

# Student Achievement SMK Competence Relating to Entering the World of Work Global Preparedness

(A Case Study in Vocational School in West Java)

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**Abstract**—The development of the quality of education in Indonesia at the moment still has not improved significantly. Based on the data in the country it is known that the National Examination elementary schools to high schools not reflect the real value which, if interpreted in the ability to master students are still relatively low and no significant increase. Information from the business world also appears to complaints that graduates entering the workforce do not have good job readiness. Absorption related information data and the unemployment rate obtained from BPS West Java province shows that vocational graduates have the unemployment rate the highest percentage or the number of kills nearly two million. To the authors wanted to know on student achievement of competence relating to readiness for entering the workforce Global. The method developed problems related to this research is descriptive analytical methods sampling of some of the existing vocational school in West Java, which has a membership program Power Installation Engineering. The achievement of the competency of graduating from Vocational showed good. With both these categories is the initial capital as the provision of life skills to enter the workforce. These results may contribute to education, especially regarding the implementation of the system-oriented education in the field of vocational life skills.

**Keywords**—vocational education; competence; world of work global

## I. INTRODUCTION

Vocational High School (SMK) is one institution that is responsible for creating human resources who have the ability, skill and expertise, so that graduates can develop performance when entering the world of work. Vocational education itself aims to improve the ability of students to develop themselves in line with the development of science, technology and vocational, as well as preparing students to enter the workforce and develop a professional attitude.

Data and information absorption and the unemployment rate of BPS in West Java [1] on 2012 are described in table 1.

TABLE I. POPULATION LABOR FORCE AND UNEMPLOYMENT IN WEST JAVA

Education	Work		Unemployment		Total	TPT
	(souls)	(%)	(soul)	(%)	(souls)	(%)
<= SD	8.928.460	49,14	602.054	30,58	9.530.514	6,32
SMP	3.360.773	18,50	499.600	25,37	3.860.373	12,94
SMA Umum	2.735.322	15,05	411.890	20,90	3.147.212	13,09
SMA Kejuruan	1.656.635	9,12	281.345	14,29	1.937.980	14,52
Diploma I/II/III	454.309	0,003	61.577	3,13	515.886	11,94
Universitas	1.034.153	5,69	112.540	5,71	1.146.693	9,81
Total	18.169.652	100	1.969.006	100	20.138.658	9,78

Based on table 1 shows that graduates Vocational (SMK) has the highest unemployment percentage rate is 15.52% (1.93798 million inhabitants). This event can be caused due to the reorientation of the learning process is carried out in schools has not led to life skills-oriented education. Life skills-oriented education ever launched by the government especially the Ministry of Education between 2003 to 2005 [2]. In the life skills-oriented education programs can be done in four ways [3], namely: a reorientation of learning, school culture development, educational management, and a synergistic relationship with the community. Broadly speaking, four ways can be grouped into two, the reorientation of learning and practice of education reform (school reform) which includes a school culture (school climate), school management (school management), and the relationship of the school with the community (networking).

Based on the above description, the writer wanted to know how description on the attainment of vocational graduates in West Java in entering the world of work globally?

## II. LITERATURE REVIEW

### A. Education Vocational High School

Law on National Education System article 11 paragraph (1) states that the type of education that includes education track consists of general education, vocational education, special education and educational training, religious education, academic education, and professional education. In the same article paragraph (3) explains that the Vocational Education is education preparing students to work in a particular field. In Act section 15 subsection (1) provides that secondary education was organized to continue and expand basic education and prepare students to be members of the community who have the ability to hold a reciprocal relationship with the social, cultural, and natural surroundings and can develop more skills further in the world of work and continue to pursue higher education. While paragraph (2) explains that secondary education consists of general, vocational education, special education and educational training, and religious education [4].

Based on the Law on the top of it can be explained that the vocational schools at the secondary level education is called the SMK. The Vocational High School in the execution of the Decree of the Minister of National Education [5]. The purpose of the Vocational High School (SMK) is based on Government Regulation [6], mentioned in article (2) Paragraph (1) explains that: (a) Prepare students to continue to pursue higher education and / or expand basic education, (b) Increase the ability of students as members of the community in organizing a reciprocal relationship with the social, cultural, and natural surroundings, (c) Increase the ability of students to develop themselves in line with the development of Science, Technology, and the Arts, and (d) to prepare students to enter the workforce and develop a professional attitude.

