

## Employability Skills Mastery of Special Needs Students at Polytechnics

**Puteh, S.<sup>1\*</sup>, Maisarah, M.<sup>1</sup> and Rosnawati, B.<sup>2</sup>**

<sup>1</sup>*Department of Engineering Education, Faculty of Technical and Vocational Education, Tun Hussein Onn University, 86400 Parit Raja, Batu Pahat, Johor, Malaysia*

<sup>2</sup>*Faculty of Civil and Environmental Engineering Tun Hussein Onn University, 86400 Parit Raja, Batu Pahat, Johor, Malaysia*

### ABSTRACT

This study attempts to examine the employability skills of students with special needs. Employability skills are related to soft skills and hard skills. The respondents were 81 impaired students in four polytechnics (Politeknik Sultan Salahuddin Abdul Aziz Shah (PSA), Politeknik Ibrahim Sultan (PIS), Politeknik Ungku Omar (PUO) and Politeknik Kota Kinabalu (PKK)). The aim of this study is to identify the extent of implementation and control employability skills among special needs students in polytechnics as well as to recommend improvements to the quality of TVET graduates. Data were analysed using the Statistical Package for the Social Sciences (SPSS) version 20.0 to calculate and process the descriptive and inferential statistical findings. Mean scores for all three problems were high implementation employability skills (soft skills=3.70 and hard skills=3.86). The mean score for employability skills competency mastery of special needs students in polytechnics was 3.89, while the correlation between employability skills and mastery of skills competency was 0.776 (r), showing a relationship between application of employability skills and mastery of employability skills of special need students in polytechnic. The results showed that the activities that contribute to improved employability skills of students with special needs should be intensified to help them compete in the job market and contribute to national development.

**Keywords:** Employability skills, hard skills, special needs students, soft skills

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*E-mail addresses:*

saifull@uthm.edu.my (Puteh, S.),  
msrhmshr@yahoo.com (Maisarah, M.),  
rosna@uthm.edu.my (Rosnawati, B.)

\* Corresponding author

### INTRODUCTION

Special education in Malaysia has now been applied at all levels of education such as early childhood education, primary

school, secondary school and higher education. Students under special education programmes can learn something new for the benefit of their future through special education programmes. Special education in polytechnics under the Ministry of Education Malaysia (MOE) established a Special Education Programme in October 1995 for students with special needs for a particular programme in five polytechnics in Malaysia.

## Background

In Malaysia through *Pekeliling Bilangan 16 Tahun 2010*, privileges were granted to the disabled i.e. 1% of jobs in the civil service are set aside for them (Jabatan Perkhidmatan Awam, 2015). This policy ensures that disabled people who have academic and skills qualification suitable for positions in the civil service will be considered for employment. According to Halim, Ab. Rahim, Ramlah and Abdullah (2013), the percentage of job opportunities given to disabled people is too small to accommodate the many disabled people who are eager to be independent and get their own job. Students with disabilities are vulnerable and their families face many challenges, especially in the crucial transition period between education and employment. The problems faced by disabled people in Malaysia are similar to those faced by disabled people in other countries, especially the United States of America. The main difference between developed countries and Malaysia in provisions for the disabled is

that developed countries are able to provide better facilities and training for the disabled (Zinaida, 2006).

Students who are hearing impaired face difficulty mastering knowledge and skills because their abilities are deficient and they find it hard to adapt to a new environment (Mohd. Tahir & Mustafa, 2009). The problem of growing numbers of unemployed graduates is indeed a serious problem. Statistics show that institutions of higher education, especially universities, cannot accommodate the demand of employers. One reason for this is that graduates do not seem able to satisfy employers' needs, making employability skills a competency that institutions of higher education must take into consideration (Madar, 2008). Some employers tend to think that disabled employees would be burdensome and would create problems (Lindsay et al., 2014). For instance they might cause delays in completing work or fail to meet the quality and standard of work set by the organisation. This situation calls for research to identify how far implementation and employability proficiency among students with special needs in polytechnics can improve their employability skills as well as to recommend improvements to the quality of TVET graduates in order to transform technical and vocational education.

## METHODOLOGY

This study was designed as survey research that used a questionnaire. Wiersma (2000) stated that surveys can provide an overview

of a situation as well as details relevant to a particular period and describe plans for the future. The questionnaire was used as the main research tool for this study as it enabled clear construction of the soft and hard skills of students with special needs. In addition, it allowed the data collected to be easily processed and analysed.

### **Population and Sample**

Eighty-one students with special needs from four polytechnics, Politeknik Sultan Salahuddin Abdul Aziz Shah (PSA), Politeknik Ibrahim Sultan (PIS), Politeknik Ungku Omar (PUO) and Politeknik Kota Kinabalu (PKK), were surveyed. The population was identified first to determine the research problem to be reviewed as well as the data and information to be collected (Abdul Ghaffar, 1999). From the population identified, 81 students were chosen. Another 30 students had been chosen earlier for a pilot test.

