THE MISSING PRODUCTIVE VOCATIONAL HIGH SCHOOL TEACHER COMPETENCY STANDARD IN THE INDONESIAN EDUCATION SYSTEM

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ABSTRACT

Teaching profession reform in the Indonesian education system began with the enactment of National Law on Teachers and Lecturers. An exception to the productive vocational high school teacher competency standard in the government regulation is identified to be a problem in the vocational teacher professionalism development system. This article reviews in what way it is missing and what the effects are. Comprehensive analysis on the vocational high school teaching context indicates the importance of occupational-specific competency standard for vocational teachers. This article reviews how the missing standard affects the vocational teacher professionalism development programs in the national education system.

Keywords: *Vocational teacher, teacher competency standard, teacher professionalism, vocational high school, Indonesian education system*

1. INTRODUCTION

December 2004 became the culmination of the teaching profession unrest in Indonesia. Through the organization of Indonesian teachers, namely PGRI '*Persatuan Guru Republik Indonesia*', they urged the government to pay more attention to their profession. Susilo Bambang Yudhoyono, the Indonesian President at the time, finally declare teaching as a profession that is recognized by the government. It became the starting point of the following governmental regulation on the teaching profession in Indonesia. In the following years, many government provisions regarding the teaching profession are enacted.

In some government regulations – which are Indonesian Law No 20/2003 on the National Education System, The Government Regulation No 19/2005 on the National Education Standards, Law No 14/2005 on Teachers and Lecturers, and the Government Regulation No 74/2008 on Teachers – it's explained that teachers are required to hold an academic qualification, master a set of standard competencies, and own an educator certificate (Republic of Indonesia, 2003, 2005a, 2005b, 2008). Regarding the standard competency for teachers, the government had ratified the Indonesian Minister of National Education Regulation No 16/2007 on Teachers Qualifications and Competency Standards as a reference on what professional teacher profile should be (MoNE, 2007a). It clearly defines teachers' academic qualification and standard competencies for preschool, elementary school, junior high school, senior high school, special education, and vocational high school (VHS) teachers. In the case of the vocational high school teacher, it regulates the standard competency for normative and adaptive teachers but exclude the productive one (Enclosure of MoNE, 2007a). Further explanation of the three kinds of Indonesian VHS teachers - namely normative, adaptive, and productive - will be discussed in the following sections of this article.

The exclusion of the productive teachers in the regulation leads to a generalization among the three kinds of VHS teachers in every program in the teacher professional development program series. It becomes a warm discussion among vocational education practitioners because the three types of VHS subject matter have different characteristics. A survey conducted by Basyirun (2014, p. 243) found that only 5% of respondents agree that the certification method for welding teacher is able to reveal their practical competence. The majority of respondents also agree on the inclusion of practical competency test in the certification process. Although this survey is only conducted for welding VHS teacher, it gives some evidence of the problem on the miss application of the vocational teacher standard.

This article reviews the Indonesian policy on the vocational teacher preparation system as a part of the global national teacher professionalism development program. Any existing governmen regulation – including Laws, Government Regulations, Ministerial Regulations, and the Ministerial Standard Operating Procedures – related to the topic will be reviewed. Any problem which may arise in the teacher professional development programs which may be caused by the missing standard will be identified. References relating to the vocational education philosophy will be reviewed to identify the missing points in the national practice and regulation. Literature regarding vocational education including textbooks, journal, conference paper, and work report will also be used to strengthen the given argument. The discussion will be elaborated

with the existing practice of Indonesian vocational teacher professional development system. Critical analysis will be used to draw conclusions and recommendations to improve the effectiveness of the vocational teaching profession development system in Indonesia.

1.1 Vocational Education In The Indonesian Educational System

The newest regulation on the Indonesian Education System is Law No 20/2003 on the National Education System (Republic of Indonesia, 2003). Education is defined as a conscious and deliberate effort to create an atmosphere and learning processes which enable learners to actively develop their potential to obtain a spiritual power of religion, self-control, personality, intelligence, character, and skills needed by themselves, their society, nation, and country (Article no. 1). The function of the national education is to develop the ability and to shape the character and the civilization of the nation's dignity in order to educate the citizen, it aims to develop students' potentials to be a human being who faith and fear of God Almighty, noble, healthy, knowledgeable, skilled, creative, independent, and becoming democratic and accountable citizens (Article no. 3). There are three terms which should be differentiated in the Indonesian national education system: education paths, education levels, and education types. The education path consists of formal, non-formal and informal education that can complement and enrich each other (Article no. 13). Formal education consists of primary education, secondary education, and higher education (Article no. 14) while the types of education consist of general, '*kejuruan*', '*vokasi*', academic, professional, religious, and special education (Article no. 15).

'*Pendidikan kejuruan*' and '*pendidikan vokasi*' are two terms which have a similar meaning in English as 'vocational education' (Estriyanto, 2016). '*Pendidikan kejuruan*' is a kind of expertise education in the secondary education (Republic of Indonesia, 2003: Article 18) whereas '*pendidikan vokasi*' refers to an expertise education in the higher education (Republic of Indonesia, 2012b: Article 15). So, both '*pendidikan vokasi*' and '*pendidikan kejuruan*' is an occupational-expertise education type but in a different level. In this paper, the term 'vocational teacher' refers to the teachers who teach in the Vocational High School, which is a vocational school in the secondary education level. In Indonesia, Vocational High School is usually called with '*Sekolah Menengah Kejuruan (SMK)*'.

