through formal training or training for the purpose of certifying teachers, really proven to improve the quality of teachers? How the model should be developed and used as a measurement of performance and increase the professionalism of teachers in their efforts to improve the production and productivity of teachers as human resources in Indonesia so that strong and able to compete at international level and to be host in their own country?

If be mapped, there are two profiles of HR (Human Resources) in Indonesia today. Firstly, there is an imbalance between the number of job opportunities in the workforce. Secondly, education levels in Indonesia’s workforce is still relatively low. Meanwhile, the substance of the problems, that led to the development of human resources, goes far less supported by adequate labor productivity (Samsudin, 2006). On the other hand, a picture portrait of Indonesian human resources, compared to the other countries, still do not indicate the quality of human resources encouraging rank.

Currently, the HDI (Human Development Index) of Indonesia was ranked 121 out of 187 countries. We were far below neighboring countries, such as Singapore (ranked 18th), Malaysia (ranked 64th), Thailand (ranked 103), and the Philippines (ranked 114). Similarly, if we look at the structure of the Indonesian labor force, a total of 55.3 million (46.8 percent) graduated from the Elementary School (UNDP, 2013). Soon, we will face the AEC (ASEAN [Association of South East Asian Nations] Economic Community) in 2015; so, the competition in the labor market is becoming more widespread and demanding quality human resources primed and ready to compete.¹

¹See, for example, news on “Indonesia Ready to Face ASEAN Economic Community” in Antara News [Jakarta: 11 August 2014. Available online also at: http://www.hdaadvisory.com/content/updated-news-august11-2015#Indonesia%20Ready%20To%20Face%20ASEAN%20Economic%20Community [accessed in Surabaya, Indonesia: 9 October 2014].
THE CONCEPT OF PRODUCTIVITY IN PERFORMANCE

Work productivity is part of HR (Human Resources) management. In the context of HR management, productivity including substance field of human resource development. According to S.P. Siagian (2009), there are seven benefits of the development of human resources, namely: (1) an increase in labor productivity; (2) the realization of a harmonious relationship between superiors and subordinates; (3) the availability of rapid decision-making process and the right; (4) increased morale all members of the organization; (5) to encourage an attitude of openness of management; (6) the smooth running of effective communication; and (7) functionally conflict resolution (Siagian, 2009).

The concept of productivity can be viewed in two dimensions, i.e. the dimensions of individual and organizational. Seeing the individual dimensions of productivity in relation to individual personality characteristics, that appear in the form of mental attitude, implies the desire and efforts of individuals who are always trying to improve the quality of life (Herrman, Saxena & Moodie eds., 2005). While the dimensions of organizational see the productivity within the framework of the technical relationship between input and output. Therefore, in this view, the increase in productivity is not only seen from the aspect of quantity, but also can be seen from the aspect of quality (Masofa, 2008).

Formulation from the NPB (National Productivity Board) in Singapore defines that productivity is a mental attitude of self-motivated to make improvements and repairs (cited in Sedarmayanti, 2009). Furthermore, Sedarmayanti (2009) said that productivity implies that mental attitude, that always has a view of quality of life, should be better today than yesterday, and tomorrow be better than today. Productivity can also be defined comparison between the results achieved (outputs) with all resources used per unit of time (Sedarmayanti, 2009).

The productivity of individuals can be assessed and what is done by the individual in his/her work. In other words, individual productivity is how a person carrying out the work performance or job performance (Sedarmayanti, 2009). In principle, productivity include mental attitudes and behavior of the workforce or the employees themselves.

Previous research, related to the productivity performance of teachers, said that teachers are key to improving the quality of learning. There is a differentiation influences social motivation (achievement, affiliation, and power) compared with the professional competence of teachers. The results found that the differentiation of social motivation, particularly achievement motivation, distinguishes the professional conduct of teachers, but the power of social motivation and affiliation cannot distinguish the professional conduct of teachers (Subandowo & Suwirta, 2014).

Meanwhile, in the study of the relationship between social motivation for the behavior of the teachers find that the professional social motivation to contribute very significantly to the professional conduct of teachers, and has the largest contribution to the achievement motivation. M. Subandowo (2014) said that education is divided into macro and micro level, in which to shape a macro and micro level required synergy and commitment among governments, teachers, schools, and, last but not least, as the primary basis are the parents. With government support to improve the welfare of teachers, through teacher certification program, it should the level of productivity of teachers and the quality of outputs produced better HR and evidenced by indices measurable national and international levels (Dieleman & Harmmeijer, 2006).