### **Research Instrument**

According to Abdul Ghaffar (2000), the questionnaire as a research instrument can improve accuracy and truth of response of the subject to given questions. The instrument for this study, a questionnaire, was designed based on the objectives, issues and theoretical framework of the study. The questionnaire was divided into four sections: Section A was on respondent demography, Section B was on soft skills and hard skills, Section C was on employability

competency of special needs students in polytechnics and Section D was on employability improvement focussed on employability skills needed to achieve a high level of employability.

Four experts in technical and vocational education validated the questionnaire for use in this research. Several improvements in content and language were made based on comments and suggestions from the experts. The pilot test yielded a Cronbach Alpha value of 0.946. According to Abdul Ghafar (2001), Cronbach's Alpha is a coefficient or validity level that shows the relationship between research items.

Section A of the questionnaire consisted of nominal data collected through response to a set of questions. Sections B, C and D a 5-point Likert scale representing the following ranking: 'Strongly agree', 'Agree', 'Uncertain', 'Disagree' and 'Strongly disagree'. Based on the frequency distribution and percentage of min, the appropriate descriptive analysis was made. The mean score identified the extent of implementation and mastery of the employability skills of polytechnic students with special needs needed to achieve high employability.

## **RESULTS**

A total of 81 respondents were involved in this research, of whom 35 were male (43.21%), while 46 were female (56.79%). Students from the Department of Visual Communication and Design obtained a high score of 25 (30.86%). The highest percentage

was 49.38%, obtained by students from the Department of Design and Visual Communication, which offered two courses, Special Skills Certificate in Fashion and Clothing and Special Skills Certificate in Graphic Design. Students from the Special Skills Certificate Construction programme under the Department of Civil Engineering, numbering 13 persons, obtained a score of 5.16%. The lowest percentage, 7.41%, was obtained by students enrolled in the Special Skills Certificate in Mechanical Maintenance programme offered by the

Department of Mechanical Engineering. There were only six students pursuing this certificate programme.

Table 1 shows the correlation coefficient for the pair of variables, employability skills and mastery of skills competency. The coefficient for employability was high, between 0.776 and 1, while the Pearson coefficient ( $r$ ) was 0.776, at the significant level of 0.00. Therefore, the two variables had positive and high 0.776 correlation (Cohen, 1988).

**Table 1**  
*Pearson correlation analysis between the application of employability skills and mastery of skills competency for employability*

Relation		Skills	Competency	Interpretation
Application of employability skills	Pearson Correlation Sig. (two-tailed)	1	0.776**	Strong
Mastery of employability skills	Pearson Correlation Sig. (two-tailed)	0.776** 0.000	0.000 1	

Table 2 shows the improvement in employability skills of the special needs students, describing the items, number and percentage of the respondents based on their opinions and views. Competence in mastery of employability skills among the special needs students yielded an average mean score of 4.03 ( $SD=0.332$ ). This shows that

improvement to the employability skills of the students is urgently needed. The mean score for Item 10 (D10) was high, at 4.32 ( $SD=0.609$ ). Table 2 also shows that the mean score was lower by 3.37 ( $SD=0.660$ ) for Item D7 (employability skills outside the classroom).

**Table 1**  
*Frequency analysis, percentage, mean, average and the overall mean for items to increase performance for employability*

Item		Mean	Standard deviation	Interpretation
D1	Improvement to access to facilities is adequate	4.19	0.760	High
D2	Improvement to infrastructure	3.89	0.806	High
D3	Improvement to curriculum development	3.91	0.809	High
D4	Additional training in employability skills improvement	4.14	0.685	High
D5	Improvement of teaching aids for relevance	4.16	0.715	High
D6	Improvement – Exposure to employability skills is more effective during learning and teaching	3.91	0.616	High
D7	Improvement – Exposure to employability skills outside the classroom (Co-curricular activities)	3.37	0.660	High
D8	Improvement through expert assistance in employability skills in the relevant field	4.17	0.648	High
D9	Improvement to reference materials and price	4.27	0.652	High
D10	Improvement award per achievement for students	4.32	0.609	High
Overall Mean Score		4.03	0.332	High

## DISCUSSION

The study found that the majority of the students agreed that improvements were needed, such as the introduction of a rewards system for student achievement. Students who possessed high self-esteem usually obtained good results in school because they already had a sense of direction for the future, had many friends and were close to both parents (Masiron, 2010). This shows that students can improve if they are rewarded for doing well. One way to reward them would be to introduce a Dean's list for excellent students. The lowest mean score for improvements was for employability skills outside the classroom (extra-curricular activities). This is because many students think extra-curricular activities are not

important and just a waste of time as they are not assessed (Bahari, 2002). This aspect needs improvement as co-curricular activities complement and complete one's education, ensuring one is able to contribute meaningfully to national development (Mohd Sofian et al., 2002).

## CONCLUSION

The correlation between application and mastery of students with special needs is high and encouraging. These students have the potential to be good employees. However, some improvements are needed to enhance their skills in terms of employability in order to correct the perception of students with special needs held by employers.

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