

FACTORS LEADING TO UNEMPLOYMENT OF VOCATIONAL SCHOOL GRADUATES: AN EXPLORATIVE STUDY

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***Abstract:** This research aims to: 1) find the determining factors of vocational high school (SMK) graduate unemployment in Bandung, 2) find the weaknesses of the vocational high school graduate related to the competence needed by the market place and industrial environment. This research is explorative research that uses mixed method research between quantitative and qualitative. The research subjects are the stakeholders of the vocational high school, the quantity of whom is determined purposive and proportionally as 270 people. The data required for this research was collected through questionnaires, documentation, interviews, and focus group discussion (FGD). Data analysis was undertaken through quantitative analysis (descriptive statistics) and qualitative analysis. The results show that (1) factors determining vocational high school graduate unemployment comprise two aspects, namely graduate competence which does not fit the requirements of the market place and limited information on employment opportunities; (2) the weakness of vocational high school graduates related to the competences required for the business and industrial world, which is a lack of English speaking ability, lack of ability to use information and communication technology (ITC). Besides this, vocational high school graduates have weak soft skills, including leadership and self-confidence.*

***Keywords:** Determining factors, Competences, and Soft-skills.*

1. INTRODUCTION

Education is believed to be a great engine in the creation of quality human resources for economic development. To support development processes, human resources resulting from the educational process need to fulfill the needs of the market place. Quisumbing in Park (2005) said that "If education is the key to development, then vocational and technical education is the key which opens the door to the work place and economy, reduces poverty, saves the environment and increases the quality of life."

Attempts to provide high quality employees who can be absorbed by the workplace through management of vocational high school education is a government priority. This is shown through government commitment to make a 70:30 scheme between

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vocational high school and senior high school. This intensive effort to manage vocational education began in the 1990s, when Mr. Wardiman Djojonegoro (1994) started a link and match program for vocational education. World Bank data also shows that Indonesia is one of countries which is particularly concerned for vocational education (Pimpa, 2007). Compared with experience of other countries, Germany has been successful in vocational education. (Hanushek, 2012). Vocational education especially internships, are designed to make sure that a worker has employment that is related to his/her expertise, which makes a company want to use him/her immediately.

West Java is the province which has the highest number of vocational high schools in Indonesia. In 2012, the number reached 1,704 vocational high schools, consisting of 203 public vocational schools and 1,501 private vocational schools. Seen from the number of pupils, until 2012, the ratio between the vocational high school and public high school is 60:40. Even so, there is still much that needs to be evaluated related to the provision of vocational high schools. This is proven by the high level of unemployment in West Java in 2012, of 9.08%. Shockingly, the level of unemployment officially published by the Central Office of Statistics (*Badan Pusat Statistik*) in 2012 showed that unemployment based on educational level was most experienced by vocational high school graduates, namely 14.24%. Meanwhile, 11.81% of public high school graduates were unemployed. This means that a paradox has occurred between expectations and reality, where government policy in vigorously promoting vocational high schools is not accompanied by the absorption into the workplace of vocational high school graduates. This is even though vocational high school graduates are supposed to be more ready to work and competitive in the world of work, as the school curriculum aims to create graduates ready to work in the field. The unemployment level from vocational high schools is also higher than for middle school graduates, namely 13.35%. In the wider scope, Chen (2009) found that in 2000, the unemployed graduates of vocational high schools was much higher than for graduates of public high schools, at 43% and 38% respectively.

In opposition to the ideal aim of managing vocational education and the principals that need to be followed, the facts in the field show that, based on various earlier research, the unemployment level of vocational high school graduates was relatively high compared to graduates of public schools. Even so, there are not many studies which explore the relationship between vocational education and unemployment. Most of the research undertaken only studies the relationship between vocational education and the work place, or societal preferences in choosing between vocational or public high schools.

Based on the above, there is a need for more research into management of vocational high schools. It is important to trace the causes of this paradox. If the cause is found, it will help policy makers to formulate appropriate policy related to running vocational high schools. To discover this, explorative research was undertaken, limited to locations in Bandung.

2. RESEARCH METHOD

This research is categorized using mixed method research between quantitative and qualitative approaches. This type of research is searching for a phenomenon, where the determining factors that will be researched are not yet clear. As a result, the research method used in this research is explorative survey.

The subject of the research comprises the working and industrial world as the users of vocational high school graduates, companies as the internship partners (PRAREKIN) of vocational high schools, graduates (alumni), whether working or not, and vocational education administrators. The total number of research subjects was determined purposively and proportionally, based on the number and distribution of vocational high schools in Bandung, whether public or private. Based on this sampling, the total number of research subjects is 270 people.

The data required for this research was collated through questionnaires, documentation, interviews and focus group discussion (FGD). There are five types of questionnaires arranged according to data expected to be completed by the research subjects (graduate users, institutions / companies as vocational high school internship partners (PRAKERIN), vocational high school graduates (alumni) whether working or not, and vocational education administrators. Documentation was used to filter data from schools and the Education Department. Interviews were used to complete / confirm data obtained through questionnaires. Focus group discussion was used to obtain more comprehensive data from the stakeholders, including, teachers, school administrators and PRAKERIN partners.

