

# The Implementation of Industrial Training for Students with a Disability: The Role of Adaptability in Enhancing their Workplace Well-Being

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Industrial training for schools was introduced by the Malaysian Ministry of Education in 2017. The Upper Secondary Industry Apprenticeship program [PIMA] was implemented in vocational schools, as an extension to the industrial apprenticeship program since 2010. Industrial training is a career transition to prepare students for the workforce. Special education students are also required to seek relevant knowledge and training, to acquire a career. Industrial training should provide an equal opportunity of education for diverse students, as stipulated in the Malaysian Education Blueprint 2013 to 2025. Hence, industrial training plays an important role in enhancing students' career well-being, and developing their potential, interests, and skills. This paper assesses the implementation of industrial training for students with disabilities. It also examines the role of adaptability in enhancing students' workplace well-being. The results and implications are discussed critically.

**Key words:** *Industry training, special education, disability, workplace adaptability, workplace well-being.*

## Introduction

Special Education Students (SES) should be equipped with the necessary knowledge and industrial training to be acceptable in the workplace. Industrial training is a form of career transition training that prepares students for the workforce. Schools should provide prevocational skills such as food and beverage services, bakery and plants to SES, before



they plunge into industries. Vocational skills programs provide opportunities for SES to acquire knowledge and job-related training (Anizam, Manisah, & Amla, 2013). The combination of these activities taps into students' individual needs and their choices and interests which include instruction, community experience, job development and various adult life goals after school years (Williams-Diehm, Lynch, & A, 2007). In addition, according to Sankardas and Rajanahally (2015), school-to-work transition can be made easier by proper career preparation. This helps youngsters in attaining employment and enhancing career outcomes. Unfortunately, students with disabilities finish their secondary school without a working transition plan. There is an urgent need to provide students with special needs with appropriate skills training, and opportunities to apply them in real working environments, to enhance their self-esteem (Nor, Hanafi, & Yasin, 2018). Therefore, industrial training is one of the means to prepare SES to enter the workplace.

The Ministry of Education Malaysia (2017) has taken the initiative, by designing an integrated Upper Secondary Industry Apprenticeship program. This industrial training is a collaboration of secondary schools and industries. It is offered to students aged 15 and above in selected secondary schools. An industry is defined as a skills training provider managing a program, while students are apprentices, receiving skills training provided by the industry (Ministry of Education Malaysia, 2017). Industrial training aims to provide alternative learning to special needs students, in either special integration education programs or inclusive programs which belong to the field of skills at secondary schools. Industrial training provides an equal opportunity of education for diverse students, as stipulated in the Malaysian Education Blueprint (2013-2025) (Ministry of Education Malaysia, 2013). Hence, industrial training plays a pivotal role in enhancing students' career well-being and in developing their potential, interests and skills. This program is a pilot program implemented by the Ministry in selected schools throughout Malaysia. The purpose of this paper is to assess the implementation of industrial training for SES. It also examines the role of adaptability, in enhancing their workplace well-being.

Based on the Malaysian Education Blueprint 2013 to 2025, 1934 students with special needs completed Form 5, from vocational special education schools in 2012. However, no standard job placement program was provided for them (Mashitah & Suhaida, 2014). Apart from career development, vocational training is a critical experience for SES. The Malaysian Plan of Action for People with Disabilities 2016-2022 was proposed by the Ministry of Women, Family and Community Development (2016). It targeted a 10 percent increase in the number of existing special need students attending the existing career transition program (Ardzulyna, Aznan, Abd Rahim, & Hui Min, 2018). Yet, certain organisations claimed there was a lack of support and attention, in initiating and creating employment support systems for SES. Ardzulyna et al., (2018) suggested that the practice of career transition amongst students with special needs should not only be seen from the perspective of practice approach (in terms of

student development). Instead it should also be viewed in-depth from other perspectives such as student-focused planning, family involvement, inter-agency collaboration and program structures, to ensure effective career transition programs amongst students with special needs.

In Malaysia, the Special Education Integrated Program (*PPKI*) has implemented the Special Education Secondary School Curriculum Standard [*KSSMPK*] since 2017. The Upper Secondary Industry Apprenticeship program [*PIMA*] was added to it. The combination of these programs enhances SES' workplace adaptability. The starting point towards the achievement of workplace well-being, for SES, are schools that provide vocational education career preparation industrial training and school-based engagement after school. The combination of vocational education in school, and training industry for students with learning disabilities, enable them to adapt easily in the working environment (Abdullah, N., Yasin, M. H. M., & Abdullah, 2015). Vocational education assists students with special needs in obtaining necessary skills, and prepares them for securing a job in the competitive employment market (Lokman, Nurul Qistin, & Mohd Hanafi, 2009; Ramlee, 2000). Thus, the adaptability acquired by SES during industrial training enhances their well-being in job placements after school.