1.2 Indonesian Vocational High School (VHS)

Explicit definition on VHS is given in the Government Regulations No 74/2008. It is stated that VHS is a formal education unit which organizes vocational education at the level of secondary education as a continuation of some kind of junior secondary education (Republic of Indonesia, 2008: Article 1 Paragraph 21). Secondary junior education constitutes the graduation from either Junior High School, '*Madrasah Tsanawiyah*' or Islamic Junior High School, and its equivalent. Law No 20/2003 states the aims of secondary vocational education is to prepare students for work in a particular field (Republic of Indonesia, 2003: Article 15). So, there is no ambiguity that the VHS is a work-oriented education at the secondary level of education in the national education system. The graduates of VHS are skill-ready workers who have capabilities

to handle any tasks in the appropriate field of work. The success of its education program should be measured from employment acceptance level in its related industries or world of work.

Because of the diversity of the field of work, the government developed a VHS codification under the Decree of the Director General of Secondary Education, the Ministry of Education and Culture No 7013/D/KP/2013 (DGoSE, 2013). According to the decree, VHS is grouped by areas of expertise, programs of expertise, and packages of expertise. There are nine areas of expertise which each area consists of several programs of expertise, and each program of expertise are divided into several packages of expertise. For example, Metal Fabrication Engineering is a package of expertise under the program of expertise in Mechanical Engineering, under the field of expertise of Technology and Engineering. Besides the Metal Fabrication Engineering package of expertise, there are also Machining, Welding, Metal Foundry, Industrial Mechanics Maintenance, and Mechanical Drawing which are equally under the program of expertise of Mechanical Engineering. In total, there are 128 packages of expertise with their specific characters, depending on the related occupation.

1.3 Curriculum of the Indonesian VHS

The most recent regulation on which the VHS is referred to is the Regulation of the Minister of Education and Culture No 60/2014 on the VHS/MAK Curriculum 2013 (MoEC, 2014). MAK – stand for '*Madrasah Aliyah Kejuruan*' - is an Islamic VHS under the Ministry of Religion. Due to the VHS areas of expertise complexity, the curriculum for each VHS package should cover its' particular characteristic. Table 1 is the detail of the VHS curriculum structure to give deeper insight on how the education process in the VHSs is administered.

There are three groups of subject matters: group A, group B, and group C. Group A and group B are generic subjects. They are commonly known as normative and adaptive subject matter. Group C is vocational specialization which depends on each expertise. Table 2 is an example of how Group C subject matters are broken down for the Package of Expertise of Metal Fabrication under the Program of Expertise of Mechanical Engineering, under the Field of Expertise of Technology and Engineering.

Table 1: Curriculum Structure of Indonesian VHS

SUBJECTS		TIME ALLOCATION PER WEEK X	XI	XII
GROUP A (GENERIC)				
1	Religion and Character Building	3	3	3
2	Pancasila and Citizenship	2	2	2
3	Bahasa Indonesia	4	4	4
4	Mathematics	4	4	4
5	Indonesian History	2	2	2
6	English	2	2	2
GROUP B (GENERIC)				
7	Art and Culture	2	2	2
8	Physical, Sport, and Health Education	3	3	3
9	Crafting and Entrepreneurship	2	2	2
GROUP C (SPECIALIZATION)				
C1. Basic of Field of Expertise		(6)	(6)	-
C2. Basic of Program of Expertise		(18)	-	-
C3. Basic of Package of Expertise			(18)	(24)
Total hour per week		48	48	48

(MoEC, 2014).

Table 2: Curriculum Structure of VHS for Package of Expertise of Metal Fabrication Engineering

SUBJECTS		TIME ALLOCATION PER WEEK X	XI	XII
GROUP C (SPECIALIZATION)				
C1. Basic of Field of Expertise		**(6)**	**(6)**	-
10	Physics	2	2	
11	Chemistry	2	2	
12	Mechanical Drawing	2	2	
C2. Basic of Program of Expertise		**(18)**	-	-
13	Mechanical Technology	8		
14	Mechanical Electricity and Energy Conversion	3		
15	Engineering Mechanics and Machine Elements	4		
16	Digital Simulation	3		
C3. Basic of Package of Expertise			**(18)**	**(24)**
17	Metal Fabrication Drawing		6	-
18	Metal Joining Engineering		4	8
19	Metal Forming and Fabrication Assembly		4	8
20	Metal Fabrication Construction Engineering		4	8

From the three groups of subject matter, the syllabus for subject matter group A and C is developed by the ministry of education, while for group B subject matter, the local school may develop by itself as an additional local content (Article 11). Although the ministry of education has developed the syllabus, each school has to design their own lesson plan which is challenging for vocational schools to do so due to the diversity of the existing package of expertise.

Group A and B named as generic subject matter, because those are the same with the ones which given to the generic senior high school. Some of them are categorized as a normative

subject matter which is oriented to build students' spiritual strenght, self-control, personality, character, values, and citizenship. Included in this category are Religion and Character Building, Pancasila and Citizenship, Indonesian History, Art and Culture, and Sport and Health Education. Some others are categorized as an adaptive subject matter which is focused on preparing learner's ability to understand, master the basic concepts and principles of science and technology that are needed for their daily life or an underlying knowledge in their work field. Included in this category are Bahasa Indonesia, English, Mathematics, Entrepreneurship, Physics, and Maths.

