MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

OCTOBER 2021, VOLUME 9, ISSUE 4, 73 -96
E-ISSN NO: 2289 – 4489

THE DESIGN OF EFFECTIVE SCHOOL ENTERPRISE PROGRAMME FOR VOCATIONAL COLLEGES IN MALAYSIA: AN APPLICATION OF FUZZY DELPHI METHOD

Norfariza Mohd Radzi* & Muhammad Faizal A. Ghani

Corresponding Author:
Universiti Malaya,
Malaysia

E-mail:
norfariza@um.edu.my

ABSTRACT

The aim of Malaysia Vocational Education Transformation Plan 2012 was to produce self-esteem human capitals, accredited skill workers, lifelong learner and competitive entrepreneurs who can contribute to the country's high-income generation. In the context of Malaysian education, all the Technical and Vocational Colleges' graduates must be equipped with the necessary skills to face their future. Therefore, this study was carried out to design the effective School Enterprise (SE) programme for Vocational Colleges in Malaysia. Specifically, the objectives were to find the elements in the programme and to rank them based on the experts' opinion. The research applied the Fuzzy Delphi method with the sample of experts who consisted of teachers, lecturers, entrepreneurs and officers from the Ministry of Education and government agencies. The first round involved interview sessions with five experts to design the questionnaire for the Fuzzy Delphi. The questionnaires were then distributed to fifteen more experts to gain their opinion on the effective School Enterprise programme's elements. The findings show four main themes/dimensions in this study: (1) programme preparation, (2) programme modules delivery, (3) programme training, and (4) programme implementation. Programme preparation includes understanding the programme, students' readiness, teachers' readiness, school organisations' readiness and module preparation. The dimension of module delivery is divided into two elements that are knowledge and skills. For the dimension of programme training, the two elements found are the programme practical training and reflection. The final dimension of programme implementation includes applying knowledge and skills, achievement assessment and rewards. It is expected that these findings could give guidance to schools, particularly Vocational colleges and the higher authorities on the content of the School Enterprise programme that they should implement to be effective and impactful.

Keywords: **School Enterprise; Vocational Colleges; Effective; Fuzzy Delphi; Malaysia**

INTRODUCTION

Entrepreneurship is recognised as the necessary soft skills that need to be nurtured as early as secondary education. It is associated with the spirit of innovation, the ability to take risks and long-life survival for students' benefit in the future. At the national level, Malaysia's government notably has launched the Shared Prosperity Vision 2030 (Ministry of Economic Affairs Malaysia, 2019) intending to make Malaysia a nation that achieves sustainable growth along with fair and equitable distribution across income groups, ethnicities, regions and supply chains. In line with this, the 10-10 MySTIE Framework also provides a comprehensive approach to transform Malaysia into a knowledge-intensive economy by design. All these require a proper ecosystem chain starting from a well-developed human capital (Academy of Science, Malaysia, 2020).

The contemporary country's development requires individuals to gain a wide range of skills, including entrepreneurship. Thus, education at the school and higher educational institutions emphasise students' ability to master entrepreneurial skills as critical elements in developing soft skills. The School Enterprise (SE) programme implemented by the Vocational College is a product-based education curriculum approach that provides students with opportunities to run for business or product service. A School Enterprise programme or School-Based Enterprise (SBE) is an entrepreneurial operation in a school setting that provides goods/services to meet the market's needs (Holmes, Scott and Hanley, Penelope, 1989). School-Based Enterprise offers realistic and practical learning experiences that reinforce classroom instruction. It is also considered a useful educational tool in preparing students for the transition from school to work. In Malaysia, the School Enterprise programme is the latest concept applied in Vocational College with crucial needs to improve clear policies and guidance for its implementation.

Nevertheless, they were feedback from industry and related agencies that find the lack of entrepreneurship skills by the Technical and Vocational Colleges graduates (Ministry of Education, 2010). Many entrepreneurship courses were still applying the traditional teaching technique in the forms of lectures and notes (Tom, 2003). This kind of instructional method was suitable for more general knowledge but not for a deep and practical understanding. A study done by Musa (1996) indicated that most teachers in the Technical and Vocational colleges have a moderate ability for entrepreneurship with a lack of experiences in handling business or related activities. This situation only exposes students to limited knowledge of entrepreneurial theories and concepts without being equipped with the practical skills necessary to achieve learning outcomes. As Hytti and O'Gorman (2004) mentioned, the form of teaching that can produce entrepreneurial spirit will be achieved through direct and practical experiences.

