

Acquisition of Employability Skills in Technical Vocational Education: Necessity for the 21st Century Workforce

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Abstract: Technical Vocational Education (TVE) institutions graduate students yearly, as the number of TVE graduates increases significantly the unemployment rate among youths increases in many countries, especially in the developing countries. Therefore, there is the need for TVE graduates to acquire employability skills in order for them to be gainfully employed to be able to fit into the 21st century workforce. This paper highlights on the concepts of TVE and employability. The paper discusses on the needs of the employers (industries) for the 21st century workforce and the importance of acquisition of employability skills in TVE institutions. The paper concludes that employability skills should be given greater emphasis in TVE by ensuring that employability skills are integrated into the curriculum of TVE institutions to ensure that TVE graduates acquire such skills to be able to fit into the 21st century workforce.

Key words: Employability Skills, Technical Vocational Education, Globalization, 21st Century Workforce.

INTRODUCTION

Employability skill is referred to as the skill required to secure and retain a job and recent usage of the term is often used to describe the training or foundation skills upon which a person must develop job-specific skills. Employability skills are those essential skills necessary for acquiring, keeping and performing well on a job Robinson (Shafie & Nayan, 2010). Such skills include; managing resources, communication and interpersonal skills, team work and problem-solving and acquiring and maintaining a job. Generally, employability skills are required by students to prepare themselves to meet the needs of various occupations after graduation. Employers today are worried about getting good workers who not only have basic academic skills like reading, writing, science, mathematics, oral communication and listening, but also higher order thinking skills like learning, reasoning, thinking creatively, decision making and problem solving (Shafie & Nayan, 2010)

According to Robinson, *et al.*, (2007) there is a great demand for educated people with general employability and specialized technical skills. Workers in the 21st century need skills such as problem-solving and analytic, decision-making, organization and time management, risk-taking, and communication to be employable in the workforce.

Technical Vocational Education Defined:

Technical Vocational Education (TVE) is defined as that type of education which fits the individual for gainful employment in recognized career as semi-skilled workers or technicians or sub-professionals (Oni, 2007). According to Maclean & Wilson (2009) TVE is concerned with the acquisition of skills and knowledge for employment and sustainable livelihood. TVE is that aspect of education that exposes the learner to the acquisition of demonstrable skills that could be transformed into economic benefits (Akerle, 2007). It is a planned program of courses and learning experiences that begins with exploration of career options, supports basic academic and life skills, and enables achievement of high academic standards, leadership, preparation for industry-defined work, and advanced and continuing education (Maclean & Wilson, 2009).

The primary objective of all TVE programs is the acquisition of skills and attitudes for gainful employment in a specific occupation or professional area. The need to link training in TVE to employment either self or paid employment is at the base of all the best practices and approaches observed throughout the world especially in the 21st century. One of the most significant aspects of TVE is its inclination towards the world of work and the emphasis of the curriculum on the acquisition of employable skills. TVE delivery systems are therefore; well placed to train the skilled workforces that the nation needs to create employment for the youth in order for them to become productive and contribute to the development of their society and the nation at large.

Conceptual Definition of Employability Skills:

Employability skills may be broadly defined as the basic academic, personal and teamwork skills that employers expect from their workers, which are expected to be developed by the educational system. According to Munro (2007) employability skills involve the ability to contribute to work efficiency in an organization combined with good oral and written communication skills and critical thinking, which form the foundation of both academic and workplace success. Bennett (2006) argued that employability skills include not only the attributes that are desired from prospective employees but also the basic requirements an individual needs to be considered for employment. These skills are required to perform a task efficiently and to contribute to the growth of an organization.

Employability skills are group of skills which help in supporting the ability of an individual to perform effectively in the workplace. It is non-technical skills and sometimes called 'transferable skills' or 'soft skills' or 'generic skills'. The employability skills consists of basic skills, thinking skills, resource skills, information skills, interpersonal skills, system and technology skills and personal qualities (Clarke, 2007). Employability skills are those basic skills necessary for getting, keeping and doing well on a job. Zinser (2003) stated that employability skills include areas such as managing resources, communication and interpersonal skills, team work and problem-solving and acquiring and retaining a job. Employability skills are those essential skills necessary for getting, keeping, and doing well on a job. These are the skills, attitudes and actions that enable workers to get along with their fellow workers and supervisors and to make sound, critical decisions. Unlike occupational or technical skills, employability skills are generic in nature rather than job specific and cut across all industry types, business sizes, and job levels from the entry-level worker to the senior-most position. (Robinson & Garton, 2008).

