The Workforce Participation Diploma Degree's Vocational and Higher Academic Graduation at West Java

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Abstract. This research is to find out whether or not there are differences between higher vocational education graduates and higher academic graduation graduates as university on workforce participation. This paper is comparative-quantitative based, conducting hypothesis-based experiments. The experiments were carried out upon on Higher vocational education graduates and university graduates in the West Java Province in the years 2011-2021. The method of analysis used is the SSPS with the Mann Whitney U test. Comes about conclude that there is indeed a significant difference of workforce participation between the two groups. This was shown by the Mann Whitney test, where it accumulated a score of Asymp. Sig. (2 tailed) 0000,0<0,05, meaning the hypothesis were accepted.

Keywords: workforce; vocational; academic

1 Introduction

Professional instruction is an instructive level that is organized to make graduates who are ready to enter the universe of work. Professional Instruction level could be a level that is organized to enter the universe of work right away. Not by any stretch of the imagination like scholarly schooling, in professional training to require the D4 level, for that is organized to make graduates who are ready to enter the universe of work. Professional Schooling level could be a level that is organized to enter the universe of work right away. that is organized to make graduates who are ready to enter the universe of work. Professional Instruction level could be a level that is organized to enter the universe of work right away. Not at all like academic education, in vocational education to require the D4 level, for illustration, understudies don't have to be go through the D3 level to begin with. This implies, the specialization of ponder programs at this level, it is sufficient to see within the number of understudies who think about in a program ponder., understudies don't have to be go through the D3 level to begin with. This implies, the specialization of ponder programs at this level, it is sufficient to see within the number of understudies who think about in a program ponder.to be go through the D3 level to begin with. This implies, the specialization of ponder programs at this level, it is sufficient to see within the number of understudies who think about in a program study.

It is the task of the education community to enhance the capabilities and skills of the human resources of the workforce of the younger generation of the future, be it formal or informal.

MIC 2022, November 12, Semarang, Indonesia

DOI 10.4108/eai.12-11-2022.2327314

Education is an important part, which is inseparable from the cultivation of high-quality, rigid and skilled human resources. So through vocational training as a foundation for facing globalization, they obtain qualified prospective workers to be more productive.

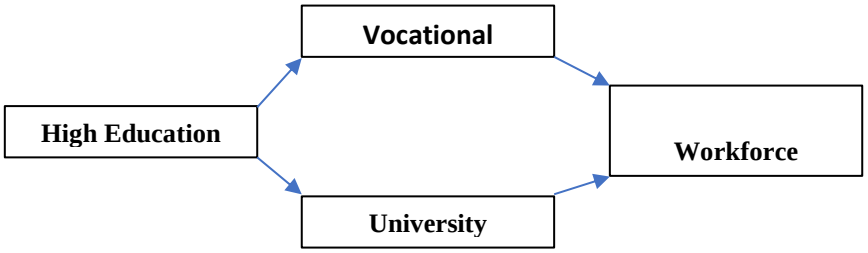
University is an educational system that leads to the mastery and development of certain fields of science, engineering, and art. If you choose University, you will get more theory than practice. The comparison between theory and practice is about 60: 40. Academic education includes programs: Undergraduate (S1), Master (S2), Doctoral (S3) education. Sanjaya (2008: 4), puts forward the conceptional curriculum into three dimensions, namely: subjects, learning experiences, and learning program planning. The curriculum dimension becomes a subject that is oriented to the content of the lesson (content oriented), and as a learning experience oriented to the learning process carried out by the students (student oriented).

In Indonesia's schooling system in light of the universe of work and industry, two instructive terms are utilized, names: professional training and college. Article 15 of Public Instruction No. 20 of 2003 specifies that professional training is auxiliary schooling, which basically plans understudies for occupations in unambiguous occupations, while professional schooling is advanced education, which gets ready understudies for occupations that require explicit applied abilities. At most after essential learning. Professional instruction is hence an execution of the pattern that conventional training depends on optional training, specifically: Professional Secondary School (SMKejuruan) inside Professional Secondary School. Professional schooling is the execution of formal training courses coordinated in colleges, for instance colleges of applied sciences, certification projects, and others. From the depiction above, it very well may be seen that professional schooling is the execution of instructive projects that are firmly connected with business. As per Sapto Kuntoro cited by Soeharsono (1989), the connection between school training level and work can be depicted as in Figure 1.

The previously mentioned conditions show that proficient guidance should have the option to fulfill the solicitations of the information society inside the time the creative economy. Through viable and effective professional training, it is trusted that it can make a future labor force that has delicate and hard expertise, decisive reasoning and problemsolving abilities confronting the universe of work in the time of globalization. Likewise, as indicated by Pavlova (2009), work schooling is a preparation program that has three interrelated parts, to be specific: (figuring out how to work), grasping the idea of work (finding out about work) and figuring out the idea of work (grasping the idea of work). what's more, figuring out the idea of work (grasping the idea of work). Generally, as indicated by Pavlova (2009), professional schooling is instruction whose fundamental design is to plan for work utilizing ability based learning techniques. The professional training model is viewed as more compelling and productive on the grounds that it has 8 The abilities of graduate understudies include: (1). impart Aptitudes, (2). Essential and Inventive Considering, (3) Information/High level training, (4) Solicitation/Thinking Aptitudes, (5) Relational Capacities, (6) Multicultural/Multilingual Instruction, (7) Issue Comprehending, (8) Mechanical Aptitudes. Skills 1 to 7 are fragile capacities capabilities while skills 8 are troublesome capacities abilities.