Development of Vocational stems from a variety of vocational schools in Indonesia such as: School of Technology Secondary School (STM), Secondary School of Economics (SMEA), the School of Agriculture SMA (SPMA), School of Forestry SMA (SKMA), and others, where the academic year 1999/2000 the names is transformed into a vocational school Vocational High school (SMK).

### B. Graduate Competence Standard

Competence Skills to be achieved in accordance with the demands of Graduate Competency Standards for Competency Vocational High School Skills teknik Power Installation includes three competencies, namely competency General, Vocational competence, and competence Employment [3-7]. (1) The general competency expected (a) behave according to the teachings of the religion professed; (b) develop themselves optimally; (c) shows a confident attitude and responsible; (d) participate in the enforcement of social rules; (e) respect the diversity of religion, race, ethnicity, race, and social class within the scope of the global economy; (f) developing and implementing information and knowledge in a logical, critical, creative, and innovative; (g) shows the ability of logical thinking, critical, creative, and innovative decision making; (h) ability to develop a learning culture; (i) shows a competitive attitude and sportsmanship; (j) ability to analyze and solve

complex problems; (k) ability to analyze the natural phenomena and social; (l) use the environment in a productive and responsible; (m) participate in the life of society, nation and state; (n) express themselves through arts and cultural activities; (o) to appreciate works of art and culture; (p) to produce creative work, either individually or in groups; (q) maintain the health and security of person; (r) to communicate orally and in writing; (s) to understand their rights and obligations; (t) to appreciate their differences of opinion; (u) indicates reading and writing skills; (v) demonstrate listening skills, reading, writing, and speaking in Indonesian and English; and (w) master competencies and entrepreneurial skills programs to meet the demands of the working world. (2) Vocational Competency to be accomplished include (a) the installation of lighting and power of single phase and three phase on building simple and stratified; (b) operates the electromagnetic and electronic control system; (c) perform maintenance and minor repairs of household electrical appliances; (d) maintaining dash panel for electricity; (e) understand the Competency Standards and Basic Competence (SKKD) for each Basic Competency Study (DKK) and Vocational Competence (KK). (3) Competence Field Work to be accomplished, namely (a) For jobs Industry Vendor / Author Bureau of Technical Consultants / Installers Services Bureau, and (b) For jobs User Industry / Manufacturing Industry.

### C. Indonesian National Qualifications Framework (KKNI)

Fasli Jalal told the forum national convention APTEKINDO in Bali that KKNI dapat build awareness among education providers in Indonesia to produce quality human resources in accordance with the descriptors of qualifications and became the foundation of recognition, access, collaboration of human resources in the international world and in turn awakening country education profile with comprehensive data [8]. Presidential Decree on the National Qualifications Framework Indonesia which regulates about the levels, equalization, and the application of qualified human resources in Indonesia [9].

Indonesian National Qualifications Framework (KKNI) or Indonesian Qualification Framework is a gap competence and qualifications framework to reconcile, equalize, and integrate the field of education and vocational training in the field of work experience in order to award the work in accordance with the recognition of the competence structure of employment in various sectors. Qualifications KKNI reflect learning outcomes (learning outcomes) acquired through a person (1) education, (2) training, (3) work experience, and (4) independent learning. The presence of this rule is not intended to create social stratification within the community, but interpreted as an attempt to realize the quality of the identity of the Indonesian nation associated with national education and training system in Indonesia.

KKNI consists of 9 (nine) levels of qualification, starting with level one as the lowest level up to level 9 (nine) as the highest level. From 9 levels were divided into three groups, namely: (1) levels 1 to 3 as the office of the operator, (2) the level of 4 to 6 as a group of office technician or analyst, and (3) levels of 7 to 9 in the group professional career. An overview of these groupings can describe on figure 1.

Relationship between the level of college graduates and the Job Market

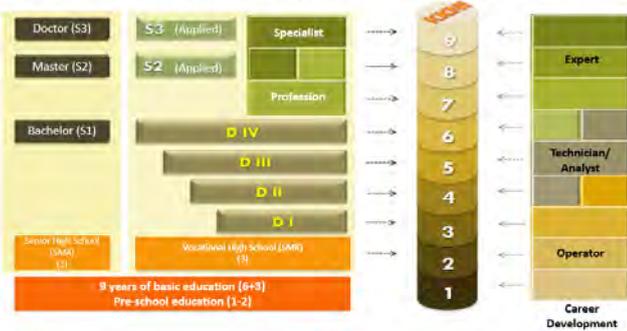


Fig. 1. Grouping positions based on the level KKNI.

