ENHANCING THE COMPETITIVENESS OF INDONESIAN MANPOWER THROUGH THE IMPLEMENTATION OF "RECOGNITION OF WORK EXPERIENCE AND LEARNING OUTCOME (ReWELO)" THROUGH COMPETENCY TESTS

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Abstract

This paper aims to: 1) Find out whether the ReWELO (Recognition Of Work Experience And Learning Outcome) model can be used as a effective tool to recognize work experience and prior learning outcomes; 2) Assess the effectiveness of the implementation of the ReWELO model through competency tests; 3) Find out whether the ReWELO model able to improve the competitiveness of Indonesian Manpower. The ReWELO model can be implemented via two methods, competency tests and portfolio assessment. This paper only discuss the implementation of the ReWELO model through competency tests. The subject of the trial implementation of the ReWELO model through competency tests is 18 students with Electrical Engineering area of expertise from 18 Public and Private Vocational High School in Yogyakarta. Instruments used in this trial are questionnaires, observation sheets, and documentation. The validity of the instrument was tested through expert judgment and reliability was tested through Cronbach's Alpha. The collected data were analyzed descriptively. Results from the trial are: 1) Implementation of the "ReWELO" model through competency tests can be used effectively to provide recognition of work experience and prior learning outcomes; 2) Of the 18 participants, participants of trial implementation who passed and received a certificate of competency were 12 participants (67%); 3) The ReWELO model can be used to improve the competitiveness of Indonesian Manpower.

Keywords: work experience, prior learning outcomes, ReWELO, competitiveness, Indonesian Manpower

1. Introduction

Recognition of Prior Learning (RPL) is the actual issues in the global world. This is demonstrated by the agreement of the countries which are members of the Organization for Economic Co-operation and Development (OECD) to ratify the RPL [13]. Each country may use different terminology, but actually refer to the same thing. In Malaysia, RPL is called Accreditation of Prior Experiential Learning (APEL). In the United States, RPL is called Prior Learning Assessment (PLA). In England, Scotland and Ireland, RPL is called Accreditation of Prior Learning (APL). In Canada, the terminology Prior Learning Assessment and Recognition (PLAR) is used. While in Indonesia RPL is referred to as Recognition of Work Experience and Learning Outcome (ReWELO) or in the Indonesian Language "Pengakuan Pengalaman Kerja dan Hasil Belajar (PPKHB)". In Indonesia, ReWELO is a process of recognition of work experience and learning outcomes of a person either gained through experience in the workplace or gained through formal, informal or non-formal education.

As part of the international community, Indonesia has ratified several conventions related to RPL, i.e. GATS (General Agreement on Trade and Services) on April 5, 1994, the WTO (World Trade Organization) on January 1, 1995, AFTA (Asean Free Trade Area) in 1992, and the Recognition of Studies, Diplomas and Degrees in Higher Education in Asia and the Pacific on January 30, 2008. Indonesia also became a member of APEC (Asia Pacific Economic Community), which one of its agreements is the liberalization of trade and investment by 2010 for developed countries and by 2020 for developing countries. In addition, Indonesia has also ratified AFLA (Asian Free Labor Agreement) and AEC (ASEAN Economic Community) which provides opportunities for flow in and out of manpower from one member country to others member countries

Ratification has been done by Indonesia at various conventions clearly puts Indonesia as a country that is more open and easily accessible

by workers or human resources from other countries. Ratification is also slowly but surely would shift the regulatory protection for Indonesian manpowers. That is, Indonesia can't prohibit foreign workers who already have a certain competency certificates to work in Indonesia. On the contrary, Indonesian workers won't be able to work abroad or even in their own country if they do not have the required competence and qualifications of the labor market. A worker can no longer rely solely on a diploma without having a specific competence to get a job.

Examined from educational background, Indonesian workers who work abroad dominated by graduates of elementary and secondary schools, the percentage of primary school graduates is 31.36%, while the percentage of junior high school graduates is 37.4%, a total of almost 70% of Indonesian workers who work abroad have only primary education. These conditions will cause many problems, i.e. in the eyes of the international employer, Indonesian worker are considered to have a low quality. This assumption also caused many cases where Indonesian workers were treated unfairly due to their low bargaining position. Meanwhile, there are Indonesian workers with educational background above primary education and have a good competence, but their competence is not recognized by the destination country because they do not have a certificate of competence which is recognized internationally, and have no adequate foreign language skills to explain their competence. The implementation of ReWELO Model as one way to recognize work experience and prior learning outcomes is expected to be able to increase the competitiveness of Indonesian workers in labor competition arena. This paper will examine the implementation of Model ReWELO through competency test to achieve the above goal.