In contrast to group A and B, subject matters in group C is completely different compared to generic senior high school. Group C subject matters are those which aims to build student vocational knowledge and skill. The two subjects from Table 2 which are also given in generic senior high school are Math and Physics, but the ones given in vocational school are the ones which had been tailored to the field of expertise of technology and engineering. The rest of the subjects, except Math and Physics, are completely different. All of them are designed specifically to build the students' field of occupation knowledge, skill and expertise.

1.4 Indonesian qualification framework (IQF): Comparison between the generic and the vocational education

Indonesia has developed a national qualification framework under the Presidential Decree No 8/2012 (Republic of Indonesia, 2012a). Indonesian National Qualifications Framework (in Indonesia known as KKNI: '*Kerangka Kualifikasi Nasional Indonesia*') is the framework of human resources qualification which is put, equalizes, and integrating the education sector by the sector of training and work experience in a workability recognition scheme adapted to the structure in many employment sectors. According to the IQF, there are nine levels of qualification of productive human resources in Indonesia. The description of the qualifications at every level in IQF comprehensively considers whole learning outcomes, which can be produced by the process of formal, non-formal, and informal education, and also by prior personal experience so that one is able to work with quality.

According to the IQF, education is divided into two separate tracks as explained in Figure 1: scientific-based education and skill-expertise-based education. Scientific-based education is the education starting from 9 years primary education (6 yrs primary school + 3 yrs junior high school), Senior High School, then continued his/her study at the level of S1 (Bachelor), S2 (Magister), and S3 (Doctoral). Meanwhile, a skill-expertise-based education is education path that began after 9 years of primary education then cross to the path of secondary vocational education (VHS). After completing the VHS, it followed by D1 (1 yr Diploma), D2 (2 yrs Diploma), D3 (3 yrs Diploma), D4 (4 yrs Diploma), Applied S2 (Applied Magister), and Applied S3 (Applied Doctoral).

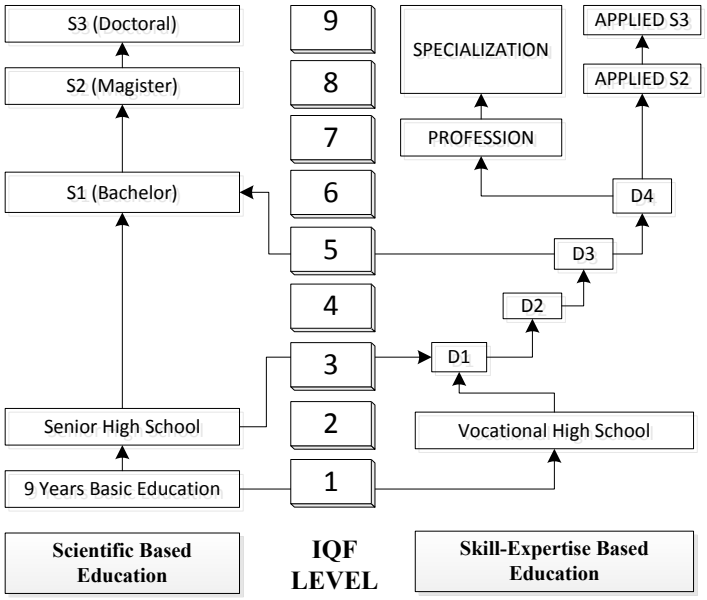

Figure 1: Two Education Tracks in the Indonesian National Qualification Framework.

Figure 1 illustrates the two education tracks in the national education system. Although the two tracks have a same level in the qualification framework, they are different in their characteristics. Scientific-based education is an educational track that promotes the expansion of knowledge required by students to continue their studies to a higher level. On the other side, skill-expertise based education is an educational track that prepares people to work in a certain field by providing practical experience in a particular occupational field such as agriculture, home economics, manufacturing, automotive, and more. The education track begin to split in the senior high school level, after the pupils completed their 9 years of basic education. They can choose to continue their study at the Senior High School, and they can also switch to expertise based education track by entering the VHS. Crossing between the scientific track to expertise track, or vice verse, in the upper level of qualification is also permitted. This mechanism is well known as a multi-entry and multi-exit system.

2. A REVIEW ON THE CHARACTERISTICS OF VOCATIONAL EDUCATION

2.1 A philosophic review on the difference between vocational and generic education

John Dewey and Charles Prosser, two world leading educational figures, have been colouring the praxis of vocational education in Indonesia (Sudira, 2013) although their way viewing the goal of vocational education is in contrast (Rojewski, 2009). Prosser's thought is likely under the philosophy of essentialism while Dewey's thought is of pragmatism. In the essentialist view, the purpose of vocational education is to meet the country's needs of workforces so that the education emphasizes the important of hands-on instruction and delivered by persons with

extensive experience (Rojewski, 2009). Essentialism philosophy is quite close to the philosophy of existentialism which believes that vocational education should develop the existing learners optimally through the facilities which are implemented under a dignified, creative, and innovative education, and also to develop talents, interests and abilities of learners (Sudira, 2013).

