

Teaching Entrepreneurship Education with Venture Creation Approach for Students with Special Needs

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Abstract: This study attempts to identify the effectiveness of entrepreneurship education introduced through entrepreneurship programs to a group of special needs students in SMK Datuk Haji Abdul Wahab in 2019. Entrepreneurship education is all about teachers setting up activities and projects that bring students to produce products and launch business opportunities. To address the employment issues among young adults with special needs, the study takes an action research approach. It is our aim to help students to create employment opportunities through this concept and enable them to generate a source of income once they graduate secondary school. This big concept is guided by an evidence-based framework called The Venture Creation Approach. The framework helps teachers to understand what are we venturing into and how are we going to create or innovate products. 30 special needs students from SMK Datuk Haji Abdul Wahab are involved actively in this concept idea and they are chosen specifically from the low function category. Under this big umbrella of entrepreneurship concept, 3 projects were introduced in stages. They are the Taugeh Production, Botania Kitchen Soap, and Authoring & Illustrating Children's Picture Books. In the taugh project which was started in Sept 2019, we had 30 times of harvesting with 4 seeding bins. As for the kitchen soap project, which was started in January 2020, 82 boxes were sold now. The third project, the children's picture book which was started in September 2020, we have self-published 4 books and a total of 50 books are being sold. Training the students to be working on the projects independently is our projected outcome in 4 years' time or by the time these students graduate from our program.

Keyword: Teaching, Entrepreneurship, Pedagogy, Special Needs, Venture Creation Approach.

INTRODUCTION

Education is the fundamental right of every child. Since the approval of the Universal Declaration of Human Rights in 1948, education is formally recognized as the fundamental right of a human being (The United Nations Children's Fund (UNICEF), 2007). In articles 26 (1), (2), it is stated that everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Education shall be directed to the full development of human personality (United Nations, 1948). This has been asserted positively since then, in the numerous worldwide agreements including the United Nations Educational, Scientific and Culture Organization (UNESCO), Convention against Discrimination in Education (1960), Social and Cultural Rights (1966), and the Convention on the Elimination of All Forms of Discrimination against Women (1981) (Unicef 2007). They expressed their support that the purpose of education is to flourish personal development, proper courtesy for human rights and freedoms, the ability for individuals to participate functionally in the free society, and encourage friendship, understanding, and tolerance (Unicef 2007). However, education has to start right from the beginning, which is in the early childhood years. The four core principles of the United Nations Convention on the Rights of the Child (1989) are non-discrimination; the best interests of the child; the right to life, survival, and development of the child to the maximum extent possible; and the right of children

to express their views (UNICEF, 2009). Human rights advocates claim that children who receive basic primary education are most likely to be literate and numerate and tend to develop the basic skills to secure a job later in their life (Lee, 2013).

Education plays a large role in achieving just societies because education can develop a child's sense of self, sense of community, and sense of citizenship (Lee 2013). Therefore, educating students with special needs is a holistic effort, which consists of aspects like suitable curriculum, time management, classroom environment management, and behavior management in consideration of developmentally appropriate practices. Having said that, special education is an important brand of service in the education system of Malaysia (Sharul Hapizah Musa, Elia Md Zain, Muhd Zulkifli Ismail, Hifzan Mat Hussin & Mohd Norazmi Nordin., 2021). Thus, entrepreneurship education is widely implemented for students with special needs in SMK Datuk Haji Abdul Wahab. It is an umbrella that consists of 3 entrepreneurship innovation projects. It is an active teaching, and competency-based approach introduced to 30 special needs students in 2019. It is also a process and product innovation based on entrepreneurship activities. There are a lot of modifications made in the production process of these innovative projects from the original methods to accommodate the learning abilities of the students. Entrepreneurship education is all about teachers setting up activities and projects that bring students to produce products and launch business opportunities. Under this big umbrella of entrepreneurship, the innovative projects were introduced in stages. They are the Taugeh Production with Automatic Spraying System, Formula Botania Kitchen Soap, and Authoring & Illustrating Children's Picture books. It is our aim to help students from the low functioning category to have employment opportunities through this concept and enable them to generate a source of income once they graduate secondary school.

PROBLEM STATEMENT

In Malaysia, employment for persons with disabilities is historically seen as a charity act and often stereotyped into welfare cases. Generally, persons with disabilities are marginalized and perceived as less productive (Dzalani Harun et al., 2020). A large number of people with disabilities in Malaysia is facing social exclusion and mostly is out of the main development stream (Rezaul Islam, 2015). There is a study suggesting that disabled people face employment problems, mainly due to the lack of understanding of disability which translates to employers' negative attitudes toward hiring disabled people and little intention to hire them (Peram & Koteswari, 2018). The exclusion of people with disabilities from employment opportunities is linked to the social organization of the labour market, not because of individual impairment.

