



Career Readiness Among Vocational Graduates: Implication of Competency Based Learning

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Abstract

This study aims to investigate career readiness among graduates of vocational colleges in Malaysia. Past research shows that graduates from technical and vocational institutions faced problems in choosing a career. In Malaysia, competency based learning adopted by vocational colleges to create opportunities for student personalized their own learning regardless of time, place and pace of learning. This ex post facto research design is intended to identify the level of career readiness of vocational college graduates, and to examine the effect of the CBL approaches implemented in vocational colleges on graduates' level of career readiness. The total of 330 graduates from fifteen vocational colleges in Malaysia were randomly selected as respondents in this study. Finding shows that the graduate career readiness is at lower level whereas the one-way ANOVA analysis shows that the CBL approaches do not have a significant effect on the level of career readiness among vocational college graduates.

Keywords: Technical and vocational education and training (TVET); Vocational students; Vocational college's graduates; Choosing a career; Learning approach; Preparing student for career readiness.



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1. Introduction

Many research findings concluded students of TVET institutions often face problems in choosing a career (Ebenehi *et al.*, 2016; Lapan, 2004; Mansor and Rashid, 2013; Rashid *et al.*, 2009; Rashid, 2010;2011; Saari and Rashid, 2013; Savikas and Porfeli, 2011). These problems include the inability to decide, lack of exposure and information relating to career, uncertainty in career choices, inability to plan their career as well as inability to solve career problems. Among causes of these problems that occur are closely related to the lack of readiness in making career choices among the TVET students (Mansor and Rashid, 2013).

Furthermore, with the changes and demands in the Industry Revolution 4.0, students need to be empower not only by transfer the knowledge they expect but also with skills asking the right questions or thinking analytically and critically. The current employment market is more competitive as the economic structure changes from one based on natural resources to a knowledge-based economy or stated by Drucker (1992;1999) that increasing the productivity of knowledge workers are more crucial economic resource than land, labor, or financial assets to compete and survive in the 21st century.

In response to this issue, vocational colleges in Malaysia adopt competency-based learning (CBL) to enhance both of the student and program offered. CBL emphasis on principle of almost all students can learn equally well if they receive the kind of strategy, method and technique of instruction or teaching that suit with them. CBL create opportunities for student personalized their own learning regardless of time, place and pace of learning. It also increases quality of instructional delivery and assessment of a program offered. In other words, CBL will ensure vocational graduates possess the knowledge and skills that are deemed to be essential to success in workplace, life after school and career. If students in vocational college fail to meet expected curriculum standards, with this CBL approaches, they will receive additional instruction, practice time and support to help them achieve expected standards.

2. Competency Based Learning in Vocational Colleges

Malaysia was upgraded 80 vocational schools into vocational colleges since 2012. This move is being done under the vocational transformation program to strengthen technical and vocational education. These vocational colleges will provides graduates with diploma qualifications with revised and upgraded curriculum contents rather than offer vocational education as a stream at secondary school. CBL that introduced in vocational colleges in Malaysia was based on learning module which guide by curriculum standard of vocational college. Based on the provided module, each student is required to mastery him/herself in each task that assigned in the module before proceed to the next task.

Entwistle (2003), offered conceptual framework in achieving quality of learning through both student's and teacher's roles in the teaching and learning process considering subject content as well the learning environment. For students, they need to ensure their prior knowledge, abilities, attitude and behaviours in learning and perceiving the learning environment. Meanwhile, for teachers, they should consider the design of the intended learning outcome,

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teaching materials, methods and creating exciting learning environment for students. [Sturgis \(2015\)](#) describes five elements that need to be put into place in implementing competency based learning as follows: students advance upon demonstrated mastery; competencies include explicit, measurable, transferable learning objectives that empower students; assessment is meaningful and a positive learning experience for students; students receive timely, differentiated support based on their individual learning needs; and learning outcomes emphasize competencies that include application and creation of knowledge, along with the development of important skills and dispositions.

[Sturgis \(2015\)](#), stated that implementing competency based learning able to engage, motivate and teach all students to proficiency and mastery towards deeper learning and meaningful assessments for learning. In competency based, learning is constant and time is the variable since there is different individual requires different total amount of time to mastery different content cause by a number of reasons. For instance, a student may have different approaches to learning, with some students preferring to take more time upfront to dive more deeply into learning to master new skills or content however, other not needs. All of these differences lead to students learning at different paces. Though, teacher needs to work with students to ensure they are filling any gaps in foundational skills, and schools provide timely support so students can get immediate help when they are struggling.

