Development of Vocational Education as Demands Revitalization of Vocational High School in Dual Skills Program

Author(s): 1Gede Widayana, 2A. Mukhadis
Affiliation: 1Mechanical Engineering Education, Ganesha University of Education, Indonesia
2State University of Malang, Indonesia
*Corresponding author: gedewidayana@gmail.com

Abstract: Result of analysis of Ministry of Education and Culture (Kemendikbud) obtained data that some skill program in Vocational High School (SMK) experiencing lack of productive teacher. The existence of a dual skills education program is one way to meet the lack of productive teachers. Dual Skill Program intended here is the transfer and or addition of the teacher's assignment from the adaptive subject teacher to become a productive SMK teaching teacher on a particular skill competence in accordance with his interests and talents. Dual Skill Program is aimed at teachers to obtain certification of skills as productive teachers that last for 12 months through four stages of stage of education and training process through the pattern of "On-1 In-1 On-2 and In-2" (theory and practice) At the ON stage participants learn independently in their home school with a given module and mentoring. While for stage IN participants exist in the industry and Center for Development and Empowerment of Educators and Education Personnel (PPPPTK)[10]. At the end of the training, teachers who are participants of the Dual Skill Program may receive a double certificate, a certificate of expertise and an educator certificate. Programs adopted from sandwich systems are good for improving teacher competence, but have not provided an evaluation of the effectiveness of productive teacher printing.

Keywords: Revitalization; Dual Skill Program; Evaluation.

I. INTRODUCTION

By 2020 to 2030 the Indonesian nation will face challenges which will enter the era of “Bonus Demografi”, which defines an era in which the number of productive ages more than non-productive age [18]. This is certainly a threat and a challenge for the Indonesian people where there will be an explosion of unemployment but also the opportunity for economic growth and public welfare [33]. This situation has been realized by the current government under the auspices of president Joko Widodo to empower the productive age community in order to have the competence to produce something [4]. Moreover, based on data from Central Bureau of Statistics (BPS) November 2016, the largest number of unemployed in Indonesia is graduated from vocational high school [8]. From here the government realizes there is a fundamental problem in vocational education that needs to be fixed soon. Vocational education and training (VET) and vocational education have been widely applied in industrialized countries as a tool to equip graduates with new skills that the job market needs and reduce unemployment [24].

Then on September 16, 2016 President Joko Widodo issued Presidential Instruction No. 9 of 2016 on the revitalization of Vocational High School (SMK) in order to Improve the Quality and Competitiveness of Human Resources Indonesia [7]. The release of this instruction to answer the problems experienced by SMK so far; Link and Match Program between SMK and workplace (DUDI) which has not been running as desired [13][19]. The lack of cooperation and the difficulty of SMK to find the relevant DUDI partners is one of the factors causing the lack of competency of vocational graduates and not the acceptance of graduates in the industry. Which in turn makes unemployment more and more [14][17]. Likewise, the increase in the number of SMK according to the government's plan to reach the ratio of 60:40 will increase the number of students in SMK to 4.5 million in 2016 from 750 thousand in 2005 [16]. This will increase SMK graduates who will ultimately increase unemployment of vocational graduates if they do not have a superior competence to enter the workforce [21][23][26][34].

Talking about the competence of graduates also can’t be separated from the limitations of tools and equipment practice in SMK [1]. Many SMKs have difficulties in meeting the completeness of equipment in school practices, where the limited funds are often the fundamental reason. Lack of facilities and infrastructure or facilities owned by SMK become an important issue that never ceased to complete in order to improve the quality of education, even the government has passed the education law that set the standards, especially related to the problematic of facilities and infrastructure [1]. In addition to tools and tools of practice, the professionalism of teachers also greatly determines the competence of existing graduates [9]. The professionalism of a teacher is closely linked to three main factors: competence, certification and professional allowance [2]. These three determine the quality of education. As a professional teacher the task is required to educate, teach and train. Besides, teachers also carry out humanitarian and community duties. Teachers as the
spearhead in the world of education, need to be equipped with intellectual intelligence (cognitive), emotional intelligence (affective attitude, personality, soft skill and psychomotor life skill) and spiritual intelligence, so skilled in operationalizing education activities [22][11].

The regulation taken by the Indonesian government to revitalize vocational high schools is one of the answers to the problems faced by vocational high schools so far, such as the exposure above. Revitalization, in order to improve the Quality and Competitiveness of Indonesian Human Resources.