Although we have many vocational training centers, it is limited to young adults with disabilities. Even if they get the opportunities to be educated in any vocational training centers, unfortunately not all are able to engage in full-time employment after the training (Abdul Razak Abd Manaf, Siti Zubaidah Othman, Mohd Faizal Mohd Isa, Wan Shakizah Mohd Noor & Norizan Azizan., 2019). This depends on how delayed they are developmentally and the impact of their disabilities in their daily life. Most likely, young adults with disabilities who had high academic skills, reading, writing, or arithmetic skills were two to three times more likely to be employed in full-time jobs compared to those with low skills. Sadly, this is the current situation for this group of people (Noor Fazlina Abd Kadir, 2018).

However, having an understanding of the barriers per se is not sufficient to promote the disabled to join the employment sector. What is most important is how to transform disability into ability, especially among students from the low function category. These students are much more delayed than their peers with disabilities in developmental areas like fine motor and gross motor, cognitive, speech, and social development. Mostly they are not able to read and write. Due to this limitation, they have restricted career options when they graduate high school later. From my past reflection of being in the field for almost 13 years now, many low-functioning young adults are stranded at home without any economic opportunities but only depend on an allowance from the welfare department. Many of them not only are 'hidden' at home but also in a particular institution due to social stigma, prejudice, and environmental barriers which prevent them from participating productively in society. The failure to integrate people with disabilities into the workforce has severe economic ramifications too (Ta & Leng, 2013).

Since many people with disabilities are having difficulties securing and maintaining a traditional job placement, self-employment would be a good option for this group of people. Self-employment through entrepreneurship can be a great alternative employment opportunity and economic self-sufficiency strategy. Thus, this is how the big umbrella of

entrepreneurship pedagogy emerged as a solution to the current faced problems as discussed above. At the school level, special education teachers need to incorporate the curriculum such as entrepreneurship and career transitions to these students as well as teaching specific subjects. This is important as it opens the minds of students about career opportunities after graduation (Mohd Khaidir Othman, Mohd Mahzan Awang, Abdul Razaq Ahmad & Anuar Ahmad, 2019).

LITERATURE REVIEW

Entrepreneurship Education

Entrepreneurship education is always found to be a solution for a promising economic opportunity for all students with special needs, especially the ones from the low-skill categories. Entrepreneurship education is important to the development of entrepreneurial capabilities. Students who receive basic entrepreneurship education are more likely to engage in entrepreneurship. Entrepreneurship education is an important method of encouraging entrepreneurship, because it triggers feelings of independence and self-confidence, enables the recognition of alternative career options, broadens individuals' horizons by enabling them to perceive more opportunities and provides the knowledge for individuals in developing new business opportunities (Hien & Cho, 2018). The entrepreneurship-based syllabus is one of the core elements in the Special Education Curriculum in Malaysia. There are 12 vocational-based subjects introduced in the syllabus for the low-functioning category in the secondary school (Bahagian Pembangunan Kurikulum, 2019). Additionally, entrepreneurship education can be characterized by concentrating on the idea of opportunity identification based on the strength and abilities of the students (Isichei, 2021).

Concept of Special Education in Malaysia

Education for students with special needs is shouldered by the Ministry of Education (MOE) under the supervision of the special education division. Thus, special education for students with special education needs has been developed in three settings. First, Special School of Education; second in mainstream schools that implement the Integrated Special Education Program and third is the Inclusive Education Program; at the pre-school education level; primary education and secondary education (Jasmy Rahman, Hanafi Yassin, Isa Hamzah, Mokhtar Tahar, Zolkepli Haron & Nur Kamariah Ensima, Jasmy Rahman., 2019). The special education integrated program (SEIP), is a special education program for children with special needs who studied in separate classes from regular children in the same school (Dewi Kurniati & Herry Widyastono, 2020). Apart from that, MOE also executed the initiative by providing the 'MBK Career Transition Program' which refers to activities supporting special education students to go through the transition process in secondary schools before entering the career world. The program, which requires the cooperation of family, includes six components starting from Form One to Form Five and was designed to enhance students' competencies, especially in preparation for a career that is fit for them later (Hishamuddin Ahmad, Siti Eshah Mokshein, Razimi Husin, Norfishah Mat Rabi, Abdul Rahim Hamdan & Ismail Yusuf Panessai., 2021). Besides that, the work transition programs offered to students with special needs in secondary school are mostly for moderate functioning students. Those who had high academic skills, reading, writing, or arithmetic skills were two to three times more likely to be employed compared to those with low skills (Dzalani Harun, Normah Che Din, Hanif Farhan Mohd Rasdi & Khadijah Shamsuddin., 2020). This resulted in students with low skills being stranded at home without economical opportunities after their secondary school education.

