

PRODIGY AUTOHAUZ: THE APPROACH OF INDUSTRY ON CAMPUS CONCEPT AT SUNGAI PETANI COMMUNITY COLLEGE

Wan Mohd Farid Fauzi^{1*}, Mohd Shahar Harun², Abdul Mu'im Abd Rahman³,
Reezlin Rahman⁴

^{1*,2 &3}Department of Automotive, Sungai Petani Community College, Kedah, Malaysia

⁴Department of Entrepreneurship, Sungai Petani Community College, Kedah, Malaysia

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ABSTRACT: This conceptual paper explores the implementation of Industry on Campus (IOC) at Sungai Petani Community College (SPCC). The IOC program was implemented based on the original concept developed by the Department of Polytechnic and Community College (JPPKK) through its basic model framework. Implementation of IOCs involving educational institutions with companies from the industry builds strategic collaboration that promotes the development of highly skilled human resource development at the institutional level. In recognizing this aspect, the automotive unit has implemented the IOC model at Sungai Petani Community College for students to take advantage of this concept through Autohauz Prodigy Entrepreneur hub @SPCC. The continued collaboration of companies and institutions for implementing the IOC is expected to contribute to high marketability to enhance the country's social and economic life.

Keywords: Collaboration, Industry on Campus, TVET, Politeknik dan Kolej Komuniti.

1. INTRODUCTION

Malaysia acquires human resources who are knowledgeable and highly skilled in operating a developed country whether in terms of humanity, systems and infrastructure (Ismail, 2018). The goal to become a fully industrialized country can also be achieved with the benefit of the Technical and Vocational Education Training System (TVET) from a well-designed national education plan by the government.

Technical and Vocational Education Training in Malaysia started in the early 1980s, with an initial focus only on students who drop out of mainstream education. As a second option, these students are allowed to pursue TVET education to help them generate income and live surviving. However, as the government recognizes the needs and importance of TVET in the process of developing countries, TVET is further strengthened as a mainstream education in producing semi and skilled workers (Abdul-Rahman, 2015). The government recognizes that TVET education is an important way for countries like Malaysia to produce highly-skilled, knowledgeable, innovative, and capable human capital at a global and regional level relevant to current needs (Muhammad, 2019).

TVET also emphasizes lifelong learning, an unlimited continuing education for specific learning to enhance people's lives. Countries must increase enrollment in TVET and improve the quality of training as a whole. TVET transformation is necessary to increase the value of employability and boost TVET in order to compete with developed countries, TVET-related study opportunities are able to develop certain skills that are appropriate to current needs in the job market (Mohd *et al.*, 2015). These skills are important not only to be easily accepted to work with the employer, but also work when they apply to their own business (Abd-Kadir and Hashim, 2017).

At the higher education level, the development of TVET education has been given special attention by the government through the Malaysian Education Development Plan 2015-2025 (Higher Education) (PPPM-PT). The focus on TVET is in line with the aspiration to portray Malaysia as a technology-driven country with a sufficient number of skilled and semi-skilled workers in the job market.

Reflect on the above statement, TVET institutions in higher education must be ready to meet the challenges of the Industrial Revolution 4.0 (IR4.0) in line with the globalization era. Education Minister Dr. Maszlee Malik alleged that educators need to be courageous in making changes, possess creativity, and practices innovation in parallel with the technology progresses (Bernama, 2019a). In the educational

environment with ridiculous information technology, industry and educational institutions should play a leading role as the agents of change to the country's development.

Reflect the higher education plan, the Department of Polytechnic & Community College (JPPKK) has invented a strategic plan to become the leading TVET institution (Department of Polytechnic Education and Community College, 2019) by producing their students to be competent and relevant to the world of work today through its missions;

- i) Provides extensive access to quality and recognized TVET programs
- ii) Produce holistic, entrepreneurial and balanced graduates
- iii) Take full advantage of smart partnerships with stakeholders.

In response to the aspirations and requirements set by the JPPKK, the Light Vehicle Service Unit at Sungai Petani Community College continued the desire by establishing an Industry on Campus (IOC). Prodigy Autohauz @SPCC then established as the Industry on Campus for Light Vehicle Service Unit to carry out the mission and objectives by the JPPKK.