II. REVITALIZATION OF VOCATIONAL EDUCATION ON DUAL SKILL PROGRAM

The number of unemployed SMK graduates had made the government take a policy to revitalize vocational education [8]. There are four points that become the focus of revitalization of SMK which is mandated in Presidential Instruction no. 9 of 2016. These four points include curriculum revitalization, educators & education personnel, cooperation, and graduates. (1). Curriculum; The curriculum is currently rigidly assessed. As a result, it is difficult to meet the needs of the workforce that is ready for business and industry. (2). Educators & labor; In addition to availability, revitalization is also aimed at improving teacher competence [35]. As a short term solution, the fulfillment of teachers' productive needs is done through multiple skills programs. For the long term is still waiting for the lifting of a moratorium on civil servants scheduled to end 2019. (3). Cooperation; Improved cooperation with universities and inter ministries. (4). Graduates; every graduate of SMK must pass a competence test and certification that is recognized by DUDI, because the quality of SMK graduates will determine whether SMK can respond to DUDI needs or not [29].

In the first point is said Curriculum for SMK level is often considered rigid by various circles. As a result, it is difficult to meet the needs of the workforce that is ready for business and industry. With this revitalization, out of the three curricula in SMK there is one more flexibly designed curriculum [32]. That is, this curriculum adapts to industry needs. In addition to the curriculum, revitalization is also done from the side of educators and education personnel, especially teachers, ranging from the fulfillment of the needs of teachers to the improvement of teacher competence. As a short-term solution, the fulfillment of teachers' productive needs is done through multiple skill programs, outsourced teachers from DUDI, Student Internship Program, and recruitment of new civil servant teachers (PNS).

A dual skills program was held to follow up Presidential Instruction No. 9 of 2014 on vocational education with a primary focus on four areas of expertise, namely, Maritime and Marine, Agriculture and Food Security, Creative Industries, and Tourism. [20]. The program is one of the main programs of the Ministry of Education and Culture (Kemendikbud) in empowering the development and empowerment of teachers and educators in Indonesia. A dual skills program is for adaptive teachers from SMK to get an additional education for one year. This is because at this time SMK has the advantages of adaptive teachers [31][28]. Result of analysis of Directorate General of Teachers and Education Personnel (GTK Kemdikbud) obtained data that some skill program in SMK experiencing lack of productive teacher, while in program of expertise and other subject matter amount of teacher exceeds amount needed [5]. From the data above, it is known that the needs of productive teachers in SMK in 2016 reached 335,821 people. Productive teachers in SMK amounted to 100,552 consisting of 40,098 teachers of civil servant status and 60,482 non-civil servants. So there is a lack of productive teachers in SMK a number of 235,269. This deficiency is spread over all competence skills [3].

Dual Skill Program intended here is the transfer and / or addition of the teacher's assignment from the adaptive subject teacher ( Natural Science, Social Science, and Entrepreneurship) into a teacher of SMK productive subjects on a particular skill competence in accordance with his interests and talents [6][27]. While Adaptive Teachers here are teachers who teach English, Mathematics, Natural Science, Physics, Chemistry, Social Science, Entrepreneurship in SMK. And productive teachers are teachers who teach subjects on a specific skill set or skill competence in accordance with the Basic Vocational Competencies and Vocational Competencies [10].

Dual Skill Program is aimed at teachers to obtain certification of skills as productive teachers that last for 12 months through four stages with stage of education and training process through the pattern of "On-1 On-2 and In-2" (theory and practice). At the ON stage participants learn independently in their home school with a given module and mentoring. While for stage IN participants exist in the industry and Center for Development and Empowerment of Educators and Education Personnel (PPPPTK). At the end of the course, if you pass the exam, the teacher who is a participant of the Dual Expertise Program may receive a double certificate, a certificate of expertise and an educator certificate. Certification of expertise will be issued by the Professional Certification Institute, while the certification of the educator is received after passing the Teacher Certification Program through the pattern of Teacher Professional Training (PLPG) at the Institute for Educational Teaching (LPTK). The training on the implementation of the dual skills program is carried out in the PPPPTK and the Institute for Development and Empowerment of Teachers & Teachers of Marine Fisheries of Information and Communications Technology (LPPPTK KPTK) in accordance with their field of duty [10]. The target teacher who will follow the Dual Expertise Program totals 30,000 teachers. In the implementation is divided into two stages; for phase 1, in 2016, a number of 15,000 people and the second stage, in 2017, the remaining 15,000 people.