Education is one of the most fundamental factor in improving the quality of life, as well as a deciding factor for social and economic development toward better conditions. Education is also seen as the most strategic means to raise the dignity of a nation. Given the importance of the role of education for the lives of people, then, the government today is very concerned
to all aspects of education to be improved, including improving the quality of teacher productivity (Kagwiria & Amukowa, 2013).

The hope is that the education in Indonesia is to rise from adversity and become the frontline in nation building. This form of attention, specifically reflected in government policies, among others: the form of legislation, such as strategies to improve the education budget; and the efforts to improve various regulations that apply to promote national education (Subandowo, 2009a:109-110).

There is the correlation between achievement motivation, insight steadiness, tendency to act, and non-physical exhaustion as compared to labor productivity. It is also done for teachers as the human resources factor, as well as labor. See the figure 1.

Results of the study conducted by Suparwoto et al. (2011) stated that there are four aspects to improve the productivity, as follows:

Firstly, aspects of the competency of teachers that tend to vary, namely professional competence in sequence at the level of elementary school teachers, junior and high school teachers. They are in the realm of perception of good and very good categories, and pedagogical competence sequentially at elementary school teachers, junior and senoir school teachers is located in the realm of good and very good.

Secondly, personal competence possessed sequentially teachers of elementary schools and junior high schools are in the category of very good and well, while the teachers of senior high schools are in a good and sufficient category.

Thirdly, social competence possessed a science teacher, from 68 elementary and junior high school teachers in science subject matter, in both categories, than senior high school teachers are good and sufficient category.

Fourthly, aspects relating to the science teacher’s performance, in terms of self-development to increase the effectiveness and efficiency of performance on behavioral science teacher at elementary, junior high, and senior high schools, are an experience to act efficiently and more prominent than the act effectively, among others are very prominent (> 80%) for education and training, seminars, experience becomes the committee in the social organizations, and additional tasks that are not associated with
the science subject matter; on supporting activities to act effectively is quite prominent (66% to 80%) to take charge of the organization activities in education, such as mentor peers, mentors for the students, and so on (Suparwoto et al., 2011).

Research results through performance appraisal of junior high school teacher in social studies subject matter, in the town of Tarakan, East Kalimantan, after teacher certification, the main task element in the dimension of learning assessment presented based on existing indicators on the dimensions of learning assessment. The indicators in the dimensions of learning implementation consists of three indicators, namely: (1) designing the evaluation tool for teacher in measuring the progress and success of learners; (2) the teachers use a variety of strategies and methods of assessment to monitor progress and learning outcomes of students in achieving a certain competence as written in the planning and implementing of the teaching-learning process; and (3) teachers is utilizing a variety of assessments to provide feedback to students on their learning progress and drafting of learning materials (Sukono, 2015).

Sukono (2015) also stated that teacher performance of social studies teachers at the junior high school in the town of Tarakan, East Kalimantan, Indonesia, after teacher certification, the implementation of learning dimension of 36 respondents, there are no teachers who achieve very good category as 0 or 0%, for both categories of teachers as much as 6 or 16.67%, quite as much as 17 categories of teachers or 47.22%, and less category as well as 13 teachers or 36.11%. Performance of social studies teachers at junior high school, however, in the post teacher certification, on the overall dimensions of learning implementation have met with average performance enough (cf Coultas & Lewin, 2002; and Lewin, 2004).

MODEL PERFORMANCE IMPROVEMENT FOR CERTIFIED TEACHERS

According to the PDC (Productivity Development Center) in Indonesia, there are six factors that determine the productivity of labor, namely: working attitude, the level of skills, the relationship between labor and head of the organization, the management of productivity, energy efficiency work, and entrepreneurship (cited in Samsudin, 2006). In addition to the things mentioned above, there are various factors that affect work productivity, among others: mental attitude, education, skills, management, industrial relations based on values of Pancasila or five basic principles of the Republic of Indonesia, the level of income, nutrition and health, social security, environment and climate work, the means of production, technology, and the chance of achievement (cf ILO, 1987).