Therefore, today's education, whether at the school level or higher education, have to expose students to cultivate entrepreneurial skills and product innovation. Among the entrepreneurship curriculum that focuses on real-life experiences is the School Enterprise programme which has been widely implemented in various countries. Hannon, Collins and Smith (2005) define the School Enterprise programme as a programme/curriculum that can produce students who can develop business skills and ready to take risks of profit and loss in running a business. This programme provides an opportunity for students to experience real business operations through practical training or also known as active learning. In Malaysia's context, it is a form of the curriculum in line with Vocational Colleges' other courses aimed at enabling students to market the products or services produced by themselves.

An entrepreneurship course needs to build a curriculum that combines specific theoretical and practical elements to enrich students' knowledge, skills and values. The School Enterprise programme conducted by the Vocational Colleges also needs to be evaluated and improved from time to time to ensure its relevancy. The curriculum review is also in line with the government aspirations to produce highly skilled human capital with extensive knowledge in their fields. Therefore, the purpose of this study is to design an effective School Enterprise programme for Vocational Colleges' implementation in Malaysia. Specifically, this study has two research objectives that are:

1) To find the elements of an effective School Enterprise (SE) programme for Vocational Colleges in Malaysia.
2) To analyse the rank of elements for the effective School Enterprise SE) programme

It is hoped that this profile will become guidance and reference for the curriculum developers of Entrepreneurship courses in Vocational Colleges and lecturers or teachers who will teach this course or programme. Overall, this article consists of several segments which begin with the research background and continue with the literature review, methodology, findings, and the relevant discussion and conclusion.

LITERATURE REVIEW

Entrepreneurship Education

Entrepreneurship refers to the activity of a person undertaking an initiative to get a return from their efforts. According to Kuratko and Hodgetts (2007), entrepreneurship is a process of creation through specific innovations consisting of individuals, organisations, the environment and procedures in collaboration with networks in government, education and the constitution. Individuals are an essential pillar in creating or processing innovations that will be traded in addition to organisations' involvement, interactions with the environment, and joint ventures with external parties. Entrepreneurship is also a symbol of the survival and achievement of a business (Ministry of Higher Education, 2007). A profitable business is the result of continuous innovation towards improvement and consistent efforts by individuals to find business opportunities.

Entrepreneurship education is recognized as the curriculum which consists of formal teaching that educates and trains students concerning the business establishment and operations. In other words, it is a kind of pedagogical process that supports entrepreneurial activities and behaviours for the preparation of real business organisations (Sheikh Md. Monzurul Huq, Sheikh Mohammed Rafiul Huque & Md. Baktiar Rana, 2016). Thus, entrepreneurship education not only brings the relevant content knowledge for the entrepreneurship development but further bring opportunity for students to have the necessary skills through experiential learnings and practical training. In addition, entrepreneurship education enables the learner to build their innovative mind, positive attitude and survival in the economic development of the society (Ministry of Higher Education, 2007).

The School Enterprise programme is a kind of entrepreneurship education embedded with hands-on and practical skills in handling business. According to John, Foley, Frank & Olson (2008), the factors that need to be considered before implementing School Enterprise are to look in terms of its curriculum structure. It requires comprehensive content to ensure that students understand from a theoretical aspect and run the business through practical training in the entrepreneurial part. Tom (2003) states that teachers and students' training and skills are equally essential to achieve the targeted learning objectives. Teachers need to act as mentors to guide students to experience entrepreneurship and share ideas and views to ensure the programme's effectiveness. School Enterprise should be conducted to increase the knowledge, skills and interest of teachers and students towards the best teaching and learning of Entrepreneurship course (Technical and Vocational Education Division, 2014).

School Enterprise (SE) Programme

The School Enterprise programme implemented by Vocational Colleges is a product-based education curriculum approach that provides opportunities for students to run a product or service business (Technical and Vocational Education Division, 2014). In particular, the School Enterprise programme can provide useful input and exposure to future job descriptions. It also offers students an opportunity to apply entrepreneurial skills and management, supervision, and leadership skills (Hanim Zainal, 2016). The School Enterprise concept focuses on the active learning process and exposes students to real-world scenarios and workplace experiences. Students will gain experience in managing the risk and further gain profit or loss in real business settings.

According to Norhana Mustapha, Sumaiyah Mamat Zambi, Rafidah Manap and Mokhtar Pet (2019), the School Enterprise programme is conducted based on three main methods, namely through the production of goods, services or 'trading' or through a combination of more than one way by utilising the teacher and student expertise. Production of goods refers to students' opportunities to market products produced by them and are created through specific innovations. Among the common examples are bakery products, foods, or daily use products such as soap and many more. Meanwhile, services or 'trading' is the marketing of services produced through students' expertise such as salon and beauty services, computer repair, sewing and embroidery, or other skills they learned from their curriculum field.