Prosser (1950, p. 233) reviewed nineteen aspects that differ in the characteristics of vocational education and general education. The most important points of the compared aspects are the learning characteristics, content, learners characteristics, instructors qualification, course reference standard, and learning method. The general education prepares the learners with a general knowledge for their higher education or common job, while vocational education prepares the learner for work in a specific job. Vocational education has closer interconnection with the world of work, even the world of work itself become the world of the learning process. The origin of vocational education is competent workers experience, and it emphasizes the importance of occupational experiences of the instructors. Table 3 illustrates some important aspects that distinguish between vocational and general education.

Different from the essentialism and existentialism philosophy, pragmatism views the goal of vocational education is to meet individual needs for personal fulfillment to prepare their future life (Rojewski, 2009). It should better accommodate any kinds of human intelligence, potential changes, talents, and interests (Sudira, 2013). It emphasizes problem-solving and higher order thinking, where learning is constructed from prior knowledge (Miller, 1984). Pragmatism learning gives students opportunities to be problem solvers, collaborators, maker of meaning, lifelong learners, agent of change, and democratic processes practician (Miller, 1996, p. 73). Although there are different perspectives among philosophic streams, they all agree that vocational education should result in graduates who master skills to carry out any jobs in their occupation with in-depth basic knowledge relating to it. Essentialism and existentialism agree on the key aspect of vocational education which is occupational skill-matching and that the education given should facilitate students for their future job. Key to pragmatism is the emphasis on pupils' readiness to face changing working conditions, lifelong learning and problem-solving, and collaboration. Therefore, various matters related to the learning process in vocational education should be oriented to this purpose.

Table 3: Prosser's Comparative Table between General and Vocational Education

Factors	General Education	Vocational Education
Basic theory	Faculty psychology	Habit psychology
Form of training	General faculty training	Specific habit training
Character of content	Standardized	Widely diversified specific content
Origin of content	Traditional selection	Experiences of competent worker
Environment	Isolated from life	Under life conditions
Special interest	Not regarded	Regarded
Special aptitudes	Not capitalized	Capitalized
Basis of admission	Ability to meet standardized academic requirements	Ability to profit by the instruction
Scope of service	Limited – chiefly youth	Serve all groups – all ages
Repetitive training	Little	Much
Qualifications of instructors	Know content	Hold specific occupational experience
Standards	Academic	Occupational
Objectives	Appreciation and trained faculties	Ability to meet demands of a specific occupation
Method of training	Illustrations, information, exercise, pseudo jobs	On the job
Working conditions	Practically common to all courses	Different for each course
Basis of operation	To offer a general opportunity	To meet specific needs
Leadership	General	In specific occupations
Group characteristics	Ignored	Considered
Administration	Easy, simple, rigid	Difficult, complex, elastic

Source: Prosser & Ouigley, (1950). Vocational Education in a Democracy. Chicago: American Technical Society, p.233.

2.2 Vocational teaching-learning

Prosser's Sixteen Theorems on Vocational Education could be the best foundation for an effective vocational education and training program (Prosser & Ouigley, 1950, p. 234). This theorem also gives deeper insight on how successful vocational education and training should be. As emphasized in Table 3, the purpose of vocational education is to prepare the student for a specific occupation. That's why the vocational learning should be conducted in a replica of the working environment (Theorem-1), by doing certain jobs using similar equipment which is the same as the ones in its real occupation (Theorem-2), and specifically in the manipulative and thinking habits required in the real occupation (Theorem-3). Vocational education helps the students to take worth financial profit from the training offered (Theorem-4) so that it only suitable for those who are interested and wanted a career in the occupation (Theorem-5). The learning process conducted by repetitively doing every task of the occupation to build students' expertise in skill and knowledge (Theorem-6) so that it could only be trained by persons who have mastered the skills and knowledge that he teaches (Theorem-7). Vocational education has to ensure that the trainees have minimum employment standard that can be sold to an employer (Theorem-8) and the training should match to the market requirement (Theorem-9). Vocational training should be given on actual jobs, not in exercises or pseudo jobs (Theorem-10) so that the training content should be obtained from ones who master the occupation, not a theorist (Theorem-11). Vocational education is occupational content specific, it has a body of content

which is peculiar to that occupation (Theorem-12), and sometimes, the setting-up of working and teaching condition should meet current specific need (Theorem-13). Those learning characteristics lead to an adapted instruction method and teacher-learner personal relation (Theorem-14). Because of its complexity learning atmosphere, it usually need an elastic and fluid administration (Theorem-15). Vocational education need high cost to carry out so that if it is not effective enough, vocational education should not be held (Theorem-16). In vocational education, pupils who are enrolling the education generally called by 'trainees' rather than 'students,' while teachers who teach in vocational education generally called by a 'trainer' rather than a 'teacher.'

Parallel to Prossers' theorems, Gerds & Zhao (2006) emphasize that know-how of an occupational experience can only be obtained in a real working condition where the standards of good performance have to be demonstrated. Vocational teachers should be able to combine the practical 'know-how' with their prior theoretical knowledge when doing a certain job. From their repetitive works, they may find some problem and difficulties which they have to overcome. Their theoretical base practical reflection lead to the 'know why' understanding so that they can explain why a certain way should be carried out in a certain task, not another.