The effectiveness and efficiency produced will be more directed if universities collaborate with the industrial world (DUDI). Effectiveness lies in the simplicity of the proposed system, which is characterized by accuracy. Efficiency can be achieved by optimizing cooperation with DUDI and learning in a workshop or place of practice to create graduates as a future workforce that has soft and hard skills as well as the ability and ability to think critically.

Models



Source: Researcher

Fig 1. Models

2 Method

μ_1 = Vocational
μ_2 = University

Formula:

$$U_1 = n_1.n_2 + \left(\frac{n_1(n_1+1)}{2} - R_1 \right)$$

$$U_2 = n_1.n_2 + \left(\frac{n_2(n_2+1)}{2} R_2 \right)$$

Information:
U1 = U1 test statistics
U2 = U2 test statistics
R1 = number of sample rank 1
R2 = number of sample rank 2
n1 = number of samples 1
n2 = number of samples 2

Hipotesis:
H0: μ1 = μ2; There is no difference in the participation rate of vocational higher education graduates with academic higher education

H1: μ1 ≠ μ2; There are differences in the participation rate of vocational higher education graduates with academic higher education

Significant Value (α 5%)
Sig < 0.05 means that there is a difference
Sig > 0.05 means there is no difference

Analysis

Table 1. Workforce Data by Education Level

Year	Academy	University
2011	560.224	896.483
2012	481.247	1.109.631
2013	509.693	1.149.658
2014	533.065	1.261.775
2015	638.060	1.654.918
2016	759.456	1.926.966
2017	678.796	1.991.516
2018	689.843	1.987.247
2019	650.357	2.057.560
2020	694.218	2.136.423
2021	798.817	2.109.581

Source: Disnakertrans

Hypotesis Test

Ranks

	Education	N	Mean Rank	Sum of Ranks
Workforce	Vocation	11	6.00	66.00
	Academic	11	17.00	187.00
	Total	22		

Test Statistics[a]

	Workforce
Mann-Whitney U	.000
Wilcoxon W	66.000
Z	-3.973
Asymp. Sig. (2-tailed)	.000
Exact Sig. [2*(1-tailed Sig.)]	.000[b]

a. Grouping Variable: Education
b. Not corrected for ties.

Test Criteria
If Z counts ≤ - Zα/2 then H0 is rejected
If Z counts > - Zα/2 then H0 is accepted
Conclusion -3.973 ≤ -1.96 then H0 rejected, there is a difference

Test Criteria

If the value of Asymp.Sig < 0.05 then H0 is rejected it means there is a difference, Hypothesis accepted
If the value of Asymp.Sig > 0.05 then H0 is accept means no difference, hypothesis rejected
Conclusion 0.000 < 0.05

3 Discussion

In the statistical test output, the value of Asymp.Sig is known. (2-tailed) of 0.000 <0.05 it can be concluded that the "Hypothesis is accepted". Those it can be that there are differences between the results of vocational higher education graduates and university. The market potential in higher education is still very broad. Higher Education based on academics and vocational-oriented higher education will certainly produce graduates as a different workforce. This is influenced by the load of different percentages of the material. In academic higher education, the percentage of learning is 70% theory and 30% practice. While in vocational education, the opposite is 30% theory and 70% practice. So that if studied further, vocational graduates are better prepared to enter as a ready-to-use and competitive workforce in the industrial world.

In vocational education to produce graduates of the workforce who have competitiveness in the world of work must have competence. The most important level of competence is soft skills and hard skills formulated in eight levels of competence of vocational graduates. Higher education in producing graduates must have a strong curriculum structure and productive lesson strategies. This is inseparable from the appearance of educators, namely lecturers who are creative in delivering learning. Learning oriented towards achieving results must be effective and efficient. Its effectiveness lies in the simplistic system that is to the point. This efficiency must also be supported by the scope of the Business and Industrial World (DUDI) sector by optimizing cooperation. Increased collaboration with the business world and the industrial world can be established through agreements or MOUs. In addition, it can also be through the learning by doing in the teaching factory method so that it is hoped that prospective graduates will be produced who are qualified, have soft skills and hard skills with critical thinking skills and abilities to face the world of work in the current ero globalization.

4 Conclusion

In view of the result of the measurable test, the worth of Asymp.Sig is known. (2-followed) of 0.000 <0.05 then it tends to be presumed that the "Speculation is acknowledged". Hence one might say that there are contrasts between the consequences of professional advanced education graduates and college. With these distinctions, one might say that professional advanced education graduates with college influence the degree of support of the subsequent labor force.

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