The School Enterprise programme's implementation is through a formal committee established in the Vocational College, which implements and runs businesses that have been set. It operates under the structure of the Vocational College Cooperative, and the organisation is also under the management structure of that Cooperative (Norhana Mustapha et al., 2019). The School Enterprise Committee is open to all Vocational Colleges students registered under the cooperative while its monitoring is under the Deputy Academic Director of Vocational College's responsibility. Students are encouraged to market their product and services in the open market for example in public places such as carnivals, expos, or any other social media platforms. This situation allows them to experience the real business and subsequently manage them with their knowledge and skills. Besides, they will also understand financial management learned in related courses to help them manage the financial resources for the overall business transactions (Norhana Mustapha et al., 2019).

The Components of Programme/Curriculum Design

There are various instructional design models that become the framework for many practitioners and researchers for education programme and curriculum. All of the frameworks consist of several elements that become the guidance throughout the programme or curriculum implementation. Generally, the curriculum usually begins with the preparation which has been executed in different ways and generally consists of different steps and actions. Preparation is defined as the phase undertaken to arouse the interest of the learner. It involves the discussion about the learning goals and benefits, raise their curiosity and eventually remove any barriers that possibly could arise throughout the learning process (Meier, 2000). In the Gagne's Ninen Events of Instruction, the component of preparation has been presented by the actions of gaining the students' attention, inform students of the objectives and stimulate recall of prior learning (Kurt, 2021). Whereas for the ASSURE instructional design model, it will begin with the process of analyzing learners, state the standards and objectives and further select strategies, technology, media and materials (Smaldino, Russell, Heinrich & Moldenda, 2005)

The implementation of the curriculum has been defined as the execution of course content to the intended audience (Schlegel, 1995). The phase of curriculum or programme implementation is the vital phase which enables students to learn the main content of the curriculum. The curriculum should enable students to learn in multiple ways whether in conventional, experiential learning and many more. Merrill (2002) has elaborate this stage with the need of having a demonstration principle so that the students will gain the content knowledge. It is suggested that the implementation could provide content with demonstration and examples, provide multiple representations of ideas and concepts together with the establishment of relevant media to support effective learning.

Training is considered as an important component which is extended from the earlier component of programme or curriculum implementation. The learning process should provide opportunities for learners to positively manipulate the knowledge and practice the related skills to strengthen the content of the curriculum obtained. This is particularly related to experiential learning in which the learners can integrate new observations with current understanding. Learners have the opportunity to enrich their knowledge through interaction with their environment and this is particularly related to the curriculum that is mainly related to hands-on and practical

sessions. This component was reflected in the Kolb's Four Stages of learning which consist of active experimentation, concrete experience, reflective observation and abstract conceptualization (Kolb, 1984).

For the component of programme delivery, there is a need to provide feedback and assess the performance of learners as described by Kurt (2021). Teachers or instructors need to provide feedback to students to reinforce knowledge and further test the learners' knowledge against specific established criteria. In addition, this component is also described as the process that involves the evaluation of students' performance that match the objectives of the programme. It will inform whether the overall curriculum or programme has been delivered effectively based on the planned flow of implementation which begins with programme preparation (Smaldino, Russell, Heinrich & Moldenda, 2005).

Conceptual Framework

In carrying out this research, the framework is based on Meier's Rapid Instructional Design (RID) model (Meier, 2000). It focuses on active learning that accelerates the understanding process and encompasses a learning environment that emphasises practice, feedback and experience. There are four main components in this model that are related to each other. The four components are the preparation component, the creative presentation component, the training/practice component and the performance and evaluation components. The preparation component is the necessary component to ensure that the curriculum is carried out through adequate preparation. After that, the creative presentation allows students to think actively and interact with various parties to undergo learning by gaining results from experience. Next, students also undergo practical training to complete the need for real skills. Finally, the curriculum needs to be evaluated by looking at the development of performance as well as the ability to achieve targeted learning outcomes. The conceptual framework of this study is shown in Figure 1.