This research suggests on an application of a life-span theory of control: a major part of development involves the individual adaptively adjusting goals to opportunities and constraints (Heckhausen & Schulz, 1995; Heckhausen, Wrosch, & Schulz, 2010; Martin, Nejad, Colmar, & Liem, 2013). The theory and research which is related to subjective adaptability well-being investigates how students with disabilities adapt to positive and negative workplace circumstances, in industrial training.

In general, the aim of this paper is to identify the effectiveness of the Upper Secondary Industry Apprenticeship program [*PIMA*], for students with disabilities, to develop their potential, interests, and skills in enhancing student career well-being. Specifically, the objectives of this study are:

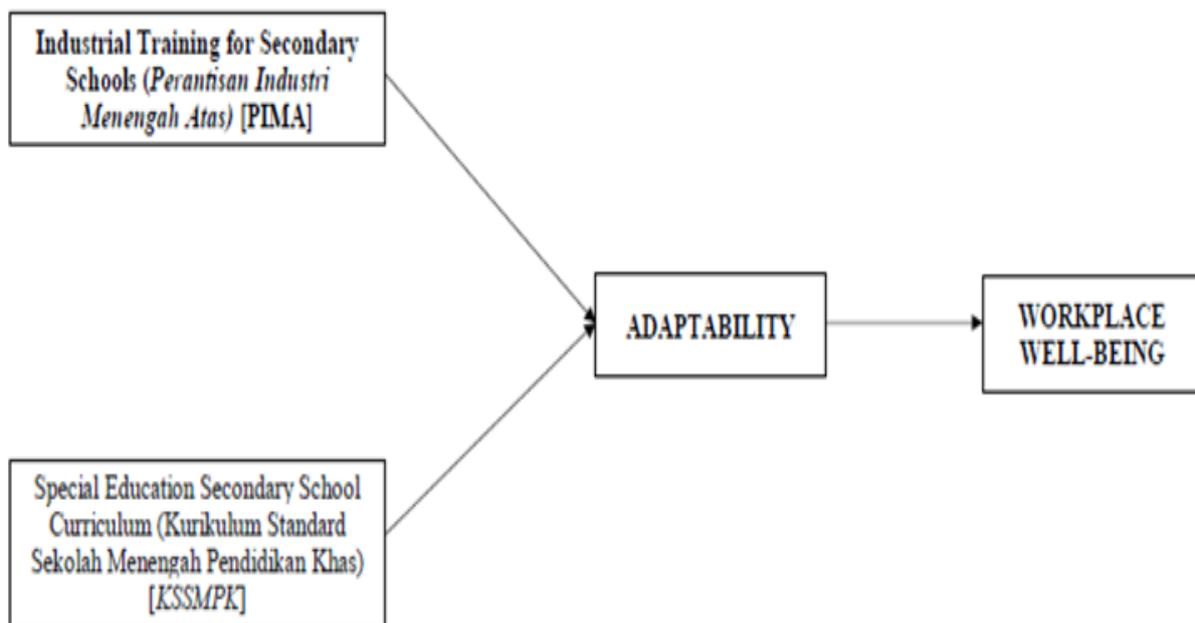
- i. To assess the implementation of industrial training for students with disabilities
- ii. To examine the role of adaptability in enhancing their workplace well-being

### **The Conceptual Framework**

The design of the preliminary conceptual framework was based on the hypothesis model of adaptability (Martin et al., 2013). This model is relevant in relating the role of adaptability to the workplace well-being of students with disabilities. It also investigates the effectiveness of the implementation of *PIMA* and *KSSMPK* towards SES's adaptability in the workplace. The implementation of industrial training of all *PPKI* in Malaysia contributes to the construction

of this framework. PIMA is the on-going industrial training. Assessment should be carried out to determine the implementation level, in seeking the role of adaptability of students with disabilities in the workplace. The implementation of KSSMPK is also a continuous part of developing education for students with disabilities, in transition from school to career. The conceptual framework is used to determine the role of adaptability in enhancing workplace well-being. The construction of the framework is shown in Figure 1.