2. Method

Phases of the implementation of ReWELO model through competency tests are shown in Figure 1. As shown in the figure, firstly the candidate signed up for a competency test, in this case to Profession Certification Institute "Gema PDKB". If all requirements are met, then the candidate took a competency test includes a written test, a practice test, and a affective test. Once the interview is finished, then assessors conducted deliberations on the results of the competency test. Candidates who can reach the total grade (theory, practical and affective test results) of 70 or better, passed the competency test and entitled to a certificate of competency. Candidates who have not achieved a score of 70, was declared not competent, but they are given the opportunity to take a competency test again.

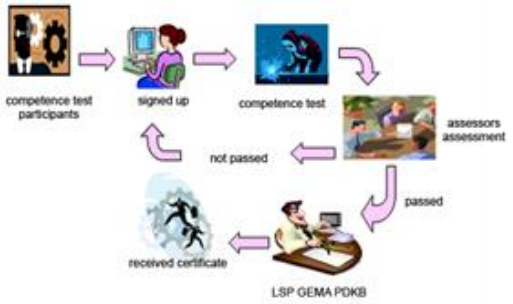

Figure 1. Implementation of ReWELO model through competence test

On the trial implementation, competence test assessors consisted of three people from LSP Gema PDKB, colleges, and instructors from the Training Center of Technical Education (BLPT) Yogyakarta. The subjects of the trial or the candidates were 18 students from public and private vocational school in Yogyakarta.

Instruments used in this trial are a test and a observation sheet. Based on expert judgment, it was concluded that the Competency Test Methods Completion instrument is valid. Instrument reliability test was performed using a Intraclass Correlation Coefficient (ICC) test. The data then was calculated by using SPSS, the results can be seen in Table 1and Table 2

Intraclass Correlation Coefficient test results.

	Intraclass Correlation	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.835	.704	.931	31.458	14	70	.000
Average Measures	.968	.935	.988	31.458	14	70	.000

Reliability of the Competency Test Methods Completion instrument

Case Processing Summary				**Reliability Statistics**	
		N	%	Cronbach's Alpha	.968
Cases	Valid	15	100.0	N of Items	6
	Excluded[a]	0	.0		
	Total	15	100.0		

Table 2 shows that the reliability value obtained using Cronbach Alpha formula was 0.968, which means that the instrument has a very high reliability. Furthermore, the value of inter-rater ICC was also satisfactory with the calculation result of 0.835 means that inter-rater assessment of six assessors have a high consistency.

3. Results

The trial implementation results showed how many candidates were able to pass or declared competent in the competency test. Candidates passed the competency test if it reaches a minimum grade of 70. Table 3 shows the achievement of the candidates in participating the ReWELO model implementation through competency test.

Competence test results

Candidates No	NP	NA	NK	Competence test grade	Final Result
1	89	80	74	82.7	C
2	38	80	38	46.4	NC
3	83	80	67	77.6	C
4	61	80	61	64.8	NC
5	83	80	68	77.9	C
6	86	86	66	80	C
7	95	95	75	89	C
8	72	83	72	74.2	C
9	86	85	57	77.1	C
10	52	80	52	57.6	NC
11	94	94	74	88	C
12	60	80	60	64	NC
13	65	80	65	68	NC
14	89	89	60	80.3	C
15	92	92	72	86	C
16	47	80	47	53.6	NC
17	74	80	74	75.2	C
18	71	80	71	72.8	C

Based on the results of the competency test above, of the 18 candidates, there were 12 (67%) candidates whose grades above 70, so they were declared COMPETENT (C) and entitled to a certificate of competency from LSP PDKB Region IX Yogyakarta. While 6 (33%) candidates whose grades below 70 were stated NOT COMPETENT (NC) and not entitled to a certificate of competency. Figure 2 illustrates the percentage of candidates achievement in competency test.