Malaysia Education Blueprint (Higher Education) highlighted that there is an increase in demand for an additional 1.3 million of technical and vocational education and training workers by the year of 2020. This was identified in the 12 national key economic areas under the government's economic transformation program. Therefore, technical and vocational education and training institutions plays a vital role in the country's economy by equipping graduates that will be the workforce with knowledge and skills from basic to advanced skills levels in various economic sectors. Among characteristics of technical and vocational education are learn by doing, learn in real world situation and student have a specific career or career field in mind. Therefore, pursuing a technical and vocational qualification enables them to acquire real knowledge and skills that will able to build on with further training into that specific career. Competency based learning that adopted by vocational colleges in Malaysia is the best they can hope for in the traditional time-based system are marginal improvements.

[Bahari \(2012\)](#), stated that there are constraints in the implementation of the CBL in Malaysia. These constraints including lack of internalization and integrity in implementing continuous assessment, insufficient and unavailable tools and equipment, and lack of industry skills among instructors. Of greater concern of the researcher is the findings from [Saari and Rashid \(2013\)](#) that pointed out the program of studies undertaken by a student in technical and vocational education can no longer determine their future. Other similar research findings in regards to technical and vocational students career includes inability to decide, inability to plan their career, inability to solve career problems, lack of exposure and information relating to career, as well as uncertainty in career choices ([Mansor and Rashid, 2013](#)).

The technical and vocational education is based on occupational competencies needed in the various employment sectors, therefore, the curriculum should clearly apply to each specific situations. With the adoption of competency based learning, vocational colleges graduates should faced no problems in their specific career choices.

3. Preparing Students for Career Readiness

Employee performance is essential for business and organization to survive economically and influence productivity. However, higher percentage of employee performance is driven through personal attitude and motivation ([Latham and Wexley, 1994](#)). As institutions to provide workforce in various economic sectors to the country, vocational colleges need to prepare their graduates for career ready including aspect of attitude and motivation towards their future career. [Savikas and Porfeli \(2011\)](#) stated that an individual is considered ready to make a career choice when he is concerned about his future career, feels self-control towards the career, has curiosity to explore opportunities as well as being confident to plan and execute a future employment plan. Therefore, graduate of vocational colleges can be assumed completed a process of exploring careers and career planning, obtain complete information relating to his career of choice as well as be able to make decisions relating to their career of choice. [Jarvis and Keeley \(2003\)](#), state that career counsellors should provide career development interventions in the new paradigm where the programmes implemented are able to help the student obtain the appropriate information for work. According to [Rashid \(2010\)](#), the agents of change that are required in technical and vocational institutions include career counsellors who bridge the gap between academic and personal growth with future career.

Findings of research stated that career development programmes in technical and vocational institutions were implemented on a large scale which involved many students in any one programme ([Mansor and Rashid, 2013](#); [Omar et al., 2018](#); [Rashid et al., 2009](#); [Rashid, 2011](#)). The study found that there were 39 types of suitable career development interventions implemented in the educational institutions. It was also found that counsellors tend to implement career interventions by involving student participation on a large scale such as club/society activities, social/personal development coaching, career resource centre, career exhibitions/career day, career information exploration activities, individual career counselling, group career counselling, career forums/workshops, career development guidance, career interest evaluations, career visits, academic planning guidance, personality assessments and interview information.

Students in vocational colleges in Malaysia are ages between 16 to 19 years old. To ensure vocational college students are able to fulfil the needs of current jobs, emphasis on student readiness in making a career choice before entering the world of employment must be prioritised. Students needs to be encouraged in explore various paths to realistically achieve their career goals through activities such as on-job training, working environment experience, apprenticeship training, volunteering or community work, and the Get Real Game program. The Get Real Game programme is a programme to improve student career development and skills in managing their career which was

implemented in Canada. It encourages the student to simulate the transition from schooling to the world of employment.

