Conference Paper

Students' Level of Understanding on Vocational Higher Education in Depok, West Java

Yulial Hikmah

Vocational Education Program, Universitas Indonesia

Abstract

This study discusses the understanding of high school students about Vocational Education. Based on the results of the distribution of questionnaires to students, about 60% of students do not understand about Vocational Education. This is one of the factors of low interest of prospective students to Vocational Program. In fact, Vocational Education is different from Academic Education. Vocational Education emphasizes on the control of work competence so that vocational graduates are workforce-ready to work, to fill both the domestic and international market. By improving community understanding, especially prospective students on Vocational Education, the prospective students can be motivated to continue to vocational education. Therefore, Vocational Education will mostly produce graduates who are ready to work with specific skills that qualify according to the industry's wishes. Thus, the absorptive power of vocational graduates will be high, resulting in reduced unemployment.

Keywords: vocational, unemployment, work

Corresponding Author:
Yulial Hikmah
yulial.hikmah@sci.ui.ac.id

Received: 8 June 2018
Accepted: 17 July 2018
Published: 8 August 2018

Publishing services provided by Knowledge E

Selection and Peer-review under the responsibility of the 2nd ICVHE Conference Committee.

1. Introduction

One of the higher education programs in Indonesia is Vocational Education. According to Law No. 12 of 2012, Vocational Education is a Higher Education diploma program that prepares students for jobs with certain applied skills to applied degree programs. According to FVPTI (Indonesian University Vocational Forum), there are several universities that established Vocational Programs, among others, UI, UGM, IPB, UB, and UNY. Participants in the Vocational Education Program in one of the universities are quite low, because prospective students still prefer academic programs or scholars and high academic program capacity.

Both Vocational and Academic Education Programs have their respective advantages and disadvantages. The results of several interviews of UI vocational students,

obtained the advantages of Vocational Education programs such as, more practical field hours than the theory, trained and equipped to form skills and special abilities in a field, the final assignment of practical work (internship) and reports, prepared for exams Certification in order to have a professional degree. In addition, there are also shortcomings of Vocational Program, among others, there are still many teachers who are academic backgrounds not practitioners, facilities for field practice is not adequate, and the cost of education is still fairly expensive.

The results of interviews of several students of Regular UI Scholarship, obtained by academic or undergraduate proficiency, such as obtaining strong theoretical depth, having deep research and analysis capability, the opportunity to participate in internal organization and external campus wider, get the opportunity of internship at institutes (company/government), Some universities require the Job Training (PKL), the final assignment in the form of thesis and graduate degree after graduation. The shortcomings of the academic program itself, among others, take a long time in college, generally take 4 years, many graduates who still bother because they do not have special skills in a field, do not have experience of field practice so much that when entering the workplace is still Need training from the company concerned, sometimes not all the material taught in the lectures are applied in the world of work.

Based on the interviews of some MA students in Depok, there are several factors why prospective students do not choose Vocational Education such as prestige, degree, status, future prospects, understanding of Vocational Education, and others. Judging from the number of devotees from one of the universities, our hypothesis is the lack of students' understanding of the difference between Vocational Education and Academic Education.

If there is an increased understanding of Vocational Education, allowing the number of enthusiasts to enter the Vocational Program more and impact on the level of increasingly fierce competition. With increasingly intense competition, vocational education can filter out more qualified prospective students. Thus, the reduced unemployment because it has been prepared and trained with a special skill that qualifies as the industry desires.

In this study only focused on the understanding of Vocational Education which provides the ability in certain fields to produce a workforce that is ready to work and skilled. Therefore, to see how much understanding of high school/vocational/vocational school students about Vocational Education, especially Depok.

2. Method

Based on the problems we studied, the method used in this research is descriptive method with quantitative approach. Masyhuri explains that descriptive research is a research that gives the best possible picture of a particular individual, state, symptom or group. Quantitative research methods described by Sugiyono are: Research methods as a method based on the philosophy of positivism; Methods used to examine a particular population or sample; Sampling techniques are usually carried out with appropriate sample technique calculations accordingly; Quantitative data collection in order to test the predefined hypothesis.

2.1. Data and data sources

2.1.1. Data

The data needed in this research are questionnaires about how big the understanding of SMA, SMK, and MA students in Depok city to education of vocational program in Indonesia. The variables measured on the understanding of vocational education include vocational definition, vocational curriculum, and competency certification.

2.1.2. Data Source

Sources of data in our study were students of class XII one of SMK and MA in Depok city.