In Indonesia, the list of occupational competencies are formulated under SKKNI – stand for '*Standar Kompetensi Kerja Nasional Indonesia*' which means Indonesian National Working Competency Standard – which regulated by the Ministery of the Man Power and Transmigration (Kemenperin, n.d.; MoMPT, 2010). Those working standard should be developed by each relating occupation consortium and should be ratified by the minister of the Man Power and Transmigration. It recommends Regional Model Competency Standard (RMCS) that was introduced by the International Labour Organization (ILO) which uses working process/task analysis approach (Kemenperin, n.d.). Those working competency standards cover knowledge, skills, and attitude aspects that are relevant to the working conditions as well. Thus, it is understandable why Dittrich (2010) indicate the need for the inclusion of SKKNI set of required aspects in the standard competency for Indonesian vocational teacher.

However, Indonesian vocational education is a part of the whole national education system whose goals is not merely to develop students knowledge and skills, but also their character, creativity and independence so that they become democratic and accountable citizens (Republic of Indonesia, 2003). Pragmatism seems to be adopted in the national education regulation. It means that the goals of vocational school should not be merely to fulfill the need of the world of work but also to prepare graduates for their whole life and career. Therefore, vocational teacher competency plays important roles not only to develop their occupation-needed skills but respectively to shape students' personality, their high-order thinking, reflective and analytical skill, and also their inter and intra-personal skill. Vocational teachers need to be able to demonstrate diverse teaching methods and define the most appropriate ones to develop those aspects. To be able to design a good vocational teaching-learning process, teachers should master its occupation related basic knowledge and skills, have a deep understanding of the work process in related occupation, a deep understanding of pedagogy, and of institutional binding regulations.

3. THE NEED OF VOCATIONAL TEACHER COMPETENCY STANDARD

3.1 Evidence from other countries

Existing vocational teacher competency standards are diverse among nations, a few countries or training providers have implemented it (Corben & Thomson, 2001; ET-Foundation, 2014) while others are still in development or under research (Soysouvanh et al., 2013). EF-Foundation (2014) formulate a professionalism standard for teachers and trainers which consist of three main aspects namely, professional values, knowledge and understanding, and skills. More aspects are included in the Australian TAFE excellent VET attributes which cover learner focus characteristics, current technical knowledge, expertise in teaching and learning methodologies, personal attributes and values, and influences on teacher development (Corben & Thomson, 2001). LAO PDR includes more aspect of categories, totally 80 indicators which divided into 16 sub-area (Soysouvanh et al., 2013). European Center for the Development of Vocational Training specifies four main roles for the vocational teacher which each role detailed into several activities and needed competencies to play the roles (CEDEFOP, 2009).

In short, as teaching in vocational education needs skill and knowledge expertise in typical occupation, the vocational teacher profession should have their typical competency standard which relates to pedagogical aspect and their typical occupation. Generic teacher competency standard could not be fully adopted because the vocational teacher has its own body of knowledge. Vocational teachers and trainers are 'dual professionals'; they are both subject and/or vocational specialists and experts in teaching and learning (ET-Foundation, 2014). Each country standard has their own formulation on how they accomodate the importance of practical skill and/or former experience in the world of work, but it becomes an important aspect in the standard. It usually a combination of occupation skilled expertise, instructional expertise, and ability to play a role as an educator as well.

3.2 Indonesian teacher competency standard

Indonesian Law No 14/2005 define teacher competency as a set of knowledge, skills, and behaviors that teacher must possess, internalize, master, and actualize in performing their professional tasks (Republic of Indonesia, 2005b). Spencer & Spencer (1993) define competency as 'underlying characteristic of an individual that is causally related to criterion referenced effective and/or superior performance in a job or situation.' The inclusion of effective criterion is also proposed by Page & Wilson (Vazirani, 2010), furthermore, Vazirani (2010) emphasizes the important point to include directly observable-and-testable competencies and the less assessable ones. Base on those definitions, teacher competency standard could be defined as a formal set of knowledge, skills, and behaviors which underlied by positive personal values so that teacher able to actualize in their daily activities so that they can perform their job effectively.

Indonesian teacher competency standard is regulated under the Minister of National Education Regulation No 16/2007 on Teachers Qualifications and Competency Standards (MoNE, 2007a). The standard consist of four aspects: pedagogies, personality, social, and

professional. Each competency aspects consist of some sub-aspect which then be divided into several indicators. Due to the different learning environment characteristics, the standards are formulated specifically for each kind of teachers: preschool, elementary, junior high school, senior high school, special education, and vocational high school (VHS) teachers. An exception was given to productive VHS teacher by giving an asterisk (*) which followed by an end note that specializes the standard for VHS teachers is only valid for normative and adaptive teachers. This exception is not followed by further explanation and/or addendum so that there is no applicable standard to regulate the productive VHS teachers.

Dittrich (2010) suggest the important of the development of the Indonesian vocational teacher standard which fit the Indonesian school-based system, not by adopting Germany standard which mostly based on the dual system environment. He also indicates for the inclusion of occupation-relevant practical skill which refers to the SKKNI. UNESCO-UNEVOC (2013, p. 10) identify the unbalance amount between teachers with academic and practitioner background in Indonesia TVET institutions as one of the main challenges facing TVET in Indonesia. Agree with Dittrich, Kurnia (2014) also suggests Indonesian TVET community to develop their national standard and criticizes government habit of hiring international consultants who often lack understand the country local context. Due to the strategic role of productive VHS teacher in resulting knowledgeable-skilled labors with good characteristics to support national economy development, a binding standard for this group of teachers is urgently needed. The missing proper standard may lead to improper teacher recruitment and long-term professionalism development which may lead to the decrease in the quality of education processes in the VHSs.

