

# The inculcation of generic skills among juveniles through Technical and Vocational Education

*Wan Azlinda Wan-Mohamed, Mohamed Hafis Yunus*

*(Faculty of Technical Education, University Tun Hussein Onn Malaysia, Johor 86400, Malaysia)*

**Abstract:** Generic skills are skills which contribute towards individual's effective and successful participation in the workplace. For juveniles, Technical and Vocational Education (TVE) is one of the platforms that provide them generic skills which enable them to compete for job market. The purpose of this study is to investigate the level of generic skills that has been inculcated through TVE on juveniles in one of the juvenile schools in Malaysia, the time the teachers spent on inculcating the skills, and the challenges the instructors face in the process. There are four focuses of the generic skills that are of interest in this study: communication, teamwork, problem solving and technology. Eight teachers and 119 juveniles were chosen as the respondents from the Juvenile School (JS). The data collected was through a set of questionnaires from the respondents, and these were analyzed by using frequency, percentage and mean score. The findings from this research show that the level of generic skills inculcated as perceived by the juveniles is at a moderate level. The perceived moderate level of skill acquire of the juveniles is justified by the moderate amount of time that the teachers believed they spend in instilling the generic skills. The teachers also suggested that the lack of understanding on what generic skills are is the main reason for not inculcating generic skills at its highest level. In conclusion, generic skills inculcation on juveniles through TVE in Juvenile School is at an average level. Measures have to be taken so that inculcation of generic skills can be increase to a higher level, as these generic skills will benefit juveniles in the labor force market.

**Key words:** generic skills; juvenile; Technical and Vocational Education

## 1. Introduction

Rapid changes in the industrial sectors such as in the field of technology, manufacturing, marketing and information technology, has contributed towards a competitive borderless world. Consequently, the industrial sector will require dynamic and versatile workers to face up to the challenges of workplace of today. Workers not only require having high technical skills but also need to master generic skills to complement the current industrial needs.

Department of Education, Science and Training, Australia (2006) described generic skills as non-technical skills, which play a significant part in contributing to individual's effective and successful participation in the workplace. Australia Chamber of Commerce and Industry (ACCI) and Business Council of Australia (BCA) (2002) defined generic skills as not only skills necessary to acquire employment, but also skills needed to achieve

---

Wan Azlinda Wan-Mohamed, Ph.D., senior lecturer, Faculty of Technical Education, University Tun Hussein Onn Malaysia; research fields: technical and vocational education, training and development.

Mohamed Hafis Yunus, Master, Faculty of Technical Education, University Tun Hussein Onn Malaysia; research field: Technical and Vocational Education.

one's potential and contribute successfully within ones endeavor. Thus, generic skills are transferable skills where skills learned in one workplace can be utilized in another workplace. Eight generic skills are identified by Australian Chambers of Commerce and Industry, and Business Commerce of Australia (2002), to be included in the employability skills framework. The skills are communication, teamwork, problem solving, initiative and enterprise, self-management, learning and technology.

The term generic skill is widely used to describe a range of quality and capacity that are increasingly viewed as important in educational institutions all over the world. One of the reasons is the increasing evidence of demand from business and employer organization for graduates to have generic skills (Hager, Holland & Beckett, 2002). Thus, Malaysia's educational institutions, regardless of whether it is primary or secondary schools, training centers or universities, it should inculcate generic skills into students so that they are equipped to compete in the current and future competitive workforce market.

Juveniles in rehabilitation centres which are also training centres should also be equipped with these generic skills. *Prison Act 1995* defined juvenile or young offender as a prisoner who is under the age of 21 years old. *Child Act 2001* defined a child as "a person under the age of 18 and below" and the age of criminal responsibility at age of ten. Thus, from the legal point of view, the definition of juveniles can be a group of adolescent under the age of 21 who has the criminal responsibility at the age of ten.

In this study, we are focusing on the rehabilitation of juveniles under the jurisdiction of the Department of Social Welfare of Malaysia (DSWM). There are two treatment models that are used by DSWM today: treatment within the community and institutional treatment. Treatment within the community is the type of rehabilitation that is commonly used in Malaysia. In community rehabilitation, the DSWM officers, the juveniles, their families and community work together in helping the juveniles rehabilitate. They will only be separated from their families and enrolled in rehabilitation hostels if they are having problems with their family. Community members are encouraged to get involved in the process of rehabilitating these juveniles by giving them jobs, and training.