2. PROBLEM STATEMENT

The curriculum of Community College implemented by the lecturers in teaching and learning at Sungai Petani Community College (SPCC) is a combination of designs developed by the Curriculum Development Division JPPKK in collaboration with industry. However, the previous implementation involved only classroom teaching and learning (theory and practice) and has found nowadays to be less relevant in industry requirements. The existing curriculum is assumed to be unable to support the teaching and learning activities fully. Therefore, a new paradigm initiative and alteration needs to be worked out to address the above issues. In other words, a new method of learning pedagogy needs to be implemented to strengthen the implementation of the curriculum further as planned before, such as institutional collaboration with industry needs to be integrated to be more relevant with the industry requirement in the job market.

In this regard, the SPCC initiates to provide education in the form of real work training to the automotive students. The efforts were undertaken to establish actual locations and training that act as an automotive one-stop center, such as car wash services, vehicle servicing, engine repair, and accessories. The above initiatives need to be undertaken to address some of the student issues:

- Inconsistent with current applications
- Difficult to adjust themselves in the working environment
- The gap between educational application and industry practices is different.

In recognizing the gaps above, a new mechanism for resolving marketability is required by establishing a model that involves collaboration between industry and institution. This collaboration involved support from the industry as a partner in the training ground. With that, some questions need to be answered to manage the industry application on campus; a) What are the procedures of implementation of IOC in the automotive field at the SPCC?; b) What are the relevant field or niche areas and coincides industries to run the IOC with SPCC? In answering these questions, a conceptual research paper is needed to determine the direction of the implementation. Therefore, writing this concept paper aims to identify the appropriate methods used to bridge the gap between the industry and the institutions of the SPCC in regards to IOC.

3. LITERATURE REVIEW

3.1. Collaboration

Collaboration refers to the individual's involvement in something or the relationship between two or more (Buang, 2013) parties. At the organizational level, collaboration is a concept of cooperation that involves two or more organizations to achieve the same objectives and mission (Amin, 2012). Amin (2012) also further emphasized that through collaboration, the two organizations will share a broader sense of purpose, incorporation, and objectives in achieving their mutual goals.

To be successful in collaboration, educators need to change teaching methods to meet the latest industry development challenges (Morgan, 2016). In sum, the collaboration of two or more entities will achieve the goals of their respective target.

Collaboration is very important in business due to current requirements in global business competition, short product lifecycle, and pressure on corporate profits, which makes business more difficult and requires knowledge sharing in new technologies to survive (Creamer and Amaria, 2012). The Director-General of the Department of Polytechnic and Community Colleges suggested in educational perspective that his staff improves their cooperation with the industry and refer to training applications conducted in Germany countries that carry out apprenticeships approach (Zainal, 2010). He also emphasized that the increasingly competitive job market requires a more dynamic workforce and willing to compete in a challenging work environment. As a result, industry and institutional collaboration can help enhance student skills and marketability upon graduation. Besides, collaborating with both parties give benefit to them in creating the experience, enhancement of technical skills (educational institutions), contribute to new ideas in the production and become competitive in products (industry) and many advantageous that give profitable to them (Hongladarom, 2000). The advantages gained through this collaborative collaboration can certainly increase the productivity of both parties to achieve their own organizational goals.

3.2. TVET (Technical and Vocational Education Training)

UNESCO (2002) defines technical and vocational education training (TVET) is an educational process involving education, technology, and related scientific research related to the improvement of practical skills and attitudes, knowledge, and understanding related to the employment of global human capital. Traditionally, TVET has also been identified as an education that involves learning for jobs that require skills, practical and in-depth skills with less intellectual ability (Brewer and Comyn, 2015). He added that TVET involves focused skills that emphasize practical skills as a key part of teaching and learning. However, with global changes in the work environment and high demand in the labor market, TVET orientation has changed (Bakar, 2017). He noted that TVET today is not only involved in the provision of the low-cost workforce but has been recognized as an important agenda for sustainable human resource development, which demands collaboration between industry and educational institutions to be one of the key steps in achieving the nation's goal.