Development KKNI as equalizer achievement of learning acquired through formal education, informal and non-formal competency work achieved through training outside the realm of *Kemendikbud*, work experience or career in the workplace, then schematically achieving each level or increase to a higher level can be done through four (4) tread the road (pathways) or a combination of the four. Meaning tread the path is the attainment of a person not only can be achieved only by means of through formal education, but can also be achieved with the careers of these competencies through other channels. Tread the path can be performed as illustrated in figure 2.

Tread road improvement KKNI level through various channels

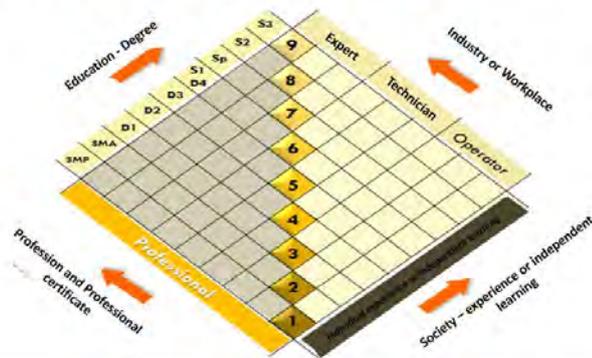


Fig. 2. Tread road improvement KKNI level through various channels.

### III. METHODS

The method used in this research is using descriptive analytical about the competency of vocational graduates who took the program Power Installation Engineering expertise. The research procedures relating to the collection of research data is performed using several methods: (1) Interview, conducted to seek answers to the formulation of a problem with the form of research instruments, which in addition to the alternative answers have been prepared but still have to give a reason or argument why the selected answer like that. (2) Questionnaire is one of the techniques of data collection is done by providing a set of questions or a written statement to answer the respondent. (3) Observations, a data collection method combined interviews with observation. (4) Documentation study is used to search for data such as notes or documents related to the learning process such as lesson plans, modules,

instructional media, enhancing the competence of public facilities, such as places of worship, the umbrella organization of student, school cooperatives, etc. other. In a block flow diagram of the research can be described in Figure 3.

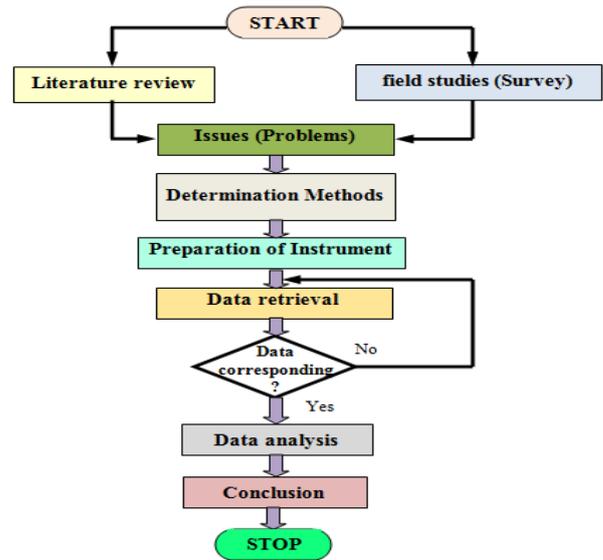


Fig. 3. Flowchart of implementation research.

### IV. RESULTS

Competency SMK to be achieved related objectives of the curriculum are conducted each competency skills program SMK Power Installation Engineering oriented life skills-based learning, can be grouped into three general competences, namely competence, competence Vocational and Employment competence. The research data was obtained from a sample of five vocational studies in the area of West Java Provincial Education Department namely Bandung area (zone 1) as sample SMKN D; Pajajaran area (zone 2) as samples SMKN T; Pantura area (zone 3) as samples SMKN E; Priangan East (Zone 4) as samples SMKN Z, and private vocational area representative Bandung area, as the sample is SMKS D.

Research data regarding the description of the competency of students in grade 3 (class XII) of each sample SMK, can be explained in table 2.