4. THE INDONESIAN TEACHER PROFESSIONAL DEVELOPMENT SYSTEM

4.1 The Indonesian government policy on teacher professional development grand design

Following the acknowledgment of teacher profession as stated in the Law No. 14, 2005 on Teachers and Lecturers, there are many government policies tailored to give detail operational guidance on the teacher professionalism development programs. Figure 2 explains the grand design of teacher professionalism development programs. The picture is extracted from the current existing policies. There are two main categories of teacher certification: in-service and pre-service certification. And after they work in the professional teaching environment, there still some activities which they have to enroll to maintain their professionalism during working at the school.

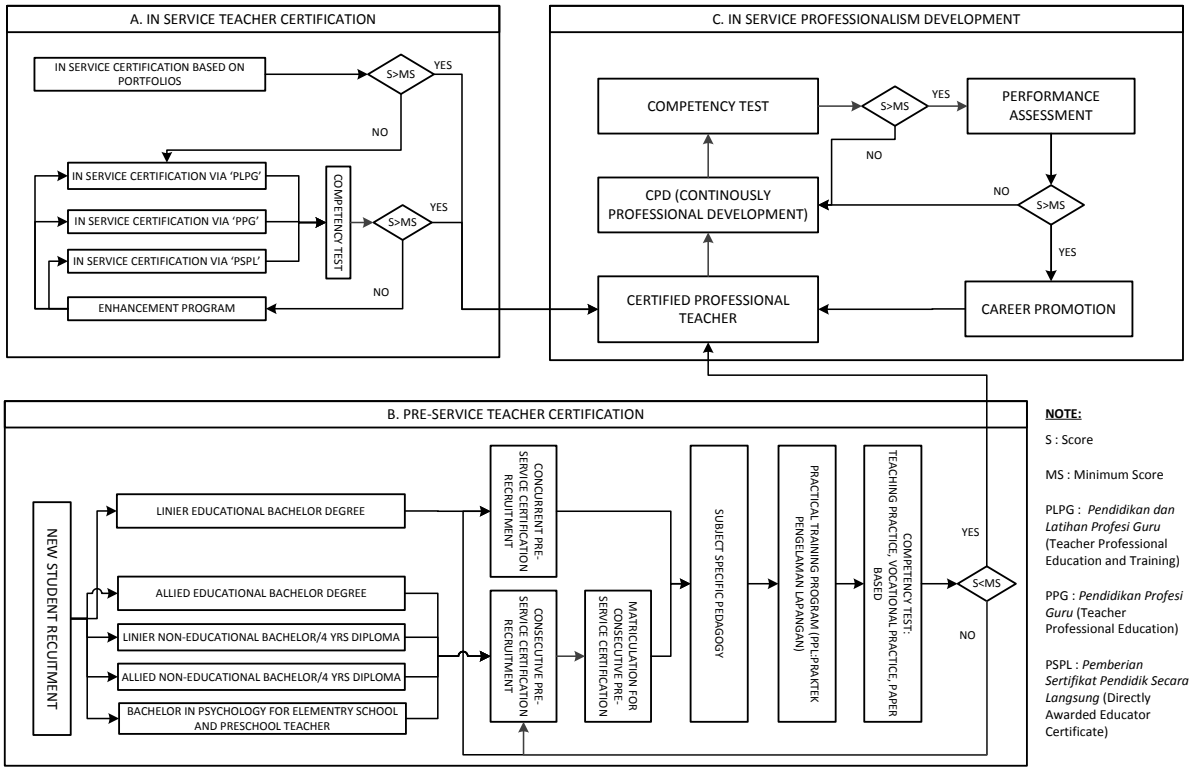

Figure 2: Indonesian Teacher Professionalism Development Framework

Container A explains the in-service certification mechanism (MoNE, 2007b). In-service teacher certification is designed to certify the existing teachers who have taught at the school until the acknowledgment of the teacher as a professional. Those existing teachers have to be certified first to avoid jealousy among senior teachers. It became a serious consideration because certified teacher will receive one-time basic salary additional take home pay. The certification is conducted by using portfolio assessment. The teacher certification committee is performed by universities which operate teacher education study programs. The universities are appointed by the ministry which is set out under the ministerial decree. The certification quota and list of the participant is determined by the ministry of education which cooperating with the local ministry of education agency at each district. Participants who were not passed the minimum score should enroll the PLPG program. PLPG – stand for '*Pendidikan dan Latihan Profesi Guru*' (Teacher Professional Education) – means a short course on some main competencies of the teacher profession to refresh their knowledge and pedagogical skill, including class action research. This certification model targeted to be completed on 2015 (BPSDMPK-PMP, 2012, p. 5) and will be followed by pre-service teacher certification via PPG. PPG – stand for '*Pendidikan Profesi Guru*' – is a one-year teacher professional education after the bachelor degree education program. Bachelor degree is equal to IQF Level-6, while PPG is IQF Level-7 (Republic of Indonesia, 2012a). But, due to the complexity of the teacher certification problems, this target could not be achieved. The PLPG certification is still running until 2016, while PPG pre-service certification has not also been rolling. Another mechanism to get educator certificate is PSPL – stand for Pemberian Sertifikat Pendidik Secara Langsung – is a directly educator certificate

awarded mechanism. Initially, it is provided for outstanding teachers to get educator certificate without rigid regulation, such as teachers with educational doctoral/magister degree and superintendent teacher. Later, this mechanism alternative is omitted without any elucidation.

