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Trainees' Perception of Virtual Learning Skills in Setting up the Simulator Welding Technology

Authors: Mohd Afif Md Nasir, Mohd Faizal Amin Nur, Jamaluddin Hasim, Abd Samad Hasan Basari, Mohd Halim Sahelan Abstract: This study is aimed to investigate the suitability of Computer-Based Training (CBT) as one of the approaches in skills competency development at the Centre of Instructor and Advanced Skills Training (CIAST) Shah Alam Selangor and National Youth Skills Institute (NYSI) Pagoh Muar Johor. This study has also examined the perception among trainees toward Virtual Learning Environment (VLE) as to realize the development of skills in Welding Technology. The significance of the study is to create a computer-based skills development approach in welding technology among new trainees in CIAST and IKBN as well as to cultivate the element of general skills among them. This study is also important in elevating the number of individual knowledge workers (K-Workers) working in manufacturing industry in order to achieve the national vision which is to be an industrial nation in the year 2020. The design is a survey of research which using questionnaires as the instruments and is conducted towards 136 trainees from CIAST and IKBN. Data from the questionnaires is proceeding in a Statistical Package for Social Science (SPSS) in order to find the frequency, mean and chi-square testing. The findings of the study show the welding technology skills have developed in the trainees as a result of the application of the Virtual Reality simulator at a high level (mean=3.90) and the respondents agreed the skills could be embedded through the application of the Virtual Reality simulator (78.01%). The Study also found that there is a significant difference between trainee skill characteristics through the application of the Virtual Reality simulator (p<0.05). Thereby, the Virtual Reality simulator is suitable to be used in the development of welding skills among trainees through the skills training institute.

Keywords: computer-based training, virtual learning environment, welding technology, virtual reality simulator, virtual learning environment

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