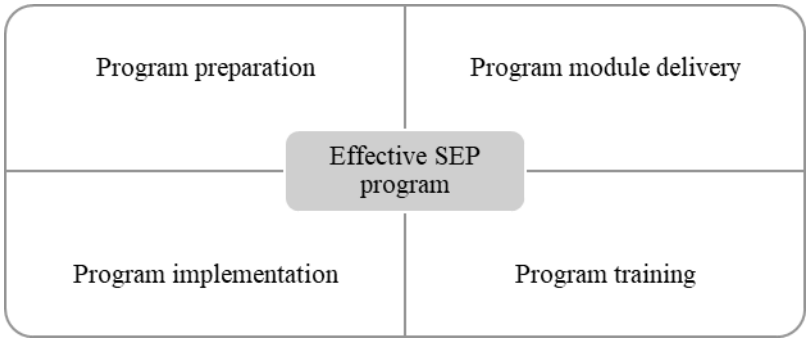

Figure 1. Conceptual Framework

METHODS

Research Design

This study applies the Fuzzy Delphi method, a combination of traditional Delphi methods and Fuzzy numbering sets. The Fuzzy Delphi method is a method used to obtain the consensus of experts who act as respondents based on quantitative methods. The Delphi method was originally a form of study that involved the views of a group of experts in the field under study and usually involved several rounds in producing a consensus on the study's findings. From the original Delphi method, modifications have been made. The combination with Fuzzy analysis has resulted in a more straightforward Fuzzy Delphi method while maintaining its validity through the findings from the panel of experts (Saedah Siraj, Muhammad Ridhuan Tony Lim Abdullah & Rozaini Muhamad Rozkee, 2020).

Sampling

The sample of this study involved fifteen (15) experts involved in entrepreneurship education and business people from various organisations and institutions in Malaysia. It applied a purposive sampling method that consists of selected respondents from among individuals who meet specific criteria. Purposive sampling is considered a type of non-probability sampling which determines the samples based on specific criteria and purposes. As described by Gall, Gall and Borg (2003), purposive sampling usually uses a small sample size as it will help the researcher understand a description of the phenomenon studied in more depth. In this study, the group of experts were selected to be the samples to provide comprehensive views on the elements of School Enterprise (SE). In the selection of experts for this study, the characteristics are (i) an individual who has been involved in the field of entrepreneurship or business education for more than ten years and (ii) willing to give views and participate in the study voluntarily. Therefore, a total of 15 experts have agreed to participate in this study, as listed in table 1:

Table 1
Experts' Demographic Information

Experts' demographics		No. of experts (N)	Percentage (%)
Gender	Male	4	26.7%
	Female	11	73.3%
Age	Less than30 years	1	6.7%
	30 – 39 years	3	20.0%
	40 – 49 years	6	40.0%
	50 years and above	5	33.3%
Level of education	PhD	4	26.7%
	Masters	1	6.7%
	Bachelor degree	10	66.7%
	Diploma / certificate	0	0.0%
No. of years working in the field	5-10 years	6	40.0%
	11-15-years	3	20.0%
	16-20 years	1	6.7%
	21 years and above	5	33.3%

Research Instrument

The research instrument or questionnaire used to obtain expert agreement to prepare an effective School Enterprise programme is built through interviews conducted with five (5) school leaders who offered the entrepreneurship courses/programmes in their schools. The interview was conducted to obtain suggestions on the construction of questionnaire items together with additional information from the literature review related to the entrepreneurship curriculum and School Enterprise programme. The scale used for each item is Likert scale from scale 1 to 5 (Strongly Disagree to Strongly Agree). The built instrument was further confirmed through a pilot study procedure conducted by two experts who had the same characteristics as the actual study experts. Several corrections have been proposed, and the experts have also given improvements to produce questionnaires that fulfilled the validity and reliability. The content validity is obtained through the pilot study by gaining the expert's view on each element's suitability. Then, the face validity can also be obtained from experts on the suitability of the question and the presentation of the entire questionnaire. Based on the experts' feedback, the questionnaire has been improved particularly through modifications to the sentence structure of several items. This resulted in better content and presentation of the whole questionnaire which has been validated for the distribution in the actual fieldwork.

Data Collection

The data collection procedure involves several essential processes in implementing the Fuzzy Delphi study. At the initial stage, the determination and selection of experts are carried out through pre-determined expert criteria. At the next step, questionnaires were constructed through interviews and literature review analysis to produce items for each profile element. Once the questionnaire was built, it was distributed to fifteen experts according to the criteria that have been set. The researcher then converted the Likert scale used in the questionnaire to the Fuzzy scale for purposes of analysis from the findings obtained. Findings from the analysis are interpreted to determine acceptance by the experts and subsequently listed in rankings. (Mohd Ridhuan Mohd Jamil, Saedah Siraj, Zaharah Husain, Nurulrabihah Mat Noh & Ahmad Arifin Sapar, 2019).