If community treatment fails, the juveniles will have to be institutionalized. There are two types of institutional rehabilitation: Advance Approve School and Approve School. The Advance Approve Schools such as Henry Gurney School are operated by the Prison Department, while Approve Schools such as Sekolah Tunas Bakti that are operated by DSWM. Admission into these schools is according to laws and regulations that have been laid by the authorities:

- (1) Children under the age of ten years old cannot be enrolled into an Approve School.
- (2) Children under the age of ten years old cannot be enrolled into rehabilitation hostels.
- (3) Juveniles under the age of 14 cannot be enrolled into Henry Gurney School.

The two institutions share a common objective, which is to rehabilitate juveniles and prepare them for the community and society.

One of the methods of preparing juveniles is through technical and vocational education and training. Technical and vocational education is important in preparing juveniles with skills required for jobs and vocation, and also to improve other skills. A study in Australia (Callan & Gardner, 2005)) finds that juveniles in Australia believed that Technical and Vocational Education can improve self-confidence and help them to obtain jobs in different fields.

## 2. Purpose of study

The purpose of this study is to investigate the level of generic skills that has been inculcated through technical and vocational education on juveniles in Juvenile School (JS) and to examine the challenges the teachers face in the process. Three research questions are formulated to help in this study.

(1) What is the level of generic skill that has been acquired by the juveniles as perceived by the juveniles?

(2) How often did the instructors instill the generic skill (communication, teamwork, problem solving and technology) through technical and vocational education among the teachers?

(3) What are the challenges faced by teachers in the process of inculcation of generic skills among juveniles?

This study would like to examine if Technical and Vocational Education (TVE) programs in JS can be a tool in inculcating generic skills, which are essential for juveniles to compete within the community for jobs when they release from juvenile institution.

### 3. Methodology

This is a descriptive study on the inculcation of generic skills among juveniles through technical and vocational education. The sample for this study are teachers and juveniles from a Juvenile School located in central state of Malaysia that is currently teaching and undergoing vocational programs respectively there. The sample consists of 120 juveniles from the age of 10 to 21 years old and ten teachers.

Two sets of questionnaires, one for the juveniles and the other for the teachers, are used as an instrument for this study. Both sets of questionnaires contain questions on demography of the respondent and on generic skills that is acquired by the juveniles through technical and vocational education. Four generic skills were study: communication skills, teamwork skills, problem solving skills and technology skills. The teacher’s questionnaire contain an extra question where there have to mark from the list given the challenges they faced during the process of inculcation of generic skills among juveniles.

Due to security constraint, the researchers are not permitted to administer the questionnaire personally. Consequently, the questionnaires are administered by the counselor in charge. From 120 sets of questionnaires that have been distributed to juveniles and teachers, 119 or 99.2 % were collected from the juveniles and 8 or 80% from the teachers.

Responses gathered through the questionnaires were analyzed quantitatively using descriptive statistics such as mean, percentage and frequency. The level of generic skills inculcated, for instance, is calculated using the mean and are then categorized into three levels. Table 1 shows how the level of generic skills is categorized according to range of mean scored.

**Table 1 The range of mean scored and the associated level of generic skills and level of time spent in inculcating the generic skill**

Mean range	Level of generic skills	Amount of time spent in instilling the generic skill
1.00-2.33	Low	Low
2.34-3.67	Moderate	Moderate
3.68-5.00	High	Adequate

### 4. Research findings and discussion

The study shows an interesting insight on the inculcation of generic skills among juveniles. The juveniles perceived that TVE has helped them in achieving a moderate level of teamwork skills (mean=3.62),

problem-solving skills (mean=3.52), communication skills (mean=3.45) and technology skills (mean=3.32). Figure 1 shows the perceived level of skills acquired by the juveniles on generic skills investigated in this study.