Counsellors and teachers are the delivery agents in schools who should help and guide students by ensuring they receive the education and training that is required for the future. Every graduate from vocational colleges should be ready for their career regardless of their income. Implementing competency based learning in relating to career readiness also about focusing on helping students transition from college to workplace as well adequately prepare students for the future challenges they face in the workplace. [Ebenehi et al. \(2016\)](#), suggested technical and vocational institutions need to provide career exploration database and encourage career intervention program in order to enhance career adaptability among students.

4. Competency Based Learning in Improving Career Readiness

[Lynch \(2000\)](#), identified strategies to improve a technical and vocational education which are providing career exploration and planning programmes; improving academic achievements and motivation to learn; obtaining generic skills, competencies and skills required for work; and creating lifelong education and learning pathways. Furthermore, [Lynch \(2000\)](#) suggested six components to support that four strategies including choice of courses or field of study, contextual learning and teaching, career education, work based learning, authentic assessment/evaluation, and readiness of skills. These components focus on improving student learning, achievement, motivation and performance so that the student will be better prepared to either further their education or go into employment after completion of their studies.

Meanwhile, [Norton \(1987\)](#) identified several benefits of implementation of CBL include students will achieve competencies required in the performance of their jobs, build confidence as they succeed in mastering specific competencies and receive a transcript or list of the competencies they have achieved. In Kenya, CBL was born after concern over the workplace relevance of many of the prevailing formal TVET educational qualifications. Dissatisfaction with the workplace relevance of many credentials derived in the traditional model of curriculum development based on the inputs of knowledge, understanding and skill attainment. This dissatisfaction has led to an emphasis on working for the outcome or referred to as a competence. Lesson learned from Kenya that redesign of new curriculum based on competency based learning, so graduates from Kenya technical and vocational institutions is more relevant to workplace requirements.

Furthermore, training time is used more efficiently and effectively as the student is a facilitator of learning as opposed to a provider of information. In addition, more training time is devoted to working individually or in small groups as opposed to presenting lectures as well as evaluating each participant's ability to perform essential job skills. [Moye et al. \(2016\)](#), stated that students understand better by doing. Students not only obtain information from their teacher, but are more inclined towards learning while working and gaining in depth skills in the context of the real world. Meanwhile, [Tanner \(2012\)](#) stated students who actively participated in learning and teaching in producing the project are able to equip themselves with skills in various career fields as well as are able to simulate the learning experience with the real working world. This is in line with the principle of constructivism where the student should be actively involved in the learning activity. Therefore, adopted CBL by vocational colleges should give their students those advantages. In this study, the researcher seeks to examine level of career readiness among graduates of vocational colleges and an effect of implementation of CBL toward career readiness among graduates.

5. Material and Method

This study utilized the ex-post facto design. According to [Ary et al. \(2019\)](#), the ex-post facto is used when the situation does not allow the variable properties to be manipulated in the research. In the context of this research, the CBL approach is experienced by students when they still in colleges, so, the researcher does not manipulate the CBL. The purposive sampling technique is used as the researcher selected only those students who had gone through the CBL approach in the randomly selected vocational colleges. The total of randomly selected 330 students from 15 Vocational Colleges across Malaysia were participated in this research.

The instrument to measure career readiness was an item adopted from the Student's Level of Career Readiness in the Career Maturity Inventory Form C which was presented by [Savikas and Porfeli \(2011\)](#). The researcher also measured student's perception of the CBL approach during they had undergone throughout their study at vocational college.

6. Results

The total of 330 sets of questionnaires were distributed by post to 15 selected vocational colleges. The returned rates were about 96 percents. However, only 292 returned answer instrument were analyzed by the researcher. The findings of the research are analyzed using descriptive statistics (mean and standard deviation) and inferential statistics (one-way ANOVA).

Mean and standard deviation is used to determine the level of career readiness among vocational college graduates. Respondents are categorized into two levels of career readiness based on the mean of normal scores as suggested by [Savikas and Porfeli \(2011\)](#). Referring to Table 1, respondent shows a lower level of career readiness. The mean score is 9.55 with standard deviation of 3.17.

These findings show that the respondents have a take for granted attitude towards their future career as well as require advice and a lot of information regarding the career that they will be involved in. Although the respondents

had high aspirations and confidence to enter the world of employment, they were still not ready to make career plans, had low ability to make decisions and lacked in exploring career information.