Venture Creation Approach

The 3 innovative product projects introduced under the entrepreneurship pedagogy are based on the entrepreneurship pedagogy theory and the venture creation approach (Isichei, 2021). The framework helps teachers to understand what are we venturing into and how are we going to create or innovate products. Venture creation is a framework that guides any venture, creation, and development-based activities. It is an approach for the development of new ventures in any education setting. The combination of entrepreneur pedagogy with the venture creation approach offers students practical experience resulting in the strong development of entrepreneurship competencies. The framework helped my students and me to understand what we are venturing into and how we are going to create or innovate products based on

students' strengths and abilities. The framework offers 3 main guided questions which are the "WHY", WHAT, and HOW as a guide for me to plan the teaching and learning process. Clearly, the "why" is for me to shape the content (personalized), the "what" is for a suitable method (customized pedagogical method) and finally the "how" refers to how to deliver the content by paying for particular attention to the student's strength and ability to perform.

METHODS

This study used the action research (AR) approach and 2 different methods of data collection and analysis in an attempt to identify the effectiveness of entrepreneurship education as a solution to the issues related to employment addressed in the problem statement. In this section, the AR approach, participants, data collection method and analysis is described in detail.

A. ACTION RESEARCH APPROACH.

An action research approach guided this study. Action research begins with values. It empowers educators to reflect on their daily practice and improve by offering practical solutions (Lundy, 2020). Action research is used in this study to find solutions for the employment issues faced by many young adults with disabilities. Two types of data collection methods are used in this study. They are the observation method and survey questionnaire (Mohd Ridzuan Md Nasir, 2021).

B. RESEARCH QUESTIONS

This action research answers the following questions:

1. What is the output of entrepreneurship product activities introduced to special needs students?
2. What are customers' perceptions towards the quality and usability of the products launched?

C. PARTICIPANTS

30 special needs students from SMK Datuk Haji Abdul Wahab are involved actively in these projects and they are chosen specifically from the low functioning category. Low functioning means they are much delayed compared to their peers. The functioning category of these students are decided based on the school-based diagnostic test. Every beginning of the academic year, a school-based diagnostic test is conducted for class streaming. 60 teachers who actively purchased and used the products are involved in the customer satisfaction survey.

D. DATA COLLECTION & ANALYSIS

To address the research questions, the study used 2 instruments to collect data. The instruments used for data collection and the analysis method are described in detail.

I. Observation with Classroom Assessment Checklist

To answer the first research question on skills mastered by students, an observation method is used. A working journal was created to record participants' interaction during the learning process. Then a classroom based assessment checklist was used. The checklist was developed based on the classroom assessment checklist (pentaksiran bilik darjah) by the Ministry of Education. The checklist guided the journal entries.

II. Customer Satisfaction Survey Questionnaire

To measure customer satisfaction on the quality and usability of the launched products, an online survey was conducted. The survey questionnaire contains 6 questions to be answered by 60 teachers from the school who were the customers. Questionnaire is in five points Likert scale and the data was analysed in percentage.

FINDINGS

In this section, we will discuss the current impact of the projects in 2 years which is from 2019-now, and the customer satisfaction percentage.

Research question 1:

To answer the first research question, a working journal was created guided by the classroom based checklist (Pentaksiran Bilik Darjah). The journal of work progress is presented in Table 1, Table 2 and Table 3 below.

Table 1: Bean Sprout Project

Date	Action Plan	Observation Findings
9/09/2019- 16/09/2019	Students were given hands-on training on how to seed the green bean.	With visual support students were able to remember the steps of bean sprout production.
	1st practical was conducted to enhance students understanding on the subject and improve their harvesting skills.	Students were supported with visual aids to refer to the steps.
23/09/2019- 27/09/2019	2nd practical was conducted	Students were able to carry out the steps with minimal support.
30/09/2019- 04/10/2019	3rd practical was conducted	Students were able to carry out the steps with less support.
07/10/2019- 11/10/2019	4th practical was conducted	Students were able to harvest and process the bean sprout without support. Teacher only supervised.
25/11/2019	5 th practical was conducted	Students are fully independent.
6/01/2020	Harvesting bins were added from 2 to 4 bins.	Students were able to estimate the amount of seeds needed and the growth hormone measurement for 4 bins by referring to the manual.
8/02/2022	6 th practical was conducted	By now, we had 6 times of harvesting fully conducted by the students.