Overtom (2000) defined employability skills as transferable core skill groups that represent essential functional and enabling knowledge, skills, and attitudes required in the 21st century to function effectively on the job. Overtom suggested that employability skills are necessary for success in the job market regardless of the employee's chosen career path, employment level, or educational background. Employability skill is a group of important skills instilled in each individual in order to produce productive workforce Overtom (Kazilan, *et al.*, 2009). This is parallel with individuals who have strong characteristics such as a high sense of self-innovative, productive, skilful, and competitive, a strong sense of determination, and creative in facing the challenges of the nation as well as globalization in the 21st century. Besides that, employability skill is also crucial in all professions as well as in education. Employability skills are skills that apply across a variety of jobs and life contexts. They are sometimes referred to as key skills, core skills, life skills, essential skills, key competencies, necessary skills, and transferable skills.

Workers in the 21st century need skills such as problem-solving and analytic, decision-making, organization and time management, risk-taking, and communication (Lynch, 2000; Robinson, *et al.*, 2007; Slusher *et al.*, 2010) to be employable in the workforce. Lynch (2000:7) posited there is a tremendous need to determine what types of skill sets are demanded of TVE graduates by industry because there is a general consensus that occupational preparation should begin sometime in high school.

Issues on Employability Skills:

In the working environment, technical skills are referred to as the procedure, technique or methods of carry out specialized or practical tasks that can be easily measured and quantified. The training of such skills in TVE graduates is easier in contrast to employability skills, which are normally referred to as core skills, generic skills or nontechnical skills. These skills are not easily taught in schools although they are highly important for the 21st century workforce (Shakir, 2009). These skills can be grouped into three (3) main categories such as interpersonal skills, problem solving and decision making skills. Technical skills and employability skills complement each other. Similarly Spencer & Spencer (Ali, *et al.*, 2012) stated that superior performers possess both specialized technical skills and generic employability skills.

In the world of work technical skills are 'hard skills' related to an organization or industry. For instance machine operation, computer protocols, safety standards to mention but a few. In the 21st century workforce employability skill is very important (Pulko & Samir, 2003). Employability skills complement the technical skills in order to fulfil a vital role of shaping individuals life (Schulz, 2008). Employability skills are skills that are supposed to be acquired by everybody in the industry. Industrial employers agreed that employability skill is crucial for their employees to be outstanding in their chosen occupation (Soo & Jumma'ayah, 2001). According to Ramlee (2002) some graduates of TVE usually master their technical skills but employers normally feel dissatisfied of their employees when it comes to employability skills because they lacked motivational skills, communication skills, interpersonal skills, critical thinking, and problem solving and entrepreneurship skill. Syed Hussain (Ali, *et al.*, 2012) expressed that TVE graduates could not fulfil the needs and requirements of the employers because TVE curriculum is designed to prepare the graduates with basic knowledge and the practical skills acquisition, but the TVE graduates lack the skills and experience required by the employers (industries) in order to meet up with the demand of the 21st century workforce. Mohamed & Mohd (2005) stated

in their study that TVE graduates perception on the relevance of the content of their course with employability skills was low which they felt the content of course did not instil enough employability skills to them. According to Shere & Eadie (Kathleen, 2005) employability skills are not job specific, but are skills which cut across all industries and all jobs from entry level to the top management level.

Employers Requirement for the 21st Century Workforce:

In the present 21st century TVE graduates are not only being evaluated based on their qualification or certificate, but their personality plays an important part in determining whether they will be employed. According to Branine (2008) the selection of TVE graduates varies from one employer to another and depends on the type of job being offered. Usually, employers select graduates from face to face interviews and tests, but to look at their skills as well, an employer actively uses other methods such as telephone interviews, assessment centers and online testing to evaluate their skills. Many employers test in telephone interviews to recognize the communication skills of their candidates and the online testing is to measure the computer technology skills of their candidates. The level of graduates' skills will lead to their being employed.

Phani-Ram Challa (2007) stated that generally the required skills applicable to any field of work, according to employer's perspective is the personal traits of the employee. The skills include courtesy, honesty, flexibility, eye contact, self-direction, personal energy, good attitude, positive work ethic and the desire to learn and be trained. All the listed skills are the skills that develop to form an employee's inner self that represents themselves. This attributes enhances employees' chances of being employed in any organization. According to Quek (2005) in dealing with the success skills, graduates need to transfer the learning from the classroom to the workplace for fulfilling work demands. As employers make recruitment decision, it will be a tough challenge to select qualified candidates that meet with the current criteria because the future of organizations depend on the recruitment and selection of the best candidates. The changes that take place in the world of graduate employment have far-reaching effects on the careers which graduates pursue.