Table-1. Mean and Standard Deviation Score for Career Readiness

Aspect	<i>M</i>	<i>s.d.</i>	<i>Interpretation</i>
Career Concern	2.89	1.19	Low
Career Aspiration	3.10	1.50	High
Career Confidence	2.81	1.53	High
Career Consultancy	3.09	1.07	Low
Career Readiness	9.55	3.17	Low

The One-way ANOVA was conducted to compare CBL approach on levels of student career readiness. Participants were divided into four groups according to their perception on CBL approach implemented in the vocational colleges (strongly disagree, disagree, agree, and strongly agree). Referring to Table 2, one-way analysis of variance shows the CBL approach on student career readiness is not significant, $F(3,288) = .369, p = .775$. There is no difference of the CBL approach on student perception of CBL implementation.

Table-2. Effects of Competency-Based Learning Approach on Student Career Readiness Level

Source	<i>SS</i>	<i>Df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Group	11.231	3	3.744	.369	.775
Within Groups	2918.998	288	10.135		
Total	2897.360	291			

7. Discussion

The finding of this study shows that the respondents have a low level of career readiness. A low level of career readiness indicates that the student did not complete the career development tasks according to the age level recommended by Super (1994). Based on Super's Career Development Theory, vocational college students aged 16 to 19 years old are in the exploration stage. At this age, students should be able to use their cognitive abilities to form general career goals by exploring career information resources, interest, values, career planning and forming self-concept and then forming career self-concept. Before graduating, vocational college students should also be able to narrow down their career choice to a job that is suitable and can be obtained by them.

Students of vocational college should be exposed to career development programmes more holistically so that they will be more ready to step into the working environment. Finding from Rashid *et al.* (2009); Rashid (2011) stated that in vocational college were likely comfortable in implementing introductory and curriculum-based intervention. Introductory interventions refers to the class of interventions designed to awaken a student's interest in their own personal and professional growth such as career day, career field trip and career aptitude assessment. Meanwhile, curriculum-based intervention defined as the class of interventions designed to promote career and academic knowledge and skills through means and content relevant to world of work such as career information infused into curriculum, career skills infused into curriculum and school-based enterprise.

According to Jarvis and Keeley (2003) career development intervention in the new paradigm has to be implemented by the career counsellor where the programme is able to assist the student in getting information to choose a career, obtain workability skills and self-management skills. This is supported by Feller (2018) who states that career development programmes can assist the student to understand the reality of the workplace. Since most career development interventions reported by vocational college counselors were introductory and curriculum-based interventions, which is expecting students to select a career choice and then, pursue the requisite education, while preparing to enter selected workforce. The Industry Revolution 4.0 workplaces demands a new approach to facilitating career development. To begin with, the CBL need to strategically plan to infuses and experiences by students during their study at vocational colleges. This strategy will help students become healthy, self-reliant citizens who are able to cope with constant change at work as well as maintain balance between life and work roles.

This research also shows there is no difference of the perception on CBL approach implemented in the vocational colleges on the student's level of career readiness. The implementation of the CBL approach in learning and teaching processes at vocational colleges must be strategically plan, reflect and evaluate. According to Rashid (2011), through continually improve practice of teaching and learning, vocational colleges can become a main contributor towards producing creative and innovative students who will then be the engine of change of workforce in the IR 4.0. Students should be exposed to skills such as creativity, critical thinking, problem solving and how to connect what they have learned with what is required when working in the future. It is aligned with the definition of TVET by UNESCO and ILO (2002;2015) where, vocational college plays an important role not only in training and transferring of skills in a certain field but is also responsible for producing students who are truly ready to work and are able to apply the skills they have to the work they engage in. Currently, vocational colleges need to response with workplaces demands whereas not only transfer knowledge and skills but also responsible to equip student with analytical and critical thinking.

8. Conclusion

Vocational college should continually reflect and improve to be main contributors of creative and innovative future workforces or entrepreneurs that will be drive engine of economic prosperity as well the nation well-being. Teachers of vocational colleges should empower their students in exploring their future career extensively. At the same time, teacher should take advantage to utilizing variety of teaching strategy, method and technique in curriculum delivery. Vocational colleges administration also plays important role in supporting this initiative and practices. Therefore, administrator and teachers should respond continuously in timely manner in the aspect of program offer, curriculum content and delivery, partnership with industry, etc.

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