**Figure 1.** Conceptual Framework



## Literature Review

### *Industrial Training for Students with Disabilities*

Industrial training can be defined as career transition. It is a combination of activities for students with disabilities, from school to after-school activities (Nor et al., 2018; Williams-Diehm et al., 2007). Industrial training programs enable SES to learn at school, and simultaneously gain hands-on experience in building up positive attitudes and potential in transition career fields (Mercer, C. D., Mercer & Pullen, 2011; Norfishah, 2016). In Malaysia, researchers agree that industrial training for students with a disability should be emphasised, even at school level, and especially in education programs that provide skills such as career transition programs (Arzulyna et al., 2018). Thus, it is vital to have job placement services where SES are selected for industrial training in companies (Cheong & Sharifah Zainiyah, 2013). This ensures that SES are assessed in school to determine their skills and interest.

### ***KSSMPK***

Since 2017, the curriculum system for special education is Special Education Secondary School Curriculum Standard (KSSMPK). Its implementation had three phases, namely Wave One: Preparation phase (2013-2015); Second Wave: Implementation phase (2016-2020) and Third Wave: Phase of Assessment (2021- 2025) (Ministry of Education Malaysia, 2012). It was implemented in secondary schools, for students with a disability, to provide academic and vocational education. This curriculum was divided into high, medium and low function categories (Ministry of Education Malaysia, 2017). Based on the requirements of the National Education Blueprint (2013 to 2025), this curriculum was formulated to improve content and learning, to comply with international standards. It ensures an appropriate and relevant curriculum for students with special needs. The use of KSSMPK has a positive impact on the future of students with a disability. Its implementation focuses on vocational skills and career transition. This curriculum has been shown to greatly impact the future of special needs students (Mohd Reduan, Mohd Mokhtar, & Norlena, 2018).

### ***Adaptability***

According to the Cambridge Dictionary and Thesaurus (2019), adaptability refers to a necessary quality in an ever-changing work environment, and the ability or willingness to change to suit different conditions. Currently there is no consensus for the definition of adaptability, yet most related literature explains that it involves a change in behaviour and how people deal with a change in environment (Poole, 2018). In this study, individual adaptability is “an individual’s ability, skill, disposition, willingness, and/or motivation to change or fit different tasks, social and environmental features” (Robert & Paul, 2006). The role of adaptability is a hidden focus in educational system, one that is prominent in non-cognitive and cognitive dimensions of schooling. Despite the lack of adaptability at the workplace, there were issues as to the lack of prior workforce participation and experience. Another measure of adaptability is the substitution of less educated workers with more educated ones, as relative shortages and rising wages of the latter manifest themselves. If workers have broader skills (including interpersonal and intra-personal skills), the possibility arises for greater substitution; less educated workers may replace higher-level ones, as relative wages change (Levin, 2015). Researches have also associated life satisfaction with broadened cognitive capacity and resources (Fredrickson, 2001), and this broadening is aligned with adaptability. Building on prior measurement work demonstrates the psychometric properties of adaptability. The present study investigates dispositional predictors (personality, implicit theories) of adaptability, and the role of adaptability in predicting academic (motivation, engagement, disengagement) and non-academic (life satisfaction, self-esteem, sense of meaning and purpose, emotional instability) outcomes (Martin et al., 2013).

### ***Workplace Well-Being***

In researching teacher assistance, workplace well-being emphasises effective classroom practices. There are four forms of workplace well-being. First; workplace enjoyment. It refers to the positive evaluations of one's subjective experience at work (Van Horn, Taris, Schaufeli, & Schreurs, 2004). The second is workplace self-concept. It refers to teacher assistants' positive appraisals of their effectiveness, in their role and in the workplace (Marsh, 2007). The third is workplace participation. It refers to the involvement and contribution in activities and tasks at the workplace. Lastly, workplace motivation. It refers to the drive and inclination to perform one's duty and role in a job (Martin, 2009). Hence, the key outcome variables in work and occupational psychology tap into the aspects of affective well-being (e.g. job satisfaction, commitment and depression), whereas other outcomes measure aspects of these broader conceptualisations of well-being (e.g. motivation, competence and efficacy) (Van Horn et al., 2004). According to Smith and Bell (2015), the roadmap concept emerged from discussions focused on the complexities of creating an agreement between the project partners, on what constitutes inclusive learning and inclusive environments. These complexities form the concept of the Roadmap, as more than a set of simple instructions are given to the vocational education institution and/or workplace provider. Another analogy is 'journey towards inclusion', upon which all professionals/practitioners and the institutions within which they work must embark, to ensure that SES learners can attain their potential, in terms of both achievement and their well-being. Potentially, multi-dimensional approaches in measuring well-being may result in more precise assessments of the relationships among well-being and other concepts than 'affect-only' approaches, thus contributing to our understanding of the nature, causes and consequences of occupational well-being (Van Horn et al., 2004).