Data analysis was undertaken through quantitative analysis (descriptive statistics) and qualitative analysis. Quantitative analysis is for describing data in form of frequency distribution, tables, and diagrams. Qualitative data analysis has been undertaken by checking data validity which has been categorized and can objectively be determined as data constructions that are ready to be analyzed further (Moelong, 2003:213).

3. LITERATURE REVIEW

Vocational high schools, known in Indonesia as SMK, are education institutions which aim to produce graduates who are ready to work. It is assumed that the more of these vocational high schools there are, the work force supply will be supported into the market place. In the future, this situation is hoped to reduce the number of unemployed people and increase economic activity caused by increasing productivity levels. Many countries believe that developing vocational high schools will continuously increase national economic growth (El Hamidi, 2006). Even large countries like the USA, Germany, UK, France, Australia and Japan put their trust in vocational education. Vocational education is hoped to solve the problems of: (1) increasing the quality of human resources; (2) reducing the number of unemployed youth; (3) providing work

places for citizens; (4) reducing the burden on the academic education system; (5) attracting foreign investment; (6) guarantee increase in income and work; (7) reduction of the gap between the rich and poor; and (8) be a place for developing high quality new technology.

However, in reality, vocational education still faces many obstacles and weaknesses which must be overcome. The study by Hanusheck et al (2011) about the balance of policy between vocational education and traditional education illustrates that the vocational high school graduates were not able to adapt to the speed of technological change, thereby increasing future unemployment. Such is the case with Chen's research (2009), which explains the different outcomes of vocational education and mainstream education related to opportunities for work, pay, and access to tertiary education in Indonesia. This research found that being vocational high school graduates, with all their strengths and weaknesses, does not have affect the work opportunities or income obtained. The other finding from this research is that vocational high school graduates tend to have lower results in their final national exams, so the percentage who enter University is also low.

4. FINDINGS AND DISCUSSION

Based on the data obtained, the causes of graduate unemployment found were: 53.3% because competence does not fulfill work place requirements, 33.33% is the limited availability job vacancies for vocational high school graduates, 6.67% because the work place prefer to use Public high school graduates, and 6.67% because the number of graduates does not match the capacity of the market place. As such, the findings show that the most significant determining factor of vocational high school graduate unemployment is because of the (lack of) competence. This finding is contradictive as vocational high school graduates must undergo competence testing to obtain a certificate of competence in order to graduate.

The study process in vocational high school faces some obstacles. In implementing lessons according to the curriculum, 46.15% of respondents stated that vocational high school experiences many obstacles. The most commonly felt obstacle is the lack of school infrastructure, such as buildings, classrooms, *practicum* rooms, desks and chairs. In addition, they also face obstacles resulting from out of date *practicum* equipment. Furthermore, lessons are also obstructed by the lack of the professional teachers.

The other factor causing high graduate unemployment is a lack of job vacancies. This condition is assumed to have arisen because of a lack of synchronisation of government policy, where on one hand the government is pushing to increase the number of vocational high schools, with a target of 70:30 to increase workforce supply, but on the other hand, not enough attention is being paid to the demand side, meaning that there are not enough vacant positions in the field to absorb the vocational high school graduates. Given this condition, it is unsurprising if for many vocational high school graduates it is difficult to find a job in their field of expertise.

Based on the data obtained, it was also found that according to the graduate employers, the weakness of vocational high school graduates is their [lack of] ability to speak English, [lack of] ability to use information communications technology, and [lack of] leadership skill. The ability to speak English and use information communications technology are important competences which must be mastered in the current information and globalisation era. According to the stakeholders, there is a mismatch between the English competence taught at school with the requirements of the workplace. The English curriculum taught is the same as at public school, even though the English speaking requirements should be more specific, in accordance with their study program.

Based on data obtained from the companies and industries who are partners in the PRAKERIN internship program, the students have lack of creativity, initiative, self-confidence, leadership skill and English speaking ability. Furthermore, according to the PRAKERIN internship partners, the vocational high school pupils do not have appropriate vocational skills.

5. CONCLUSION

There are two factors determining vocational high school graduate unemployment, namely graduate competences which fail to match workplace requirements and employment opportunity information which is still limited. The cause of the mismatch in graduate competences with workplace requirements is the learning process in school and out of school (internship) which are not optimal and experience various obstacles, including limited facilities and *practicum* equipment which is out of date. PRAKERIN (internships) implemented are still limited and mentoring is not always undertaken.

The weakness of vocational high school graduates related to competence required by the corporate and industrial world is a lack of English speaking ability and information communications technology ability. Furthermore vocational high school graduates have weaknesses in their mastery of soft skills, including leadership skill and self-confidence.

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