In general, productivity measurement involves a complex and interdisciplinary problems. The underlying factors that affect the achievement of productivity is investment position, both capital, technology, management as well as specific to the skills of the labor force (Sinungan, 1997).

Meanwhile, the performance of teachers in schools affected by several factors, namely: the teacher qualification standards and the relevance of the field of expertise of teachers with teaching duties (Taufik, 2002). In this context, the teachers have to mastery in managing the teaching and learning media to make his/her students enjoyable and interested in it. Efforts the early childhood teacher to use the media puppets in the delivery of materials by using storytelling techniques, for example, is one of the indicators of teachers expertise in teaching and learning process. See picture 1.

In terms of the existence of training institutions, national productivity of human resources can always be improved in fact by the Department of Labor in Indonesia. So, this department is responsible to bridge between job seekers with labor users (Zainun, 1996). In the field of education, for example, the training institutions, which have a duty to provide training to teachers, are also responsible in addition to education and training the stakeholders, including LPMP (Lembaga Penjamin Mutu Pendidikan or Education Quality Assurance Agency) in Indonesia (Evans et al., 2009).
About the Model of IPED (Integrated Performance Educators Development).

Based on the above exposure, and based on previous research on the productivity performance of the teacher, then developed a model of IPED with some specific performance measurement criteria for teachers in Indonesia, more specifically, as a measure to calculate the performance of certified teachers.

IPED is consisted of multiple dimensions of teacher performance measurement, but in essence it is consisted of two dimensions: quality and quantity. The quality dimensions covered five competences, namely: (1) teaching and learning competences; (2) research and publication competences; (3) assessment competence; (4) competences in developing material, content, textbook, student worksheet, and reference books; and (5) students mentoring competence.

Meanwhile, the quantity dimensions covered four developments, namely: (1) Teacher works production development; (2) insight teacher development; (3) financial teacher development; and (4) teacher achievement development.

About the components of index measuring the performance of teacher, see figure 2.

The descriptions related to quality dimensions, as shown in figure 2, are able to be seen, as follows:

First, on teaching and learning competences. It is measured from the fulfillment of hours of teaching and the quality of teaching, monitored and evaluated by the head of school, each semester.

Second, on research and publication competences. It is measured by the number of scientific papers produced writing teacher in journals that be published by the school and local education agencies, at least one scientific paper published every year.

Third, on assessment competence. It is judged by the level of validation and assessment techniques, monitored, and
evaluated by peers and school principals. Tested and validated at the regional level, the teachers who have best strategies and models in judgment and assessment are able to be given the award.

*Fourth*, on developing material, content, textbook, student worksheet, and reference books. It is monitored and evaluated by peers, principals, teachers groups, official (government), and the school committee.

*Fifth*, on students mentoring competence. It is calculated from the amount of coaching every two years and the number of students who get the achievement and to successfully earn achievements at local, regional, national, interwebsional levels. Monitoring and evaluation by peers, principals, and school committees. See picture 2.

The descriptions related to quantity dimensions, as shown in figure 2, are able to be seen, as follows:

*First*, on teacher works production development. It is measured annually and monitored as well as evaluated directly by the teacher colleagues and supervisors, and uploaded to the internet media to test the level of citation index.

*Second*, on teacher insight development. It is measured from the level of attendance of teachers in scientific forums and teacher communication forum.

*Third*, on teacher financial development. With the professional certification programs, the income levels of certified teachers has increased dramatically. It should be coupled with the fulfillment of the performance of teachers to be able to print human resources with international quality.

*Fourth*, on teacher achievement development. It is measured by the number of achievements recognized locally, regionally, nationally, and internationally levels. Monitored and evaluated by peers, principals, committee official (government), both outstanding teachers of individuals, groups, as well as supervising pupil/student achievement. See pictures 3 and 4.