Data Analysis

The data analysis procedure was carried out using Fuzzy Delphi by obtaining the Triangular Fuzzy for all the expert answers for the questionnaire items, namely by taking into account the threshold value and the percentage of expert agreement for the Triangular Fuzzy number and the value of Defuzzification. For verifying the Triangular Fuzzy, the first condition involves the threshold value *(d).* To measure expert group consensus, the resulting threshold value *(d)* must be smaller or equal to 0.2 (Chen, 2000; Cheng & Lin, 2002). The second condition involves the percentage of expert group agreement. This condition is based on the traditional Delphi method approach. The percentage value is determined based on the number of items containing the threshold value *(d),* which does not reach a value of 0.2 and above. The use of 66.7% is selected based on the number of experts agree which is 2/3 of the total number of experts. (Chu & Hwang, 2008; Murry & Hammons, 1995). In the case of the threshold value (*d*) of more than 0.2, the item can still be accepted based on the high percentage of expert group consensus of equal or more than 66.7%. For the third condition, the determination of fuzzy score value (A) is based on the value of α– a cut which is 0.5. If the value of the fuzzy score *(A)* is less than 0.5, then the measured item is rejected based on the experts' agreement. If the value is equal to 0.5 and above, it is accepted based on the expert group's agreement. Furthermore, determining the position and priority of the item can be done where the highest fuzzy *(A)* score value is considered to be in the first position (Tang & Wu, 2010; Bodjanova, 2006).

RESULTS

The study's findings successfully listed the four main dimensions in the School Enterprise programme, namely programme preparation, programme modules delivery, programme training, and programme implementation.

Programme Preparation

Programme preparation looks at the preparation by the school organisation before running the School-Enterprise programme. Based on the analyses, the study found five (5) elements under the programme preparation: programme understanding, students' readiness, teacher readiness, school organisation readiness and the element of module preparation.

i. the element of programme understanding

Programme understanding generally described the students' knowledge about the School Enterprise programme at the beginning of this programme. It mainly involves knowing the programme outcome, goals and aims of the programme, the brief curriculum content, and many more expected to be presented by the organisation/schools. The list of items based on the ranking is reflected in the following Table 2. Based on the list, all items are accepted and agreed with a high consensus among the group of experts.

Table 2
The Element of Programme Understanding

Item	*Triangular Fuzzy Numbers*		*Defuzzification Process*	Experts' consensus	Ranking
	The threshold value, d	Percentage of experts' consensus, %	*Fuzzy (A) score*		
Objectives of the programme are explained to students	0.106	93.3%	0.760	Accept	1
The learning outcomes of the programme are explained to students	0.098	100.0%	0.760	Accept	1
The purpose of the programme is explained to students	0.130	93.3%	0.747	Accept	2
The learning structure of the programme is explained to students	0.130	93.3%	0.747	Accept	2
Curriculum content of the programme are explained to students	0.130	93.3%	0.747	Accept	2
Benefits of the programme are explained to students	0.119	100.0%	0.747	Accept	2
Information about the programme arrangement / calendar are given to students	0.163	86.7%	0.733	Accept	3
Tytpes of programme assessment are explained to students	0.149	93.3%	0.733	Accept	3
Organisation of the programme is explained to students	0.163	93.3%	0.720	Accept	4
Information on sources of references for the programme is given to students	0.171	93.3%	0.707	Accept	5
The decision to enter the programme is briefed to students	0.190	86.7%	0.707	Accept	5

ii. the element of student readiness

The following Table 3 lists out the items under the element of students' readiness. Generally, this element is slightly different from the previous one as it indicates the preparedness on the part of the students to involve in the programme. Therefore, students are expected to understand the nature of being an entrepreneur to secure their interest throughout the programme. Based on data, students must understand the advantages and the importance of a career as an entrepreneur. Besides, they are several more things that they need to understand and implement as indicators of their readiness. Based on the analysis, even though the threshold value (d) for all items are more

than 0.2, only two items are rejected which indicate the percentage of experts' consensus of less than 66.7%. Furthermore, the two rejected items also have been considered as unable to fulfil the first condition of the Triangular Fuzzy number, even though they have a Fuzzy score (A) of more than 0.5 in the Defuzzification Process.