Therefore, as the number TVE graduates increases significantly, the unemployment rate among youths increases in many countries especially in the developing countries. Robinson (2000) reveals that employers find it difficult to recruit potential workers who have employability or job readiness skills that enable them to fit and remain in the organization. Both technical skills and people skills (employability skills) play significant roles in employment. Technical skills are the skills needed to perform specific tasks, whereas employability skills or people skills are the skills needed to become employed, to remain in employment and to progress in a chosen career. A person with technical skills may not be employed because he or she lacks employability or people skills. Likewise, a person with only employability skills or people skills may find it difficult to obtain a job because he or she does not know how to perform the job correctly. Thus, potential employees need both types of skills to compete for, obtain and maintain employment (Omar, *et al.*, 2012).

However, individual's knowledge and skills are continuously changing as a result of globalization and the job market demand. Graduates may perceive that they possess the knowledge and skills required by employers, while employers actually look at different things. In this competitive era, career changes are due to globalization and this automatically changes what skills graduates need to fulfil the needs of employers. In global competition, new skills set are creating the need for organizations that can respond rapidly to market demands. The skills may include interpersonal skills, technology skills and communication skills. It is impossible that the skills required nowadays remain the same because of globalization. Employers are concerned about this matter, as they need a graduate that has the required skills in order to face the changing demand in the market place (Mohd Saleh, *et al.*, 2010).

The globalization process, knowledge economy advances in technology has changed the international situation to where human resources now serve as the important role of boosting the development and infrastructure of a country (Mohd Saleh, *et al.*, 2010). Moreover, globalization is creating numerous opportunities for sharing knowledge, technology, social value, and behavioral norms and promoting development at different levels including employee and organizations across different countries and cultures (Cheng, 2004:8). The trend of globalization has led to the different demand in employee skills in order to be able to meet with the needs of the 21st century workforce.

Employees with generic skills set and knowledge will benefit from integration into the 21st century workforce, while those who lack skills and knowledge are destined to fall further behind. Many researchers emphasize the importance of employability skills that employers value, rather than focusing heavily on intellectual skills (Dench, 1997; Hunt & Baruch, 2003; Nabi, 2003). What matters, is that graduates must compete with changes in order to prepare themselves for the current requirements of the 21st century workforce. On the other hand, employers need to prepare the organization to ensure that graduate meet their needs in order to face the challenges in the working environment. Furthermore, employers are no longer interested in hiring graduates who have only specific or specialized skills, but lack other relevant skills, especially the employability skills. In order to achieve the goal of the organization, employee skills become assets that are valuable as capital and are acquired throughout a lifetime. In today's economy, chances to qualify for a good job and benefit from it

depend upon the knowledge and skills graduates have and build on over time. Thus, graduates must be able to apply skills and knowledge in the workplace environment because both knowledge and skills required are diverse from time to time. When environment, technology and markets demand change, it automatically changes the workers' knowledge and skills requirements. Organizations need highly trained employees with academic, technical, and social skills to meet the demands of ever-changing technology, global competition, and increasing social diversity (Zinser, 2003:403).

Organizations expect a high level of ability and thinking from graduates in performing tasks in the workplace. Together with the investment, organizations only select graduates that demonstrate knowledge and skills to join them. Organizations not only require hard or technical skills but also employability skills. One of the employability skills organizations required in selecting employees is interpersonal skills. Hence, interpersonal skill is the skill required in competing for today's workforce because the workers know how to represent the organization. Furthermore, they know how to work with the skills to do the negotiation, interactions, and communications for the organizations. According to Barker (2002) interpersonal skills are the most important skills for the 21st century workplace. Alongside with interpersonal skills, communication skills are also being a concern to employers, especially English language. In the current workforce, English language is highly demanded by employers as to carry out daily routines Kaijag (Mohd Saleh, *et al.*, 2010). English is seen as an important skill today because work environments are dealing with global business and require English language as the main communication medium. Poor level of English proficiency may lead to communication problems and it automatically will affect the organization's transactions.

Another skill perceived as important is the technology skills. The skills in technology seem to be highly demanded in this current situation as it impacts positively on employment. As technology continues to change, it has been a current trend of incorporating technologies into the workplace (Kuo, *et al.*, 2010:25). The usage of current and updated technology leads to the changes that effect to the work environment. By that, employees with the technology skills are required in today's job market since they are valuable in understanding the importance of technology usage.