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**Figure 2:**
Model IPED (Integrated Performance Educators Development) as a Technique to Measure the Performance of Professional Teachers
About the Measuring Productivity of Teacher Performance Achievement Index. Based on the model of IPED (Integrated Performance Educators Development) above, the following is a technique to measure the IPPKG (Indeks Prestasi Produktivitas Kinerja Guru or Achievement Index of Teacher Performance Productivity), with a formula as follows:

\[
\text{IPPKG} = \frac{[60\% (A1 + A2 + A3 + A4 + A5)] + [40\% (B1 + B2 + B3 + B4)]}{100}\%
\]

The descriptions related to the formula above are as follows: IPPKG = Indeks Prestasi Produktivitas Kinerja Guru or Achievement Index of Teacher Performance Productivity; A1 = quality dimension on teaching and learning competences was filled 10 hours is 10 points and maximum 20 hours is 20 points; A2 = quality dimension on research and publication competences, in a regular journal is 10 points, nationally accredited journals is 25 points, and international journals indexed is 40 points; A3 = quality dimension on assessment competence that be recognized by peers at school is 5 points, recognized by group of teachers at the district level is 10 points, recognized at the district level is 15 points, and nationally is 20 points; A4 = quality dimension on developing material, content, textbook, student worksheet, and reference books, in which the materials, contents, textbooks, teacher blogs and LKS (Lembar Kerja Siswa or Student Worksheet), a maximum is 10 points, and ISBN (International Series Book Number) standardized reference book is maximum 20 points; and A5 = quality dimension on students mentoring competence is followed by grade at least 3 points and winning the national level is maximum 20 points.

And then about the formula
above is also be added that $B_1 =$ quantity dimension on on teacher works production development, the maximum grade is 20 points in which the teacher’s work is documented in the form of teaching materials and can also be contested as one proof of professional teachers that able to be developed become the modules, media, lesson plans, and so on; $B_2 =$ quantity dimension on teacher insight development, with maximum grade 20 points, teachers should always actively participated in various scientific meetings, among teachers, which is held by agencies, private sector, universities, and the organizers are able to support teachers’ competence competence; $B_3 =$ quantity dimension on teacher financial development, especially for certified teachers are given the maximum grade 20 points, and who have not been certified at least 5 points and maximum 15 points, it should thus seek to improve the competence of his/herself in order to reach a grade 20 points; and $B_4 =$ quantity dimension on teacher achievement development, with the maximum grade 20 points, inwhich teachers are able to prove with physical evidences that they are able to make a scientific work recognized and published, able to guide students to achieve local, regional, national, and international levels.

All processes into component of IPPKG (Indeks Prestasi Produktivitas Kinerja Guru or Achievement Index of Teacher Performance Productivity) need to be studied in more detail by using the FGD (Focus Group Discussion) system between all components and stakeholders are involved, including teachers, government, teacher performance assessment team, other stakeholders.

**CONCLUSION**

From the above explanation, it can be concluded that there is should be a model to measure the performance and productivity of teachers, especially certified teachers. It is also necessary to develop monitoring and evaluating more focused on teachers performance. One of the professional teachers measurable variables is a model of IPED (Integrated Performance Educators Development). Measuring the IPED based on performance with outcomes such as teacher productivity can be implemented in the formula of IPPKG (Indeks Prestasi Produktivitas Kinerja Guru or Achievement Index of Teacher Performance Productivity).

The IPED is divided into nine dimensions, which consist of two main dimensions, namely: quality dimension and quantity dimension. The IPPKG, on the other hand, is able to give the grade for professional teacher is 0.7 point minimum and a maximum indexed assessment grade is 1 point. Exceptly, if a teacher is able to submit and then be published in an international journal indexed, the IPPKG can be more than 1 point.

Based on the conclusion, it is considered that the further study on calculating the point grade of IPPKG is a must. Keep FGD (Focus Group Discussion) sometimes should be conducted pertaining to the model and concept of IPED and IPPKG that should also be socialized on how real teachers doing professional manners. Finally, further studies on the performance and productivity of teachers in Indonesia are also must to be done continually.

Add note that if the teacher has the achievement more than 1, the appropriateness index should be discussed further and require more intense discussion. Models of IPED (Integrated Performance Educators Development) and IPPKG (Indeks Prestasi Produktivitas Kinerja Guru or Achievement Index of Teacher Performance Productivity) need to be studied in more detail by using the FGD (Focus Group Discussion) system between all components and stakeholders are involved, including teachers, government, teacher performance assessment team, other stakeholders.

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3Statement: 1 would like to declare that this article is my original work; so, it is not product of plagiarism and not yet also be reviewed and published by other scholarly journals.
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