In achieving National Vision 2020, TVET has been entrusted to provide high-skilled labor to drive the Malaysian economy. However, data from the National Economic Advisory Council in 2010 shows that countries are experiencing a labor shortage and are more dependent on foreign workers (Bakar, 2017). He also pointed out that according to the Tenth Malaysia Plan; the total number of highly skilled workers in Malaysia is much lower than that of countries like Singapore, China Taipei, and Korea. As a result, the government has encouraged school leavers to enroll in TVET skills institutions. The government has also allocated RM5.9 billion to fund the initial Technical Education and Vocational Training Program (TVET) in the 2020 budget (Bernama, 2019b). Progressive steps have been setting and implemented to produce a more skilled workforce to meet the industry needs.

Through the funds, as mentioned above, the technical institutions that are providing TVET education to the students can upgrade the facilities, equipment, and space capacity at their respective institutions according to industry practices. TVET programs are implemented to enhance human capital development in line with industry needs and requirements. Today's, TVET's curriculum is gradually focused on the fast-growing industry with the use of new technology applications. In line with that, TVET training was modified according to the current Industrial Revolution 4.0, which balanced work, economic, and social needs. Industrial Revolution 4.0 required a more relevant conceptual change in education by integrating with both parties, which are educational institutions and industry.

3.3. Industry on Campus

Industry on campus is one of the alternative collaborative concepts of implementing the TVET system in educational institutions that allow the industry to share experiences and technical knowledge with students. The direct engagement with the industry on the campus or institution gives a lot of opportunities through collaboration besides doing business, such as creating a skilled future staff for the company and creating new job specifications through on-job training, research, and development of new product or services (Buang, 2013). On the other hand, students can practice on the spot after the end of the theoretical learning in the classroom at the industry training center.

Therefore, the IOC concept should be emphasized so that TVET institutions are always ready and aware of the industrial revolution taking place in Malaysia to offer training areas relevant to today's technological environment (Mohd *et al.*, 2015). This awareness must be highlighted to the industry and institutions to meet the challenges of a new millennial industry activities related to TVET. As a result, the

institutions will be more dynamic and competitive in line with the government's intent in developing 35 percent local skilled workers by 2020 (Bernama, 2017). Apart from that, the industry will gain real expertise in his field and increased productivity.

3.4. Department of Polytechnic and Community College (JPPKK) Dan Sungai Petani Community College (SPCC)

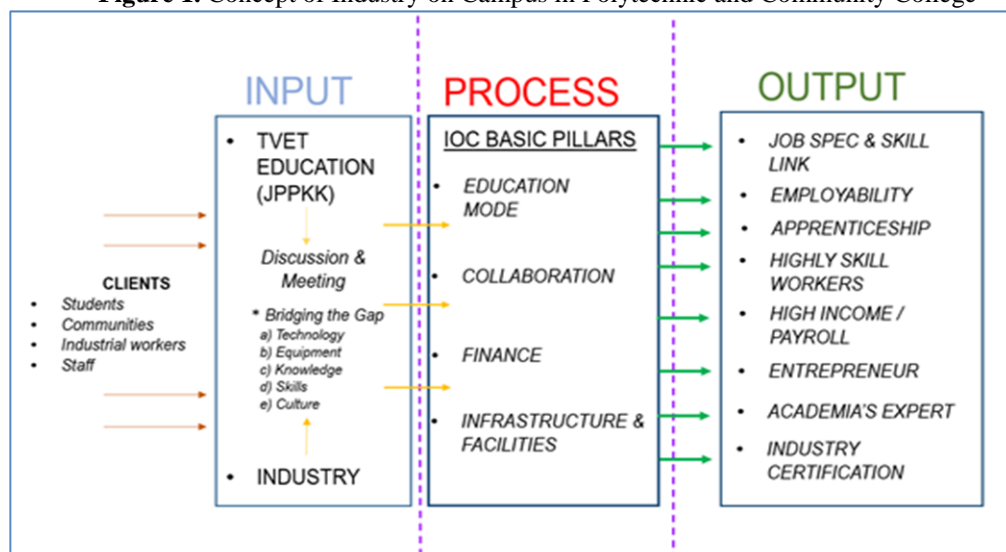
The Department of Polytechnic and Community College has played a role in providing education and training in skills development at all levels of the communities and providing lifelong learning programs to create a knowledgeable community (Hasami and Buang, 2018). Besides, Polytechnic and Community Colleges also provide opportunities for individuals who interested in becoming experts in the specific field or to be entrepreneurs. In line with the Polytechnic & Community College Strategic Plan 2018 - 2025, the strategic direction has been formulated at JPPKK's mission to provide broad access in bringing the quality of TVET programs besides to take full advantage of smart partnerships with industry. In General, the Community College is an institution that provides training and skills which provide educational opportunities for secondary school leavers before entering the labor market or pursuing their higher education. Historically, 12 Community Colleges began operations in 2001, and the number of Community Colleges increased to 103 colleges operating nationwide until now. Sungai Petani Community College is one of the pioneer community Colleges that established in 2002.