Table 1 shows the journal of bean sprout production. In the bean sprout project which was started in Sept 2019, we had 6 times of harvesting with 4 seeding bins. By the end of February 2020, students were able to carry out the project independently of all the steps. The project resumed after the pandemic and now we have harvested 30 times of bean sprout.

Table 2: Formula Botania Kitchen Soap

Date	Action Plan	Observation Findings
26/08/2020	Practical 1: Students were exposed to the ingredients needed for soap making.	Students were able to identify the ingredients used for soap making.
1/09/2020	Practical 2: Students were taught to follow the steps involved in soap making.	Students were able to follow the steps.
8/09/2020	Practical 3: Students were encouraged to make their own soaps with teacher's guidance.	Students were able to follow the steps with teachers' support.
24/09/2020	Practical 4: Students were making soap with minimal support.	Students were able to make soaps with minimal support from the teacher.
6/10/2020	Practical 5 was carried out.	Teacher faded. Students were able to arrange the ingredients and make soaps independently.
8/10/2020	Practical 6 was carried out.	Students were able to produce 40 boxes of soaps independently.
22/10/2020	Practical 7 was carried out.	Students were able to produce 44 boxes of soap independently.

Table 2 shows the production of Formula Botania kitchen soap. Formula Botania kitchen soap was the second project introduced under the entrepreneurship pedagogy. By July 2020, 84 boxes of kitchen soaps were produced and sold. The project resumed and actively progressed once the school reopened after the pandemic. Currently, we have produced and sold 400 boxes of kitchen soap.

Table 3: Children's Picture Books.

Date	Action Plan	Observation Findings
25/08/2020	All 8 students were given a briefing about the project idea. Teachers showed some sample illustrations. Students were given some storylines and requested to practice illustrations according to the storylines.	Students understood the flow with the help of visuals. Students tried working out illustrations randomly.
26/08/2020	Practical 1. Some characters were described.	Students worked out the illustrations.
1/09/2020	Practical 2. Variety of characters were described.	Students worked out the illustrations.
3/09/2020- 31/09/2020	The illustration for the book, "The Very Hungry Syikin" was initiated.	Students worked on the illustrations for 3 weeks.
5/10/2020- 31/10/2020	The illustration for the book, "The Different Little Ciku" was initiated.	Students worked on the illustrations for 3 weeks.
5/11/2020- 30/11/2020	The illustration for the book, "Tough Love" was initiated.	Students worked on the illustrations for 3 weeks.
5/03/2021- 30/03/2021	The illustration for the book, "Kisah Sekolah PDPR" was initiated.	Students worked on the illustrations for 3 weeks.

Table 3 shows the child's book publishing project which was started in September 2020. By March 2021 we have self-published 4 books and a total of 50 books being sold.

Research question 2:

To answer research question 2, a customer satisfaction survey questionnaire was used. In this section, 6 questions in Likert scale responses were given to the study sample. Data were analyzed in percentage agreement for the items. The findings for the first sub-item which is, purchase frequency by the study sample, 36.5% of the study sample purchased and used the products most regularly. While another 36.5% buy and use the products regularly and only 1.6% have never bought all the products. Next, in the second sub-item, the factors that drive the purchase of products were analyzed. Among the factors that have been given a choice in the questionnaire are such as cleanliness, reasonable price, taste, and quality. The analysis found that 63.5% of the samples had stated all of the above factors that prompted them to continue to use the products produced. If analyzed separately for each factor, a total of 61.9% of the sample agreed that the products are clean and ready to be used. Similarly, with the price factor, 66.7% thought that the price of the products sold was reasonable with the external market price. At the same time, in terms of quality, 68.3% agreed that the products had a high level of usability satisfaction. This shows that the quality of products are at the optimum level which motivated the customers to buy continuously. Finally, the majority of 77.8% of the sample agreed that the entrepreneurship projects should be continued. The results of the study, on the whole, show that the entrepreneurship products have received a high response among consumers where they agree for the products to be produced consistently.