Table 3
The Element of Student Readiness

Item	*Triangular Fuzzy Numbers*		*Defuzzification Process*	Experts' consensus	Ranking
	The threshold value, d	Percentage of experts' consensus, %	*Fuzzy (A) score*		
Students understand the advantages of a career as an entrepreneur	0.467	86.7%	0.667	Accept	1
Students understand the importance of a career as an entrepreneur	0.440	80.0%	0.640	Accept	2
Students understand the goals as an entrepreneur	0.440	80.0%	0.640	Accept	2
Students understand the concept of entrepreneurship	0.413	73.3%	0.613	Accept	3
Students understand the challenges of a career as an entrepreneur	0.413	73.3%	0.613	Accept	3
Students understand the environment supporting entrepreneurs	0.413	66.7%	0.613	Accept	3
Students understand entrepreneurial development in a local context ie. Malaysia	0.413	73.3%	0.613	Accept	3
Students are willing to handle a variety of business mediums, for example, direct or online	0.413	80.0%	0.613	Accept	3
Students receive family support in starting business training	0.387	66.7%	0.587	Accept	4
Students understand the characteristics of an entrepreneur	0.400	40.0%	0.600	Reject	-
Students can present the entrepreneurship programme proposal before being accepted	0.320	60.0%	0.511	Reject	-

iii. the element of teacher readiness

In addition to student readiness, teachers need to be prepared mentally and physically to become instructors for this programme. Teachers need to be aware of the essential skills, knowledge and interest to guide students to engage in the programme and eventually equip them with the necessary traits to become entrepreneurs. The following Table 4 lists the essential items to support this element.

Table 4
The Element of Teacher Readiness

Item	*Triangular Fuzzy Numbers*		*Defuzzification Process*	Experts' consensus	Ranking
	The threshold value, d	Percentage of experts' consensus, %	*Fuzzy score (A)*		
Teachers are ready to guide students in the programme	0.152	100.0%	0.707	Accept	1
Teachers understand the need to run an entrepreneurship programme	0.179	86.7%	0.653	Accept	2
Teachers have qualifications in handling entrepreneurship courses / programmes	0.163	86.7%	0.640	Accept	3
Teachers exhibit characteristics as entrepreneurs	0.130	93.3%	0.640	Accept	3
Teachers have skills in running an online business	0.163	86.7%	0.640	Accept	4
Teachers are aware of the issue of entrepreneurship in the outside world	0.177	86.7%	0.627	Accept	5
Teachers have experiences in teaching entrepreneurship courses / programmes	0.114	86.7%	0.613	Accept	6
Teachers have experiences as entrepreneurs	0.141	86.7%	0.573	Accept	7
Teachers have a good network of entrepreneurial training	0.190	73.3%	0.613	Accept	8

iv. the element of school organisation readiness

School organisation also has the responsibility to ensure the necessary preparation are secured for the whole programme to be implemented. As portrays in Table 5, the school organisation readiness includes the understanding of laws and regulations about the business operations at the school level, policies that bind the programme, the relevant resources required to run the programme and several more responsibilities that have to be fulfilled to ensure for the success of the programme. The analysis resulted in all items being accepted based on the agreement from all experts. The items' importance is also ranked according to the priorities as evaluated by the group of experts in this study.

Table 5
The Element of School Organisation Readiness

Item	*Triangular Fuzzy Numbers*		*Defuzzification Process*	Experts' consensus	
	The threshold value, d	Percentage of experts' consensus, %	*Fuzzy score (A)*		Ranking
Schools understand the rules that bind business operations by school students	0.136	100.0%	0.733	Accept	1
Schools have autonomy over programme management	0.152	100.0%	0.693	Accept	2
Schools provide Teaching Aids (ABM) specifically for the programme	0.152	100.0%	0.693	Accept	2
There are specific policies for the implementation of school entrepreneurship programmes by authorities	0.241	86.7%	0.671	Accept	3
Schools build networks with various entrepreneurship training centres	0.217	80.0%	0.667	Accept	4
Schools use cooperatives to help streamline programme management	0.239	80.0%	0.653	Accept	5
Schools are prepared with a variety of relevant resources to run the programme	0.212	86.7%	0.627	Accept	6
Schools build networks with various forms of business	0.227	80.0%	0.618	Accept	7

v. the element of module preparation

The programme's preparation is also considering the general features of the modules that will be implemented throughout the programme/course. Based on Table 6, the modules have to be built to meet the Malaysia Education Quality Standard generated by the government and fulfil the required curriculum purpose, objectives and the necessary entrepreneurship content. The modules also need to be reviewed by experts to ensure their relevance for the market needs. In Table 6, two items are rejected as the conditions of Triangular Fuzzy numbers are not fulfilled even though the Fuzzy score values are more than 0.5.