Container B explains how to prepare new professional certified teachers. Not all parts of the chart have been held, but the policy of each process has been provided. This chart is generated based on the Regulation of the Minister of Education and Culture No 87, 2013 on Pre-service Teacher Professional Education (MoEC, 2013). Pre-service teacher certification is a future plan to prepare professional new teachers after the certification of existing teachers – which conducted by in-service certification mechanism as explained before – is completed. New professional young teachers are expected to result from a Teacher Professional Education (PPG) whose participants are recruited from the bachelor degree graduation.

As explained in Figure 2, the government regulation accommodates both concurrent and consecutive teacher preparation models (Estriyanto, 2016; MoEC, 2013). The consecutive teacher should undertake and pass a matriculation before enrolling the program (Article 6, Paragraph 1). Especially for the vocational teacher, it complies with Schröder (2013, p. 43) which state that the two models could be adopted to prepare a qualified vocational teacher. Based on some learning experience aspects of each candidate, Estriyanto (2016) proposed both practical and pedagogical/didactical skill to include in the matriculation of consecutive vocational teacher preparation

The same ministerial regulation also states that the curriculum structure of the teacher professional education (PPG) program consists of subject specific pedagogy workshops, teaching practice by micro teaching, peer teaching practice, field practical training program, subject material enrichment and/or pedagogy (MoEC, 2013: Article 9, Paragraph 1). The learning system in the program consists of the workshop of subject specific pedagogy in the 1st semester and practical training program with clinical supervision for 2nd semester (2013: Article 9, Paragraph 2). At the end of the education program, all participants should take part in the final competency test which held by the institution which should collaborate with corresponded professional organization (2013: Article 11, Paragraph 1). Participants who pass the final assessment will receive an educator certificate which is issued by the institution (2013: Article 11, Paragraph 3). They will also obtain an additional degree “Gr” following his name which notes that he/she is a professional teacher (2013: Article 14).

The 3rd part is Container C, and this is the most important part in developing a sustainable mechanism to maintain teacher professionalism while they play their role at the school. After someone gains his/her professional teacher status, either from pre-service or in-service certification, there will be a program series to ensure that the existing teachers are in a high level of professionalism during doing their jobs. There are four important programs which are correlated one another: (1) continuing professional development / CPD; (2) regular competency test; (3) performance assessment; and (4) career promotion.

4.2 Continuously Professionalism Development (CPD)

CPD is a gradual and sustained effort to develop teachers' knowledge and skill which carried out based on the real need to increase their professionalism throughout their working life (NMOEBR, 2009). Different from the recent policy, in the new regulation, teacher performance assessment which tends to be administrative before becoming more practice oriented, quantified, and qualified so that hopefully will encourage the teachers to improve their performance and professionalism.

A CPD program could consist of any activities relating to professional teacher competencies development. There are three kinds of development activities, which are: (1) personal development; (2) scientific publication; and (3) innovative product (NMOEBR, 2009: Article 11). Personal development activities could be a: professional training or community collective program. Including the scientific publications are a scientific presentation, scientific publication, or book publishing. The innovative product could be: applied technology invention, producing innovative art products, developing new teaching aid/simulator, or participating in a workshop of test material/standard/guide development.

CPD is designed based on teacher performance profile which gathered from the performance assessment (BPSDMPK-PMP, 2012, p. 21). If a teacher gets his/her score is under the specified minimum score in the teacher performance assessment, then he/she supposed to enroll the CPD program to improve his/her competency. While for one who gets score upper the minimum score, the CPD program is intended for higher improve his/her competency level.

4.3 Teacher competency test

The competency test is the ministry annual program which intended to obtain information about the teachers' level of competence for conducting the learning process (BPSDMPK-PMP, 2012, p. 21). Based on the results of competency tests, the teacher competency profile will be formulated into some certain level of competency so that their readiness to perform their jobs could be analyzed. Furthermore, it could be analyzed in what aspect they have had perform well and in what aspect they still need more improvement. Thus, the essences of competency test are: (1) formulating a teacher competency profile, as well as their properness in performing their jobs; (2) assessing on-going teacher capability based on the standard applied; and (3) formulating the basis of competency improvement program.

4.4 Teacher Performance Assessment (TPA)

TPA is an assessment of each teacher main task activities as an effort to the development of teacher professional career, level, and position (NMOEBR, 2009: Article 1). The implementation of teacher main tasks cannot be separated from his ability in mastering their subject matter, applying it, and how to deliver it in an 'educating' environment as mandated in the Ministry Regulation No 16, 2007. It focuses on 4 main issues: (1) teacher discipline, including attendance and work ethos; (2) learning effectiveness and efficiency, which is teacher capacity to transform

knowledge to his/her students; (3) behavioral exemplary, such as his/her oral talk and behavior; and (4) teacher capabilities to motivate their students (BPSDMPK-PMP, 2012, p. 33).