2.2. Population and sample

2.2.1. Population

Population in this research is all student of SMA/SMK/MA in Depok City.

2.2.2. Sample

Sampling technique used is Cluster Sampling Technique. This technique is used for several reasons, including limited time research and cost limitations. Randomly selected for SMK Negeri 2 Depok and MA AL-Hamidiyah Depok as sample. This study takes the sample on all students of SMK and MA class XII where the total is 307 students.

2.3. Data collection techniques

Data collection techniques selected in this study is to use questionnaires. The questionnaire is a document that contains questions and several other forms designed in such a way as to obtain information appropriate to the purpose of the analysis (Acharya, 2010). Questionnaire is a research instrument consisting of sequential and continuous questions with each other that aims to obtain information from respondents.

In this study the questionnaire is intended to collect data about the understanding of SMK and MA students in the city of Depok to vocational education in Indonesia. The questionnaire used is a closed questionnaire, meaning the alternative answer is already provided. Respondents only chose one of the alternative answers that best fit their opinion.

1. For statements that require an answer Yes is given a score of 0

2. For statements that require no answer given a score of 1

2.4. Instrument testing techniques

Before the questionnaires used as a data collection tool, first tested the instrument. An experimental test was conducted to determine the shortcomings or weaknesses of the questionnaire that had been prepared. Arikunto revealed that "a good instrument must meet two important requirements that are valid and reliable."

2.4.1. Test reliability

Reliability is when repeated measurements/questionnaires on different respondents, different times, under different conditions, are expected by alternate measurements to produce the same result or stability of the measuring instrument on various circumstances always yielding the same results (Drost, 2010). In other words Reliability shows the consistency and stability of a score (measurement scale). Reliability leads to the accuracy and precision of a measuring instrument in a measurement procedure. Please note that the reliability tested is only a valid revelation number.

The reliable level of an instrument (questionnaire) can be used in the scoring classification below:

Interval Value *Cronbach Alpha*	Interpretation
0.800–1.000	Very High
0.600–0.799	High
0.400–0.599	Enough
0.200–0.399	Low
0.000–0.199	Very Low

2.4.2. Test validity

Validity is defined as a measure that measures several measuring devices whether the measuring instrument is said to be capable of measuring according to the research objectives. [5]. In [1] Questionnaire is said to be valid if the question contained in the questionnaire is able to reveal something that will be measured by the questionnaire. In other words, validity is a measure that indicates the level of accuracy or validity of an instrument/questionnaire. The content of the instrument/questionnaire should be able to represent the research to be measured.

Testing Criteria:

H_0 : $\rho = 0$, meaning the score of the question item correlates to the total score so that it can be said that the item is valid.

H_1: $\rho \neq 0$, meaning that the item's grain score is not correlated with the total score so it may be said the item item is invalid.

Thus, if the value of $\rho_{count} < \alpha = 0.005$, then H_0 is rejected

3. Results and Analysis

3.1. Questionnaire testing

Before the questionnaires were distributed, the questionnaire testing should be conducted, namely reliability and validity testing. This test was conducted on 60 students by providing questionnaires online. The questionnaire tested consisted of 17 statements.

3.1.1. Test Reliability

After the questionnaire was distributed to 60 respondents, the data was inputted and analyzed with the help of Microsoft Excel 2016 and IBM SPSS 21. The following is the result of testing the reliability of the measuring instrument:

Table 1: Table test reliability.

Cronbach's Alpha	Many Items (N)
0.884	17

Source: Data processing results.

It has been explained in the previous chapter, if Cronbach's alpha has a score of between 0.8 and 1, the reliability of the measuring instrument is very high or said to be very reliable. Table 1 shows that the score of Cronbach's alpha is 0.884 means that the questionnaire used is very reliable.

3.1.2. Validity test

After the reliability testing is completed and the questionnaire is considered reliable, then tested the validity of the item, that is, whether the item (statement) on the questionnaire is valid. The following is a test hypothesis:

H_0: The item–i is not correlated with what is measured ($\rho = 0$), in other words the item is invalid; $i = 1, 2, .., 17$.

H_1: The item –i correlates with what is measured (ñ ≠ 0), in other words the i-th item is valid; i = 1,2,...,17.

Used a level of significance (real level) of 5% or á = 0.05.

Further, the hypothesis H_0 is rejected or in other words the i-th item is valid if the value of $p < \alpha = 0.05$. Here is the result using IBM SPSS 21:

Table 2 shows that item 1 to item 17 has p-value < 0.05 so hypothesis H_0 is rejected or item valid. That is, seventeen statements on the questionnaire are representative enough to measure the level of students' understanding of vocational education

Table 2: Table test validity with Spearman's Rho.