TABLE II. ACHIEVEMENT GENERAL COMPETENCY OF VOCATIONAL GRADUATES SKILLS PROGRAM TITL

SMK Sample Achievements of Competence	SMKN D	SMKN T	SMKN E	SMKN Z	SMKS D	RATA-RATA
General competence	79,02%	7,39%	2,72%	9,54%	80,37%	79,81%
Vocational competency	8,75%	3,13%	3,13%	8,75%	92,28%	85,21%
Competition Employment	5,63%	3,75%	5,00%	5,00%	81,25%	60,13%
TOTAL	75,97%	3,79%	0,48%	7,56%	82,02%	77,96%

Based on the information and descriptions third competencies of graduates above, the graph of comparative information based on the research data for the three

competencies (general competence, vocational competence, and competence of employment), which has been owned by students in grade 3 (XII) Vocational courses competency skills Mechanical Installation power for the five vocational research samples can be explained in Figure 4.

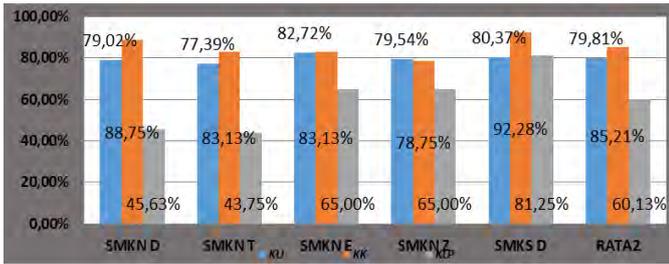


Fig. 4. Graph third comparative competence of graduates.

Based on the figure 4 above can be explained the advantages and shortcomings of each vocational samples. For general competence almost uniformly for all SMK, SMK E indicated by the highest (82.72%), and lowest SMKN T (77.39%). Vocational competence obtained the highest number SMKS D (92.28%), and the smallest SMKN Z (78.75%). While employment competency lowest number SMKN T (43.75%), and the highest SMKS D (81.25%).

Average performance graph graduates of vocational competence gained from research data can be described in Figure 5.

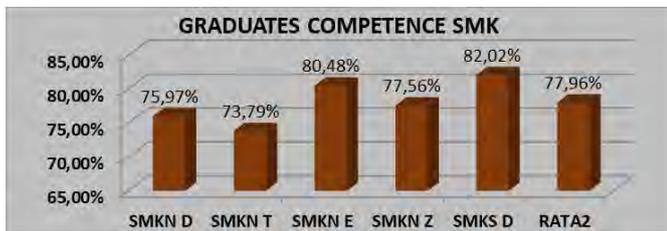


Fig. 5. Graph of the average achievement of competency of vocational graduates.

V. DISCUSSION

Achievement of average competence of graduates based on data from a study of grade 3 students (XII) SMK who have expertise competence program Mechanical Power Installation with five vocational sample in the region of West Java provincial Education Department figures showed an average of 77.96%. The achievement of the greatest figures obtained SMKS D (82.02%), dang smallest SMKN T (73.79%). Obtaining the average number of graduates of vocational competency achievement of 77.96%, an achievement that is still far from complete, especially for the target achievement of the quality of vocational education in the province of West Java. Based on the description of the performance data information the average competence of vocational school graduates were selected as sample above, it can be estimated to predict the average achievement of competency of vocational

graduates in the whole of West Java is not far from these results is even lower than that figure. Thus it seems particularly education practitioners with an interest in the management of vocational technology education must think and work harder, so that the target to be achieved in connection with the development plan and expansion of secondary technology education in Indonesia to improve the quality of human resources can be achieved with good. Expectations are that the quality of Indonesian human resources can compete in the global workplace.

VI. CONCLUSION

Competences of the students in grade 3 (XII) vocational skills competency program Power Installation Engineering in the area of West Java Provincial Education Department based on the results of research by five SMK as samples, indicating the level of achievement in the category of good and ready to enter the working world. This could showed with the level of achievement of competence of the respondents as a research subject. But there are still many things that are associated with increased achievement of these competencies include enhancement of soft skills for understanding capabilities Indonesian and English, honesty in every follow activities at school, and the most important is the need for additional insight into the world of work both in the field of services and professions, as well as in the manufacturing industry for students before graduation.

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