Employability Skills in Technical Vocational Education Institutions:

Employability skills must be emphasized in TVE institutions because these skills can accelerate employment among youths and school leavers. Without these skills, youths can be considered handicapped in competing for employment. Kwok (2004) investigated the different effects of various skill requirements with the assumption that employability skills were separate from the actual work contexts in which they are learned and developed. Kwok found out that the competitiveness of individuals in the labor market depends not only on their vocational competence but also on whether these individuals have employability competences that they can continue to expand. Employability competence must be developed to the extent that an individual can find a suitable job and can acclimatize to social, technological and organizational changes (Burgaz, 2008).

Students should acquire employability skills while they are at TVE institutions or in school. The skills can be learned through classroom instruction, in the field or outside the classroom. These skills are abstract in nature and a long time is required to train students to fully acquire employability skills. According to Knight & Yorke (Omar, *eta'l.*, 2012) employability skills, or 'generic skills, include the achievement, understanding and personal attributes that make an individual willing to work, develop a career and be successful in their employment choices. Based on the factors that contribute to employment, employability skills should be redefined to include both generic skills and technical skills. It may be difficult to become employed with only employability skills; likewise, employers may hesitate to employ individuals who know how to perform a task but may not be able to contribute to the development of the organization.

Conclusion:

Technical vocational education institutions must make a greater effort to help students acquire the employability skills required by many organizations. The development of employability skills should be integrated into the curriculum to ensure that students graduate from these institutions with the skills needed by employers. If institutions do not attempt to integrate the development of these skills, they may end up graduating students who cannot fit into the 21st century workforce, thereby becoming unemployed in the society.

Therefore, TVE institutions must find ways to ensure that their graduates are well equipped with the needed skills required for employment in the 21st century. Different countries in the world especially the developing countries need high-skilled workers to propel the country toward a high-income society, but these high-skilled workers need employability skills. Jobs change rapidly and workers must be able to adapt to these changes if they are to contribute to the economic development of the country in the present 21st century.

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REFERENCES

- Akerele, W.O., 2007. Management of Technical and Vocational Education in Nigeria: The Challenges of the country. *Lagos Journal of Educational Administration and Planning*, 3(1): 11-21.
- Ali, F.A., Y. Long, F.A. Zainol, & M. Mansor, 2012. *Student's Self-Perceived Importance of Employability Skills Needed: A Case Study in University of Sultan Zainal Abidin (Unisza), Malaysia*. Proceedings of the 2nd International Conference on Management. Held Between 11th - 12th June at Langkawi Kedah, Malaysia.
- Barker, S.A., 2002. Utilizing Cross-Cultural Curricula to Improve Interpersonal Job Skills Training. *Journal of European Industrial Training*: 26(1): 38-52.
- Bennett, T.M., 2006. *Defining the Importance of Employability Skills in Career/Technical Education*. Dissertation ProQuest Information and Learning Company.
- Branine, M., 2008. Graduate Recruitment and Selection in the UK. *Career Development International*: 13(6): 497-513.
- Burgaz, B., 2008. Employability Competences of Vocational Secondary School Students. *Eurasian Journal of Education Research*, 31: 17-34.
- Cheng, Y.C., 2004. Fostering Local Knowledge and Human Development in Globalization of Education. *The International Journal of Education Management*: 18(1): 7-24.
- Clarke, J., 2007. *Employability Skills and the Financial Services Training Package*. Australia; Department of Education Science and Training.
- Dench, S., 1997. Changing Skill Needs: What Makes People Employable?. *Industrial and Commercial Training*: 29(6): 190-193.
- Hunt, J.W. & Y. Baruch, 2003. Developing Top Managers: The Impact of Interpersonal Skills Training. *Journal of Management Development*: 22(8): 729-752.
- Kathleen, C., 2005. *Developing Employability Skills*. Regional Educational Laboratory. School Improvement Research Series (SIRS).
- Kazilan, F., R. Hamzah and A.R. Bakar, 2009. Employability Skills Among the Students of Technical and Vocational Training Centers in Malaysia. *European Journal of Social Sciences*: 9(1): 147-160.
- Kuo, T.H., L.A. Ho, C. Lin, & K.K. Lai, 2010. Employee Empowerment in a Technology Advanced Work Environment. *Industrial Management & Data Systems*: 110(1): 24-42.
- Kwok, M., 2004. *Towards an Understanding of Employability Skills Development Among University Graduates for Workplace Entry*. Manitoba: The University of Manitoba.
- Lynch, R.L., 2000. High School Career and Technical Education for the First Decade of the 21st Century. *Journal of Vocational Education Research*, 25(2): 1-20.
- Maclean, R. and D. Wilson, (Eds.). 2009. *International Handbook of Education for the Changing World of Work: Bridging Academic and Vocational Learning*. Dordrecht: Springer Science and Business Media.
- Mohamed, R. & R. Mohd, 2005. *The Year 2004 Polytechnic Convocation Survey*. Proceedings of National Seminar "The development of Technology and Technical-Vocational Education and Training in an Era of Globalization: Trend and Issues". Kuala Lumpur; Malaysia.
- Mohd Salleh, K., N.L. Sulaiman & K.N. Talib, 2010. *Globalization's Impact on Soft Skills Demand in the Malaysian Workforce and Organizations: What Makes Graduates Employable?* Proceedings of the 1st UPI International Conference on Technical and Vocational Education and Training. Held Between 10-11 November, at Bandung, Indonesia
- Munro, J., 2007. Fostering Internationally Referenced Vocational Knowledge: A Challenge for International Curricula. *Journal of Research in International Education*: 6: 67-93.
- Nabi, G.R., 2003. Graduate Employment and Underemployment: Opportunity for Skill use and Career Experiences Amongst Recent Business Graduates. *Education and Training*, 45(7): 371-382.
- Omar, M.K., A.R. Bakar & A. Mat Rashid, 2012. Employability Skill Acquisition Among Malaysian Community College Students. *Journal of Social Sciences*, 8(3): 472-478.
- Oni, C.S., 2007. Globalization and Its Implications for Vocational Education in Nigeria. *Essays in Education*: 21(1): 30-34.
- Overtom, C., 2000. *Employability skills: An Update*. (Report No. EDO-CE-00-220). Columbus, OH: Center on Education and Training for Employment. (ERIC Document Reproduction Service No. 220).