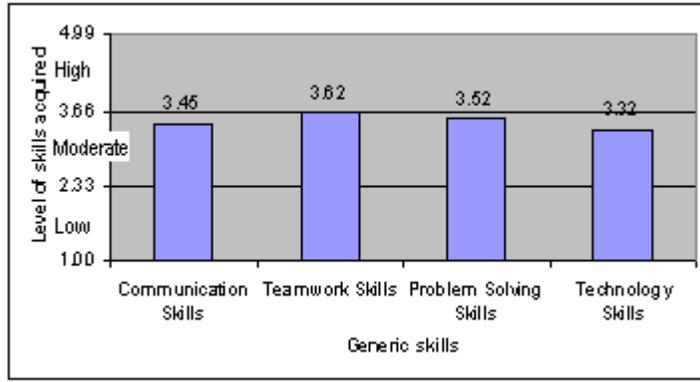


Figure 1 Perceived level of skills acquired by the juveniles on generic skills

The perceived moderate level of skill acquire by the juveniles is justified by the amount of time the teachers believed they spend in instilling the generic skills. The teachers felt that they spent a moderate amount of time in instilling teamwork skills (mean=2.93), technology skills (mean=2.60) and problem-solving skills (mean=2.45), and low amount of time in instilling communication skills (mean=2.28). Figure 2 shows the perceived amount of time spent by the teachers to instill generic skills among the juveniles through Technical and Vocational Education (TVE).

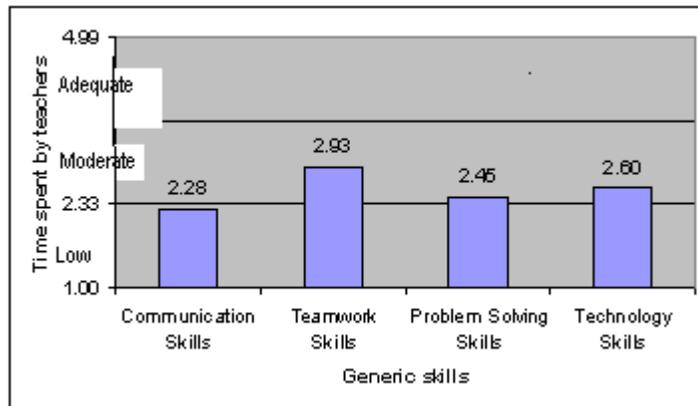


Figure 2 Amount of time spent by teachers to instill the generic skills

It is interesting to compare how the juveniles felt on their competency of the generic skills and how much time the teachers felt they spend in inculcating them. On the whole, the juveniles felt that after undergoing TVE, program they have achieved a moderate level of generic skills, teamwork skills being the highest level, followed by problem solving skills, communication skills and technology skills. The juveniles perceived that skills are actually at the high end of the moderate level. As for the teachers, they only spent a moderate amount of time instilling the skills. According to the study conducted, time spent was mostly on instilling teamwork skills, followed by technology skills, problem solving skills, and lastly communications skills was quite low.

It is worth to note that teamwork skills are listed top on both the juveniles list and the teachers list. Findings from Yahya (2004) listed teamwork skill as the most important generic skill perceived by teachers of agriculture

vocational education. In another study conducted by the Arizona Department of Juvenile Correction (2006) found that 85 percent of workers in the Arizona Department of Juvenile Corrections (ADJC) thought that working in groups is the most important method in completing a task. Because vocational programs in JS such welding and wiring require them to complete the task in groups, so it is not surprising that this is the skill that the students felt that they are best equipped with and the teachers also felt that they have spent time to instill.

Another skill that is worthy of taking a look at is technology skills. Teachers felt that they have spent a high-moderate amount of time in inculcating the skills, but the students perceived themselves as having a low-moderate level of skill in the area. The students are just not confident enough to feel very comfortable in the technology skill. However for the communication skills, although teachers felt that they spent just a low amount of time in inculcating it, the student perceived their level of communication skills at the high end of the moderate level. The authors felt that this is because communication skills are being used and practiced at all times with the juveniles. For example, when the juveniles need something from the institution or the teachers or even among themselves, they need to communicate their intentions to the party concern other in writing or orally and in a manner which both party can understand.

This is the same with problem solving skills. Although the teachers felt that only spent in the low end of the moderate amount of time, the students felt that they are quite comfortable with their skill in problem-solving. This is because everyday there is something that needs them to solve problems whether it is academically or personally.

Besides technical and vocational program, students in JS also follow other programs such as religious education, academics program and sports. Thus, other important generic skills that are not inculcated through vocational programs can also be inculcated through these programs.

Challenges teachers faced during the process of inculcation of generic skills to the juveniles are listed on Table 2. It is quite interesting to note that lack of knowledge on what generic skills is, the importance of it, and how to implement generic skills in the curriculum are the main challenges for the teachers in inculcating the generic skills among juveniles. The findings is similar to findings from Yahya’s study (2004), which shows that teachers from agriculture vocational education “did not have a clear understanding on employability skills”, thus, making it a challenge for them to inculcate the employability skills to agriculture vocational education students if they themselves do not understand what it is.