Table 6

The Element of Module Preparation

Item	*Triangular Fuzzy Numbers*		*Defuzzification Process*	Experts' consensus	Ranking
	The threshold value, d	Percentage of experts' consensus, %	*Fuzzy score (A)*		
The module is built to meet the Malaysian Education Quality Standards	0.152	100.0%	0.707	Accept	1
The module is provided according to the purpose of the programme	0.174	93.3%	0.693	Accept	2
The module is provided to meet the objectives of the programme	0.174	93.3%	0.693	Accept	2
The module contains a variety of entrepreneurial activities	0.171	93.3%	0.680	Accept	3
The module contains the appropriate forms of programme assessment	0.196	86.7%	0.680	Accept	3
The module is built with references to various other relevant modules	0.190	86.7%	0.667	Accept	4
The modules are built to meet the requirements of the National Education Philosophy	0.163	93.3%	0.667	Accept	4
The module covers direct and online sales businesses	0.261	73.3%	0.640	Accept	5
The module is built with references to various relevant scientific / academic resources	0.228	73.3%	0.640	Accept	5
The module is built with references to market needs	0.163	86.7%	0.640	Accept	5
The module is built by experts in the field of entrepreneurship	0.163	86.7%	0.640	Accept	5
The module review is made annually to ensure they are relevant and up to date	0.196	80.0%	0.640	Accept	5
The module is built after going through the benchmarking process	0.204	40.0%	0.600	Reject	-
The module is built by taking into account the quality of the school entrepreneurship programme internationally	0.277	53.3%	0.560	Reject	-

Programme Module Delivery

Programme module delivery refers to the modules' necessary content and how the entire programme module is presented to students. Thus, it is divided into two main elements: knowledge delivery and skills delivery.

i. the element of knowledge delivery

The element of knowledge delivery consists of the highest numbers of items, as reflected in Table 7. The lists consist of all topics necessary in developing an entrepreneur and what they should understand about entrepreneurship and its organisations. Failure to understand the concepts will reduce an entrepreneur's competency as it will guide them in handling and managing business organisation to be effective, efficient, and profitable. Table 7 shows that all items are accepted with only one item is rejected which is 'module contains descriptions of entrepreneurial history from various perspectives.

Table 7
The Element of Knowledge Delivery

Item	*Triangular Fuzzy Numbers*		*Defuzzification Process*	Experts' consensus	Ranking
	The threshold value, d	Percentage of experts' consensus, %	*Fuzzy score (A)*		
The module describes the accounting and financial management procedures of a business	0.152	100.0%	0.707	Accept	1
The module contains a description of the concepts of entrepreneurs and entrepreneurship	0.174	93.3%	0.693	Accept	2
The module contains a description of business culture	0.171	93.3%	0.680	Accept	3
The module contains a description of social responsibility	0.171	93.3%	0.680	Accept	3
The module contains a description of the consumerism	0.171	93.3%	0.680	Accept	3
The module describes the functions of the various structures of a business organisation	0.196	93.3%	0.680	Accept	3
The module explains the concept of innovation in business	0.171	93.3%	0.680	Accept	3
The module explains the concept of blessing in business	0.171	93.3%	0.680	Accept	3

The module explains the concept of online business	0.196	86.7%	0.680	Accept	3
The module describes the advantages of a career as an entrepreneur	0.163	93.3%	0.667	Accept	4
The module contains an explanation of entrepreneurial ethics	0.190	86.7%	0.667	Accept	4
The module explains the laws in business conduct	0.190	86.7%	0.667	Accept	4
The module explains the concept of business opportunities	0.190	86.7%	0.667	Accept	4
The module describes the diversity of business forms	0.217	86.7%	0.667	Accept	4
The module describes the organisational structure of a business	0.217	86.7%	0.667	Accept	4
The module describes the administration of a business organisation	0.190	93.3%	0.667	Accept	4
The module explains the importance of business plans	0.163	93.3%	0.667	Accept	4
The module explains the business plan preparation guide	0.163	93.3%	0.667	Accept	4
The module explains the concept of creativity in business	0.163	93.3%	0.667	Accept	4
The module explains the concept of business marketing	0.163	93.3%	0.667	Accept	4
The module describes the ethics of online business	0.190	86.7%	0.667	Accept	4
The module describes the self-development of an entrepreneur	0.209	86.7%	0.653	Accept	5
The module describes career challenges as an entrepreneur	0.209	80.0%	0.653	Accept	5
The module describes the various forms of resources to start a business	0.209	86.7%	0.653	Accept	5
The module describes the operation of a business	0.209	86.7%	0.653	Accept	5
The module describes the role of human resource management in business	0.209	86.7%	0.653	Accept	5
The module explains the	0.209	86.7%	0.653	Accept	5