TPA is conducted two times a year. The first one usually called with formative TPA and the second one is summative TPA, which held at the end year. The result of the TPA used as: (1) teacher personal evaluation to develop his/her potency and career; (2) a reference for the school to plan the needed CPD program; and (3) basis to determine teacher performance achievement in the case of career promotion as regulated under the PERMENPAN&RB No 16, 2009.

4.5 Teacher career promotion

Governmental Regulation No 74, 2008 indicate that professional development and career promotion are different, but those are correlated one another (BPSDMPK-PMP, 2012, p. 47). Professional development relates to the development of teacher competency aspects as stated in the Ministerial Regulation No 16, 2007. Those competency aspects consist of pedagogical, professional, social, and personality. Teacher career promotion relates to job assignment and promotion as stated in the PERMENPAN&RB No 16, 2009 (NMOEBR, 2009). The new regulation indicates that the two areas could not be separated. However, they have to go on simultaneous steps. It means that the increase in career level, which is also linear to the salary level, followed by the enhancement of their professionalism simultaneously. Teacher career promotion here does not mean as a separate program. However, it uses the result of the TPA as the basis. It could also be understood that the four programs in container C are an integrated system to maintain and develop on-job teachers' professionalism.

5. DISCUSSION

Some aspects reviewed in the previous section are interrelated one another. In order to figure out the situation of the praxis of vocational education, it should be viewed from any angles. A philosophy is an underlying basic value which lead to the application of certain theory (Miller, 1996), while the adopted theory affects the praxis and regulation. It means that theories, philosophies, and existing procedures and regulation should be analyzed comprehensively to capture the real situation.

Indonesian teaching profession reformation ensures a comprehensive national policy which supports the teaching professional development in spite of the fact that some aspects regarding the teacher profession are still controlled under governmental regulation. The government has provide a sustainable system in developing teacher professionalism including the VHS teachers. After entering the world of professional teaching work, teachers should take a part in the professional development program series, namely: continuous professional development, periodic competency test, and performance assessment. The programs form an integrated system to maintain and improve teacher competency during their career. Teacher career promotion is in a simultaneous process of the professionalism development which relates to their competency improvement and real working load. Due to the missing productive vocational teacher, the programs in the productive teacher professional development refer to the normative-adaptive teacher standard.

Both the Indonesian education system context and global literature on vocational teaching-learning agree that VHS main role is to prepare their graduation for jobs. It leads to the need of work-based learning in the education process. The detail on how the work-based learning should be administered is as explained by the Prossers' sixteen theorems. The Indonesian Qualification Framework also strongly emphasize the learning characteristics and goals difference between scientific-based education (general education) and the skill-expertise based education. The VHS curriculum structure indicates that VHS pupils professional skills are mainly developed by the productive subject matters group, while the normative and adaptive one tend to build their spiritual, character, personality, and socio-life skill. The characteristics of those subject matter groups are different so that the use of normative-adaptive teacher standard competence means to the improper use of teacher standard.

An exception use of normative-adaptive teacher standard is correct due to the different characteristics of them, but it should be followed by providing a proper standard for the productive one. The missing productive VHS teacher standard leads to improper program planning in their professionalism development program series: recruitment, certification, CPD, competency test, performance assessment, and career promotion. Further, it may lead to the decrease in the quality of VHS graduates. However, VHS consist of many kind of professional expertise which relate to the occupation. It may leads to the difficulties of the development of each related VHS teacher standard because each occupation have their own characteristics that may vary between each other.

6. CONCLUSION

In Indonesian education system, the vocational teacher is equal to 'productive' vocational high school. Consequently, the development of vocational teaching profession should adopt the philosophies and theories of vocational education. Philosophically, vocational education is different from generic education. The vocational teacher is 'dual professional'; they are both subject and/or vocational specialist and expert in teaching. The two types of education have different goals and characteristics so that they need different learning system, including the teachers' competency standard. The missing formulation of competency standard for productive vocational high school teacher means the absence of the vocational teacher standard.

The absence of the productive VHS teacher in Indonesian national education system means there is a missing reference in the vocational teacher professionalism development programs. All programs in the teacher preparation series need the competency standard as a reference. It is needed as the starting point to break down learning outcomes and graduates' competency profile in both bachelor degree vocational teacher education (IQF Level of 6) and teacher professional education / PPG (IQF Level of 7). The competency standard is also needed as a reference to develop appropriate instrument in the periodic competency test held by the government, as well as to develop instruments for teacher performance assessment that is appropriate to the characteristics of the working conditions of vocational teaching. The competencey standard is also necessary for designing CPD programs for vocational teacher that fulfils requirements of real working conditions. Thus, the importance of addressing the missing

competency standard cannot be over emphasised. Furthermore, the diversity of package of expertise in the vocational education, demand for further analysis on how occupation based productive VHS teacher competency standard should be formulated.

7.0 RECOMMENDATIONS

Indonesia urgently requires a national productive VHS teacher competency standard to provide a guidance on vocational teacher professionalism development programs along with the national teacher profession reform. Due to the importance of working experience requirements for vocational teachers, it should be considered to be included in the vocational teacher standard. The Indonesian qualification framework (KKNI) indicates the possibility for the inclusion of practical trainer who comes from the field of work as another alternative. The certification based on the national working competency standard (SKKNI) may be used as tools to recognize vocational teacher skill expertise. In a broader scope, comprehensive formulation of vocational teacher professionalism need to be conceptualized to underlie the standard development.

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