The Sungai Petani Community College (SPCC) offers full-time courses such as Hotel Operation Certificate, Culinary Certificate, Automotive Certificate, Beauty and Hair Care Certificate, Bakery, and Confectionary Certificate. The SPCC also provides opportunities for local communities to enhance their knowledge and skills irrespective of age limit, ranking, and field area. The Long Life Education Unit is the unit responsible for conducting short courses in the SPCC. Through these courses, the local community's skills can be enhanced for all ages in line with the government's desire to improve his citizen's skills.

4. IMPLEMENTATION OF PRODIGY AUTOHAUZ @SPCC AS INDUSTRY ON CAMPUS

The challenge in dealing with the changing millennium from a previous stage of the 3rd revolution to the industrial revolution 4.0 has impacted educational institutions to adopt the revolution in moving parallel with the situation. The impact of modernization in the industry has made TVET more prominent in educational institutions. Struggling in achieving the impact of addressing low-skilled labor issues should be taken to ensure that the workforce is sufficiently prepared and ready to meet the global industry (Bernama, 2019c). Consequently, the Sungai Petani Community College has opened a platform under the Entrepreneurship Unit based on the Industry on Campus (IOC) concept that can impact its students in terms of skills and management. This initiative is taken to produce a holistic and dynamic student ready to work in the future in line with the mission of the JPPKK.

Figure 1. Concept of Industry on Campus in Polytechnic and Community College



Source: Garis Panduan Pelaksanaan Industry on Campus (IOC), 2019

Referring to the basic concepts of IOC implementation, as illustrated above from the JPPKK, the IOC in the automotive area at the SPCC involves collaboration between students, institutions, and industry to ensure that learning of the theory emphasized at the institution can be implemented practically in the industry. In ensuring the dynamic IOC concept, the syllabus or curriculum needs to be reviewed periodically and in line with industry requirements. In Financial concern, institutions need to allocate some investment funds in placing the industry on the campus by providing space allocation in enabling the student's engagement, and the operation becomes more effective. Thus, with the institution's real training place, the industry can deliver their training, consultation, and equipment for the on-job training purposes to the students. As a result, institutions can produce students who are recognized from the industry and are better prepared to meet the challenges besides the industry will have a competent supply of skilled labor.

In achieving the goal of implementing the Industry on Campus, the entrepreneurship Unit of Sungai Petani Community College is executing a strategic effort by launching a high impact training center that will expose students to technical and entrepreneurial education by creating a real work environment for their student's exposure. Therefore, SPCC has developed an Entrepreneurial Hub named Prodigy Autohauz as the center of the IOC that complies with the field of Light Vehicle Services' niche area.

This Prodigy Autohauz @ SPCC is a "One-Stop Center" concept that offers "full service of automotive activities" to its customers. Several types of services are performed, including cleaning, vacuum, polish detailing interior & exterior, vehicle repairing, servicing, and accessories. Prodigy Autohauz @ SPCC operates on weekdays (Sundays to Thursdays) from 9 am to 5 pm. The establishment of the entrepreneurial hub is one of the efforts of the SPCC's management to produce students who are highly skilled, competent, and relevant to the needs of the industry today.

Prodigy Autohauz officially opened on July 3, 2019, is a student business entity combining institutional and industry involvement under one roof. The entrepreneurial hub is registered under the Smart Bright Works Resources; company number KC0053098-U operates at the parking lot next to the institution-building located at No. 77, Cempaka 1, Pusat Bandar Amanjaya, 08000 Sungai Petani, Kedah. This hub using the start-up capital from the trust account (Akaun Amanah) as a source of funding and equipment from the Sungai Petani Community College. Besides that, the entrepreneurial hub also engages with companies from the automotive industry that collaborate in providing skills training, equipment, and raw material facilities, including business practice, product sharing, and development.