**Table 2 Challenges faced by teachers in inculcating generic skills**

Challenges	Percentage (frequency)
(1) Do not have a clear understanding what generic skills	75% (6)
(2) The curriculum content does not emphasize on generic skills thus making it difficult for them to inculcate generic skills	62.5% (5)
(3) They did not know about the importance of generic skills	62.5% (5)
(4) They have no exposure on generic skills and how to instill them	62.5% (5)
(5) There are no guidelines in inculcating generic skills	62.5% (5)
(6) There is no generic skills elements in the programs that they teach	50% (4)
(7) No instructions from the department or authorities for them to inculcate generic skills	50% (4)
(8) Time constraint	50% (4)

Another research by Yahya, Zakaria and Meor (2006) listed 10 problems faced by teachers in inculcating employability skills. The problems listed is ranked from the highest to the lowest are as follows: (1) no specific content in the curriculum on employability skill; (2) no instructions from the authorities to inculcate employability

skill; (3) curriculum content does not emphasis on employability skills; (4) no proper syllabus for the inculcation of employability skills; (5) did not know the importance of employability skills; (6) no proper guidance in inculcating employability skills; (7) time constrain to inculcating employability skills; (8) no clear understanding on employability skills; (9) no exposure on employability skills; (10) no exams on employability skills. This result is similar to the study conducted which shows that teachers from different institutions have similar opinions about the challenges they face in inculcating generic skills.

Technical and vocational education is one of the methods used in inculcating generic skills among juveniles which is important to the world of works. Findings from by O' Rourke and Satterfield (2005) discovered that a juvenile correction centre in Georgia, United States of America has managed to improve 117 juveniles: 90 are able to get employment in Georgia; 13 entered technical colleges; 2 obtained high school diplomas; and 122 went back to their previous school.

## 5. Conclusion

In conclusion, generic skills inculcation on juveniles at JS through technical and vocational education (TVE) is at an average level. Students perceived that their level of generic skills is at a moderate level after undergoing TVE and teachers felt that they only spent a moderate amount of time inculcating generic skills through TVE. Although generic skill is recognized by different name depending upon which countries on the continent they are, such as soft skills, employability skills, core skills, essential skills, etc., the skill is very important skills either for personal consumption or work place. It is especially important that generic skills to be cultivated among the juveniles, because they are youngster who has been institutionalized, and need to develop skills that can be used when they are out of the institution and back to the labour force market. Measures have to be taken so that inculcation of generic skills can be increase to a higher level, as these generic skills will benefit juveniles in the labor force market. Technical and vocational education can be a vehicle to inculcate these generic skills in the juvenile institutions.

### References:

- American Society for Horticultural Science. (2007). *Teamwork improves learning and career success*. Science Daily.
- Arizona Department of Juvenile Corrections. (2006). *R & D news: ADJC research & development*. (Unpublished)
- Australian Chamber of Commerce and Industry & Business Council of Australia. (2002). *Employability skills for the future*. Report commissioned by the Department of Education, Science and Training.
- Azizi Yahaya, Yow Kiaw Geok & Amir Hamzah Abdul. (2003). *Keberkesanan program pemulihan akhlak di sekolah Henry Gurney Tunas Bakti*. Johor: Universiti Teknologi Malaysia.
- Callan, V. & Gardner, J. (2005). *Vocational education and training provision and recidivism in Queensland correctional institutions*. Australia: National Centre for Vocational Education Research, Ltd.
- Department of Education, Science and Training. (2006). *Employability skills, from framework to practice, an introductory guide for trainers and assessors*. Canberra.
- Hager, P., Holland, S. & Bexkett, D. (2002). *Enhancing the learning and eEmployability of graduates: The role of generic skills*. Business/Higher Education Round Table (A Position Paper).
- O'Rourke, T. & Satterfield, C. E. (2005). Think exit at entry. *The Journal of Correctional Education*, 56(2).
- Yahya Buntat. (2004). Kemahiran "employability" (soft skills) dan kepentingan penerapannya di kolej-kolej kediaman pelajar. Kuala Lumpur: *National Student Development Conference -NASDEC*.

(Edited by Max and Lily)