		Total Variable
Total Variable	$p-$ value	0.000
Variable Q1	$p-$ value	0.014
Variable Q2	$p-$ value	0.000
Variable Q3	$p-$ value	0.000
Variable Q4	$p-$ value	0.007
Variable Q5	$p-$ value	0.018
Variable Q6	$p-$ value	0.001
Variable Q7	$p-$ value	0.000
Variable Q8	$p-$ value	0.000
Variable Q9	$p-$ value	0.000
Variable Q10	$p-$ value	0.001
Variable Q11	$p-$ value	0.000
Variable Q12	$p-$ value	0.000
Variable Q13	$p-$ value	0.000
Variable Q14	$p-$ value	0.000
Variable Q15	$p-$ value	0.000
Variable Q16	$p-$ value	0.000
Variable Q17	$p-$ value	0.000
Source: Data processing results.		

3.2. Data analysis

In the previous chapter, questionnaires have been tested and have concluded that the questionnaire is very reliable and 17 statements are valid. Therefore, the questionnaires are ready to be distributed to the target sample of 307 students from 2 schools (1 SMK and 1 MA). The following is the result of data analysis using Microsoft Excel help:

Next, a percentage calculation will be performed to estimate what percentage of students' level of non-comprehension of vocational education. Because there are 17 statements contained in the questionnaire, then obtained:

$$\text{Level of Uncertainty } (\%) = 10.3/17 \times 100\% = 60.59\%$$

Table 3: Table average value of uncertainty.

Number of Respondents	307
Total Incomprehension	3161
Average Mismatch	10.3

Source: Data processing result.

Thus, the results of the samples used obtained that 60.59% of students have not enough understanding of vocational higher education.

4. Conclusion

According to Law No. 12 of 2012, vocational education is a higher education diploma program that prepares students for jobs with certain applied skills to applied undergraduate programs.

The advantages of vocational education, such as more field practice hours than theory, are trained to form skills and special abilities in a field, the final assignment of practical work (internship) and report, prepared for certification exams in order to have a professional degree.

Lack of vocational education, including many teachers with non-practicing academic background, facilities for inadequate field practice, and the cost of education is still expensive. Some factors of prospective students do not choose Vocational Education, such as prestige, degree, status, future prospects, understanding of Vocational Education, and others.

The level of student's lack of understanding with vocational education is about 60.59%, meaning that there are still many students who do not understand Vocational Education. With increased understanding of vocational education to high school/vocational/MA students can increase enthusiasts to more vocational education so as to produce many graduates of vocational education capable and ready.

In order to increase the students' understanding of vocational education, the researcher expects the government to participate in socialization activities. For further research, can be tested comparative level of students' understanding of vocational education before and after socialization. For further research, increasing understanding of vocational education can be done to high school teachers/vocational high schools (especially BK Teachers) and the general public (especially parents) for work and lead to reduced unemployment.

References

[1] Brace,Ian,2013. *Questionnaire Design, How to plan, structure and write survey material for effective market research -3rd Edition*. India: Replika Press

[2] Peraturan Pemerintah Republik Indonesia Nomor 23 Tahun 2004 *Badan Nasional Sertifikasi Profesi.* 5 August 2004.

[3] Supranto, J. 2000. *Statistik Teori dan Aplikasi*. Jakarta: Erlangga

[4] Supriadi, Dedi. 2001. Reformasi Pendidikan dalam konteks otonomi daerah. Jakarta: Adicita Karya Nusa

[5] Thatcher, Robert W, 2010. *VALIDITY AND RELIABILITY OF QUANTITATIVE ELECTROENCEPHALOGRAPHY (qEEG)*. Published in the Journal of Neurotherapy, 14: 122152. Florida: St. Petersburg

[6] Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 *Sistem Pendidikan Nasional.* 8 July 2003. Lembaran Negara Republik Indonesia Tahun 2003 Nomor 4301. Jakarta.

[7] Undang-Undang Republik Indonesia Nomor 13 Tahun 2003 *Ketenagakerjaan*. 25 March 2003. Lembaran Negara Republik Indonesia Tahun 2003 Nomor 4279. Jakarta.

[8] Undang-Undang Republik Indonesia Nomor 12 Tahun 2012 *Pendidikan Tinggi*. 10 August 2012. Lembaran Negara Republik Indonesia Tahun 2012 Nomor 158. Jakarta.