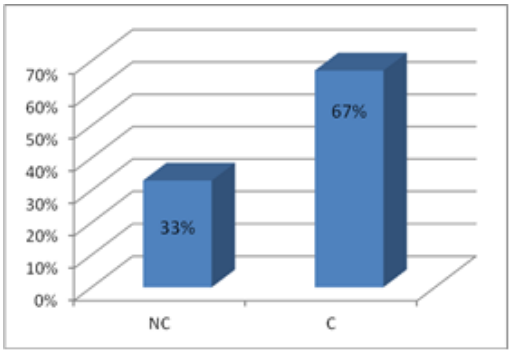

Figure 2. The percentage of candidates achievement

4. Discussion

Competency tests conducted on this trial implementation covers three areas, namely the assessments of cognitive abilities implemented through theory tests, affective assessment through work attitude assessments, and psychomotor assessments carried out through practical tests. The results of these competency tests are displayed on histograms below.

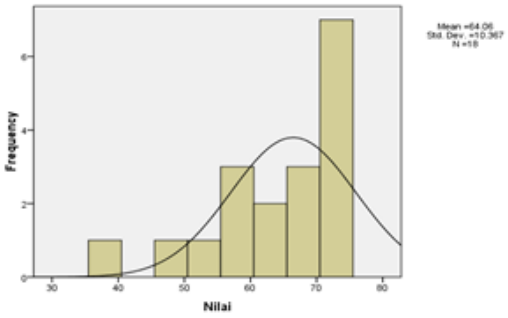

Figure 3. The results of theory tests

Figure 3 shows that the theory test results tend to skew to the left. This means that theory test results from most candidates are below the threshold for competent criteria of 70. This was confirmed by the test results average of 64.06 which is also below the threshold of competent criteria. Based on theory test results, only 7 of 18 participants are qualified for competent category (grades 70 or better), while test results of 11 participants are less than 70.

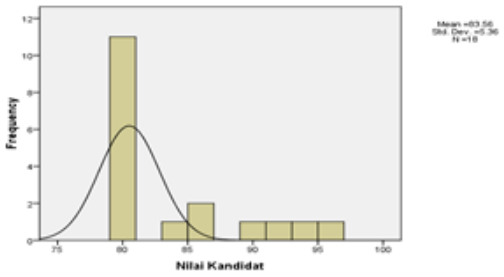

Figure 4. The results of work attitude assessments

Figure 4 shows that the work attitude assessments results tends to skew to the right. This means that the test results from most of the candidates are above the threshold for competent criteria of 70. It is supported by the fact that the test results average of 83.56 which is also above the threshold. Based on the results of the work attitude assessments, it can be stated that all 18 candidates are competent. This is logical because all participants of the competency test is the best students in their respective schools, so it is natural that their attitudes and behavior are polite, disciplined, and meet the requirements of K3 (Keselamatan dan Kesehatan Kerja or Occupational Health and Safety)

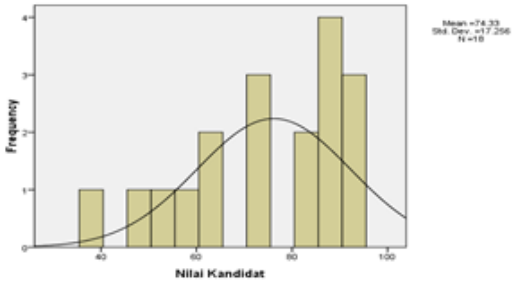

Figure 5. The results of practical tests

Figure 5 shows that the results of the practical tests tended to have normal distribution. This means that there are several candidates who scored high, some scored mediocre, and some scored low. Psychomotor assessment results obtained from practical tests show that the test results average is 74.33 which is above the threshold for competent criteria of 70. This means that most of the candidates are declared competent. Of the 18 candidates, 12 candidates (67%) are declared competent in psychomotor aspect, while 6 candidates (33%) are declared not competent.

5. Summary

Based on the results of the competency test above, of the 18 candidates, there were 12 (67%) candidates whose grades above 70, so they were declared COMPETENT (C) and entitled to a certificate of competency from LSP PDKB Region IX Yogyakarta. While 6 (33%) candidates whose grades below 70 were stated NOT COMPETENT (NC) and not entitled to a certificate of competency

The above results indicate ReWELO model implementation through competence tests can be considered effective in which more than 50% of candidates passed the competency test and entitled to a certificate of competency of Gema PDKB LSP. Certificates of competence is expected to improve the competitiveness of Indonesian workers, especially in the Electrical Engineering area of expertise.

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