- Phani- Ram Challa S S J., 2007. How to improve your soft skills at work. Retrieved February, 23th 2013, from: <http://www.rediff.com/getahead/2007/jan/09soft.htm>
- Pulko, S.H. & S. Parikh, 2003. Teaching 'Soft' Skills to Engineers. *International Journal of Electrical Engineering Education*: 23(3): 331-337
- Quek, A.H., 2005. Learning for the Workplace: A Case Study in Graduate Employees' Generic Competencies. *Journal of Workplace Learning*, 17(4): 231-242.
- Ramlee, 2002. *The Role of Vocational and Technical Education in the Industrialization of Malaysia as Perceived by Educators and Employers*. Doctoral Dissertation. Purdue University.
- Robinson, J.P., 2000. *What are employability skills?* The Workplace Series from the Alabama Cooperative Extension Service. Retrieved February, 21st 2013, from <http://www.aces.edu/crd/workforce/publications/employability-skills>
- Robinson, J.S., B.L. Garton and P.R. Vaughn, 2007. Becoming Employable: A Look at Graduates' and Supervisors' Perceptions of the Skills Needed for Employability. *North American Colleges and Teachers of Agriculture (NACTA) Journal.*, 51(2): 19-26.
- Robinson, J.S. & B.L. Garton, 2008. An Assessment of the Employability Skills Needed by Graduates of the College of Agriculture, Food and Natural Resources at the University of Missouri. *Journal of Agricultural Education*: 49(4): 96-105.
- Schulz, B., 2008. The Importance of Soft Skills: Education Beyond Academic Knowledge. *Nawa Journal of Communication*: 2(1): 146-154.
- Shafie, L.A. & S. Nayan, 2010. Employability Awareness Among Malaysian Undergraduates. *International Journal of Business and Management*: 5(8): 119-123.
- Shakir, R., 2009. Soft Skills at the Malaysian Institutes of Higher Learning. *Asia Pacific Education Review*: 10(3): 309-315.
- Slusher, W.L., J.S. Robinson and M.C. Edwards, 2010. Animal Science Experts' Opinions on the Non-technical Skills Secondary Agricultural Education Graduates Need for Employment in the Animal Science Industry: A Delphi Study *Journal of Career and Technical Education*: 25(1): 8-20.
- Soo, W.L. & S. Jumma'ayah, 2001. *Industrial Relations and Vocational Education: Issues and Strategies*. A Paper Presented the Seminar on Technical Vocational Education. Universiti Putra Serdang Selangor Malaysia.
- Zinser, R., 2003. Developing Career and Employability Skills: A US Case Study. *Education and Training*: 45(7): 402-410.