### **Research Methodology**

The researcher identified the published studies on the industrial training of students with disabilities, the role of adaptability, and workplace well-being. A literature search covering Malaysia and overseas peer-reviewed published articles or book chapters was conducted using all the main databases including Science-Direct, ProQuest, Ebscohost, Eric, Springer, PsycInfo, Sage, and Taylor & Francis Online. These databases include relevant journals in the field such as the Australian Journal of Career Development, the British Journal of Guidance and Counselling, the Career Development Quarterly, the International Journal of Educational and Vocational Guidance, the Journal of Career Assessment, the Journal of Career Development, and the Journal of Vocational Behaviour. Some journals were not included in these databases. The search specified that all the terms 'industrial training', 'special education', 'adaptability' and 'workplace well-being' appeared in the titles, abstracts or keywords. In the first round, all the articles or book chapters that include the exact term



‘career adaptability’ in the title, abstract, or keywords, or a measure of career adaptability were retained, resulting in 47 published pieces. Studies were conducted in a wide range of Asian and European countries, as well as the United States and other countries such as South Africa, India, Australia, Georgia and the Czech Republic.

## **Discussion and Conclusion**

This study explores transitional needs, and subsequently develops an effective transitional plan from secondary education to employment, for Malaysian individuals with special needs. The sample comprises two secondary school special education teachers and four individuals with learning disabilities who are at work. The findings were triangulated among five coordinators of non-government organisations, as well as parents of the four individuals with learning disabilities, and their employers. The findings revealed that the transitional needs of individuals with special needs include collaborative support systems, job coaching, self-advocacy skills training, career guidance and transition assessment, vocational training, trained transition personnel and transition services. The transition process is a collaboration between government and non-governmental sectors. Based on the findings, an effective transitional plan from secondary education to employment for students with learning disabilities was drawn (Cheong & Sharifah Zainiyah, 2013).

According to the VIs, ‘There has been a significant change of attitude among employers from 1997 to 2013 toward employing people with special educational needs’. Employers are willing to help but do not know how to help the young adults with special educational needs to adapt to the working pattern of the organisation. The employers do not want them to be a liability, but productive members of the team (Sankardas & Rajanahally, 2015). The findings also proved that the lack of working experience in industry, among special need students, contributes to difficulties in adapting to a new environment, weakness in communication skills (including communication with employers, colleagues and customers as well as difficulty in understanding the direction) and negative behaviour in completing tasks (Aliza, 2014).

Moreover, the success of enhancing their workplace well-being also relies on support from the school administration. The schools should provide industrial training with the necessary tools, materials and also a place for the training session, nearby. The next hurdle is that teachers have to find places for their students’ internships, to gain work experience. This is necessary because teachers need to make sure that through work experience, the students undergo the adaptability process. This prepares them for the real working world, besides guarantee them more employment opportunities (Aliza, 2013; Linstrom, Doren, & Miesch, 2011). Parents have to show their children support, to assure the success of implementation of



industrial training and increase the confidence level of students with disability. Parental support systems ensure that children can adapt in social workplaces (Aliza, 2013).

The findings reveal that many individuals with learning disabilities unable to transit successfully, because individual transition plans were developed too late. Esther, a mother of a child with Down Syndrome, revealed it was only after secondary education that she sent her child to a School-To-Work Transition program run by a non-governmental organisation (Cheong & Sharifah, 2013). Transition planning should begin early, due to lack of career awareness. Prevocational skills and vocational skills require repetitive training, to enable effective interpersonal communication, increased self-awareness, and the learning of skills necessary for employment.

As for future studies, the researcher suggests that the practice of career transition amongst students with special needs be not only seen from the perspective of the practice approach (in terms of student development). Instead it should also be viewed in-depth from other perspectives like student-focused planning, family involvement, inter-agency collaboration and program structure, to ensure effective career transition programs amongst students with special needs in the country (Arzulyna et al., 2018). Whereas, the students themselves should strive to be able to survive as a more independent person, and be more adaptable and flexible in the workplace. Suggestions also showed that parents' participation and support using varied approaches and mediums can be considered by the industrial training program provided by the schools (Nor et al., 2018).

Moreover, teachers should collaborate with society and the community, to discover the problems faced by students during industrial training, especially in adapting to the workplace. Persons with disabilities (PWDs) prefer to be together with friends of the same fate, in any field that they are involved in (Safani, A., & Mohd Arief, 2000). The main reasons for them quitting are that they do not feel confident, they feel inferior as to their own ability, and find it difficult to adapt and communicate with others (Abdullah, N., Yasin, M. H. M., & Abdullah, 2015). This study is important, as it can enhance the workplace well-being of students with disabilities, in relation to the role of adaptability in industrial training. The implementation of this study also sees collaboration between schools and local communities, in enhancing workplace well-being for special education students.

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