These Prodigy Autohauz working resources are comprised of Lecturer in Light Vehicle Service unit who serve as supervisors, SPCC automotive students as permanent staff, and industry representatives who serve as mentors for every operation and service in this entrepreneurial hub. The main effort is to train students in business management, vehicle maintenance, and repair services and provide students with early exposure to work in the automotive industry and venture into the automotive entrepreneurship.

Student involvement in the Prodigy Autohauz Operations course is implemented in the form of a theoretical and practical learning system coupled with business and marketing management to help students gain entrepreneurship skills. The learning system implemented is in line with the areas of interest contained in the Light Vehicle Service Certificate learning syllabus. Skills in these areas of achievement are not only practiced through students but also by the community, industry, and institutional staff.

Potential full-time students will be interviewed before being immersed in business management training and learning the skills of vehicle repair service and maintenance at Prodigy Autohauz, known as an incubator group. Practical skills are always maintained in line with the areas of knowledge identified through the subtopics that students learn from each module in the Light Vehicle Service Certificate. Besides, students will also gain value by sharing the expertise of other branches within the automotive field.

Based on the identified niche areas and to further strengthen the training workplace, the strategic collaboration and networking with industry expertise taken to improve the operating through IOC's concept. The collaboration and networking were conducted between Prodigy SP Auto and PWrap Venture. These companies add value in terms of ideas and expertise in terms of repairing, services, and accessories at the Prodigy Autohauz operations. Industry Assistance contributes to tunings in product and works quality standards according to job specifications in the vehicle care and maintenance industry.

Prodigy SP Auto is the strategic partner in the niche area of vehicle maintenance and repair services skills. SP Auto Prodigy serves as a mentor from the industry that helps to manage full-time in premises operations at Prodigy Autohauz's business site. This assistance is not only focused on practical training but includes theory, product selection, tool's application, and machine management. The collaboration also further emphasizes the operation of the latest technologies and products to strengthen the Standard Operating Procedure (SOP) for service operations in this entrepreneurial hub. In other words, the two-way

collaboration between Prodigy Autohauz and Prodigy SP Auto is involved in the equipment and spare parts supply and inclusive of guidance from expertise in providing quality maintenance and repair services.

Meanwhile, Prodigy Autohauz's second collaboration partner is PWrap Venture, where the company provides training in vehicle accessories installation. The training included paint and body care techniques, polish and detailing, vehicle windshield film installation, and vehicle sticker wrapping. The company's collaboration is based on its ability to provide polish products and equipment, windshield film, and stickers, which is the trend of accessories today. The information dissemination of knowledge and skills in the field of car accessories enables students to gain additional skills in keeping with the motor industry's current situation. With these two strategic partnerships, the process was become easier to cultivate the entrepreneurship environment within students and communities besides to catalyst them to be future job creators. It also responds to the government's vision in developing the Bumiputera Trade and Industry Society (MPPB) and meeting the objectives of the Malaysian Education Development Plan (Higher Education) 2015-2025 by producing holistic, entrepreneurial, and balanced graduates.

5. CONCLUSION

Observations from the findings on the implementation of learning through 'Industry On Campus' at Prodigy Autohauz @ SPCC indicate that such training concepts need to be taken into account by management to impact TVET graduates positively. Indirectly it can foster the confidence of graduates to place themselves in the industry. Autohauz @ EPF Prodigy is targeted as an IOC concept training center at Sungai Petani Community College. It focuses on Sungai Petani Community College students in the field of Light @ Automotive Services and the local community.

As a result of the IOC's implementation, a strong network of industry partners and strategic partners between Sungai Petani Community College and two automotive companies, SP Auto Prodigy Company and PWrap Venture Company display a positive impact on the development of semi-skilled and high-skilled labor resources. These collaborations need to be embraced more by the automotive industry players to share their skills and produce competent students to gain a job in the automotive repair and service, vehicle accessories, car wash, and sell vehicle care products, accessories, and parts. All of these skills are catalysts for a better future job and are given recognition through certification.

Implementing the IOC at the SPCC will produce high-skilled workers and increase the productivity of graduates in the automotive field. The IOC's existence will also increase the percentage of competent apprentices and leverage the skills of the individual and with fair payments. Besides that, the business skill from the IOC's implementation will produce entrepreneurs who can generate their income, thus growing a more competitive business globally.

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