DISCUSSION

Entrepreneurship pedagogy had contributed to developing the entrepreneurial mindset among our students with special needs and ensured continuity by involving parents. It empowered students by encouraging them to take charge of their own learning by choosing the projects which they want to work on, not following teachers blindly. The innovation projects which are mainly on products developed promoted opportunities for social and economic inclusion for these students with disabilities especially the ones from the low functioning categories. As pointed out in the problem statement that the majority of students with special needs from the low functioning categories are perceived as less productive, entrepreneurship skills are certainly a good option for employment. Students have learned the entrepreneurship activities through experience not from the experience of others. As they became experts, students initiated to venture into other products under the same theme. For instance, first students learned to make kitchen soap, later they attempted to make two more varieties which are the liquid dishwasher and laundry powder. Special needs students who are not able to be in full-time employment are exposed to suitable entrepreneurship skills and activities as an alternative. The venture creation approach offered educational tools for teachers to implement entrepreneurship intentions among our students with special needs.

CONCLUSION

Every student with special needs has the right to survive in the community, and one of them is by working. Through working, they can meet their own needs and can live independently, so they do not become a burden for families and communities. However, difficulty in obtaining employment is a major challenge for individuals with special needs. Thus, entrepreneurship is one of the most empowering pathways for people with special needs to break out of dependency, earn a living, and improve their quality of life. Knowing the need for this, entrepreneurship based projects were introduced to the low functioning special needs students in SMK Datuk Haji Abdul Wahab. Although entrepreneurship based syllabus is one of the core elements in the Special Education Curriculum in Malaysia, introducing new projects which are not in the syllabus was needed for students in SMK Datuk Haji Abdul Wahab. The reason being some students from the low functioning categories were not able to follow the 12 vocational based subjects listed in the curriculum. Thus these 3 simple projects were introduced based on students' strengths and abilities. Training them to be independently working on the entrepreneurship activities learned is definitely the outcome we desire by the time these students graduate from our program. Conclusively it is my suggestion that in special education classes, students should be taught to have entrepreneurial mindsets and nurture entrepreneurial intentions in them.

REFERENCES

- Ashwini M. Madawana. (2020). *Distance Education For Special Needs Students in Malaysia and its progress* (Vol. 9, Issue 4, pp. 4006–4010).
- Bahagian Pembangunan Kurikulum. (2019). *Kurikulum Standard Sekolah Menengah Pendidikan Khas*. Kementerian Pendidikan Malaysia. <http://bpk.moe.gov.my/index.php/terbitan-bpk/pendidikan-khas/category/385-dokumen-kurikulum-kemahiran-vokasional-kemahiran>
- Dewi Kurniati, & Herry Widyastono. (2020). Special Education Systems in Five Countries. *Journal of ICSAR*, 4(1), 35–39.
- Dzalani Harun, Normah Che Din, Hanif Farhan Mohd Rasdi, & Khadijah Shamsuddin. (2020). Employment experiences among young malaysian adults with learning disabilities. *International Journal of Environmental Research and Public Health*, 17(1). <https://doi.org/10.3390/ijerph17010115>
- Hien, D. T. T., & Cho, S. E. (2018). Relationship between entrepreneurship education and innovative start-up intentions among university students. *International Journal of Entrepreneurship*, 22(3), 1–16.
- Hishamuddin Ahmad, Siti Eshah Mokshein, Razimi Husin, Norfishah Mat Rabi, Abdul Rahim Hamdan, & Ismail Yusuf Panessai. (2021). Developing a Framework to Measure Competency Levels of Students with Special Needs to Attend Advanced Vocational Courses. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(5), 01–09. <https://doi.org/10.17762/turcomat.v12i5.725>
- Isichei, E. (2021). Entrepreneurial Education and Venture Creation: An Emerging Economy Perspective. *International Journal of Scientific Research in Social Sciences and Management Studies*, June.
- Jasmy Rahman, Hanafi Yassin, Isa Hamzah, Mokhtar Tahar, Zolkepli Haron, & Nur Kamariah Ensima. (2019). Student's Perception Against Special Education Programme. *Atlantis Press*, 388(Icse), 301–304.
- Lundy, K. (2020). An Action Research Project using the Dialogic Story Reading Approach with Children with Autism Spectrum Disorder. *Students Teacher Educational Research E-Journal*, 3(April), 69–76.
- Mohd Ridzuan Md Nasir. (2021). *Asas Penulisan Laporan Kajian Tindakan dan Inovasi*. MENHAJJ RESOURCES KOTA BAHRU.
- Peram, P., & Koteswari, B. (2018). A Study on Challenges Faced by Start-Ups in India. *International Journal of Innovative Science and Research Technology*, 3(7). www.ijisrt.com
- Rezaul Islam. (2015). Rights of the People with Disabilities and Social Exclusion in Malaysia. *International Journal of Social Sciences and Humanity*, 5(2). <https://doi.org/10.7763/IJSSH.2015.V5.447>