Dual Skill Program for Vocational Teachers in the implementation already has the rule of law, among others:

(1). Law Number 20 Year 2003 regarding National Education System;
(2). Law Number 14 Year 2005 regarding Teachers and Lecturers;
(3) Law Number 23 Year 2014 on Regional Government; (4) Government Regulation Number 29 of 1990 on Secondary Education; (5) Government Regulation Number 74 Year 2008 on Teachers; (6) Government Regulation Number 32 Year 2013 on the Amendment of National Education Standards; (7) Presidential Instruction Number 9 Year 2016 on the Revitalization of Vocational Secondary Schools in the Framework of Improving the Quality and Competitiveness of Human Resources of Indonesia; (8) Presidential Regulation No. 8/2012 on the Indonesian National Qualification Framework; (9) The Regulation of the Minister of National Education Number 16 Year 2007 regarding Academic Qualification and Teacher Competency Standards; (10) Regulation of the Minister of Education and Culture No. 16 of 2015 on Organization and Working Procedures of Center for the Development and Empowerment of Educators and Education Personnel; (11) Regulation of the Minister of Education and Culture No. 18 of 2015 on Organization and Working Procedures of Institute for Development and Empowerment of Teachers and Education Personnel Marine Affairs Division of Fishery Information and Communication Technology; (12) Decree of the Director General of Secondary Education No. 7013 / D / KP / 2013 on Spectrum of Vocational Secondary Education Skills [10]. This dual skill program started in early January of 2017.

Previously, in December 2016, all participants of the dual skills program were briefed throughout Indonesia for briefing on the ins and outs of the program. This program (stage one) will end in December 2017. In the field implementation, the teacher is accompanied by a companion teacher, as a mentor, who has been appointed by the Director General of Teachers and Education Personnel (GTK) with certain criteria [10].

At the time of writing this article the dual skill program is still running, can’t be evaluated the implementation of the program has been done and still leaves questions about the effectiveness of this program in producing the desired productive teachers. The lack of productive teachers can be overcome by recruiting new teachers and implementing multiple skills programs. For recruitment teachers still have a problem that is the policy of moratorium on the appointment of teachers from the government and the supply of teachers from LPTK who may not be able to provide teachers with certain skills. As for LPTKs able to provide teachers of expertise, it is no longer needed. Besides, the lack of teachers is directly proportional to the declining quality of education because of the many instant fulfillments of teachers such as program crashes and incidental. In addition, the dual skill program conducted by teachers in the training that lasted for 12 months still provides doubts about the results obtained. To be a productive teacher takes a long time to gain knowledge, experience and skills. While the double skill program that was held lasted quite short. Changes in the needs of productive teachers must conform to the needs of the industrial world. The transformation of an adaptive teacher into a productive teacher requires not only skills but also extensive experience and knowledge. Programs adopted from sandwich systems are good for improving teacher competence, but have not provided an evaluation of the effectiveness of productive teacher printing. The author suggests seeing the performance improvement of this program the evaluation model used should be the CIPP model [15]. CIPP is one evaluation model that implements a social approach in each of the four components. The goal of CIPP is to improve issues within the organization [30]. CIPP is recommended as an appropriate evaluation model for assessing higher education institutions [25].

III. CONCLUSION
Revitalization of Vocational High School based on Presidential Instruction Number 9 Year 2016 on SMK in order to Improve the Quality and Competitiveness of Human Resources Indonesia. The Dual Skill Program refers to Presidential Instruction No. 9 of 2014 on vocational education with a primary focus on four areas of expertise, namely, Maritime and Marine, Agriculture and Food Security, Creative Industries, and Tourism. The program is one of the main programs of the Kemendikbud in empowering the development and empowerment of teachers and educators in Indonesia. A dual skills program is for adaptive teachers from SMK to get an additional education for one year. This is because at this time SMK experience the advantages of adaptive teachers. With a dual skills education program is one way to meet the lack of productive teachers. Dual Skill Program can get double certificate, that is, skill certificate and educator certificate. Dual Skill Program for Teachers SMK already has a rule of law, in the implementation. The authority to teach on a new skill package for vocational teachers is given after teachers follow the process of education and training through the On-1 In-1 On-2 pattern. This program (phase one) will end in December 2017. The dual skill program is still running, not yet evaluated by the implementation of the program and still leaves questions about the effectiveness of this program in producing the desired productive teachers. Programs adopted from sandwich systems are good for improving teacher competence, but have not provided an evaluation of the effectiveness of productive teacher printing.

IV. DECLARATION

All author(s) have no conflicts of interest and funding is supported by LPDP Indonesia.

REFERENCE


ECLARATION
Program Keahlian Ganda, Surat Kabar Harian Kedaulatan Rakyat Jogjakarta.


Dinpres Nomor 9 Tahun 2016 Tentang Revitalisasi Program Pendidikan Keahlian Ganda Atasi Kekurangan Guru Produktif SMK.