concept of production / service in business					
The module reveals various entrepreneurial issues in specific programmes such as Entrepreneur Talk	0.239	80.0%	0.653	Accept	5
The module describes the diversity of capital set up of a business	0.228	80.0%	0.640	Accept	6
The module describes how to set up a business	0.261	73.3%	0.640	Accept	6
The module explains the purpose of the business plan	0.196	80.0%	0.640	Accept	6
The module describes the preparation of market research	0.228	80.0%	0.640	Accept	6
The module describes the laws of online business	0.228	73.3%	0.640	Accept	6
The module explains the importance of a career as an entrepreneur	0.212	73.3%	0.627	Accept	7
The module explains the concept of investment	0.228	73.3%	0.613	Accept	8
The module contains descriptions of entrepreneurial history from various perspectives	0.269	53.3%	0.587	Reject	-

ii. the element of skills delivery

In addition to knowledge, skills are also equally important aspects that need to be trained in this School Enterprise programme. Table 8 lists out all the items that have been accepted with the highest consensus among a panel of experts. Skills development aims to provide students with real-life experiences as an entrepreneur as it will bring exposure to students on business operation. Among the items included in this element are students' effort to attend entrepreneurship seminars, visits to relevant business enterprise, practices of online business and many more activities that could enhance the students' skills in conducting a business. Based on the analysis of all items in Table 8, four items have been rejected as they did not fulfil the conditions for the Triangular Fuzzy Numbers even though the Fuzzy scores are more than 0.5.

Table 8
The Element of Skills Delivery

Item	*Triangular Fuzzy Numbers*		*Defuzzification Process*	Experts' consensus	Ranking
	The threshold value, d	Percentage of experts' consensus, %	*Fuzzy score (A)*		
Students attend entrepreneurship seminars / forums	0.171	93.3%	0.680	Accept	1
Entrepreneurship modules are presented by various parties, i.e. teachers, entrepreneurs, field experts etc.	0.163	93.3%	0.667	Accept	2
Students visit business expos / exhibitions	0.190	93.3%	0.667	Accept	2
Students are exposed to effective communication methods	0.190	86.7%	0.667	Accept	2
Students make visits to various business premises	0.179	86.7%	0.653	Accept	3
Students master the knowledge of business 'apps'	0.239	80.0%	0.653	Accept	3
Students study various examples of Business Plans	0.228	80.0%	0.640	Accept	4
Students are briefed by the lending agency	0.228	73.3%	0.640	Accept	4
Students are exposed to effective consultation techniques	0.228	80.0%	0.640	Accept	4
Students master the operation of accounting software and business financial management	0.228	80.0%	0.640	Accept	4
Students understand the diversity of online business networks	0.196	86.7%	0.640	Accept	4
Students learn to build websites for online businesses	0.228	80.0%	0.640	Accept	4
Students make visits to various entrepreneurship development training institutions	0.212	73.3%	0.627	Accept	5
Students receive input from presentations by various entrepreneurial agencies at school	0.212	73.3%	0.627	Accept	5
Students make visits to a company listed on the stock	0.274	60.0%	0.564	Reject	-

exchange					
Students study the development of businesses	0.253	60.0%	0.573	Reject	-
Students study the support system of a business	0.204	40.0%	0.600	Reject	-
Students do research on entrepreneurial figures	0.244	33.3%	0.604	Reject	-

Programme Training

Programme training refers to the practice before the student runs the actual School-Enterprise programme. It is held in practical form, and students will receive feedback for further improvement. Therefore, it consists of two elements: programme practical training and programme training reflection/feedback element.

i. the element of programme practical training

Table 9 shows the early practical training teachers and Vocational colleges can consider before the students are officially involved in the School Enterprise programme and run their own business. As suggested by experts, students should have their own business plan/proposal and equip themselves with specific online marketing or pitching techniques. The internship programme with other business is also useful to enhance students' ability to run their enterprises. Table 9 also shows that only 4 items have been accepted with the results of experts' consensus of more than 66.7% and Fuzzy score (*A*) of more than 0.5.

Table 9
The Element of Programme Practical Training

Item	*Triangular Fuzzy Numbers*		*Defuzzification Process*	Experts' consensus	Ranking
	The threshold value, d	Percentage of experts' consensus, %	*Fuzzy score (A)*		
Students discuss to prepare a business plan/proposal	0.212	73.3%	0.627	Accept	1
Students undergo website design training for online businesses	0.212	80.0%	0.627	Accept	1
Students undergo pitching exercises	0.228	66.7%	0.613	Accept	2
Students undergo training using a variety of software for online businesses	0.228	73.3%	0.613	Accept	2
Students undergo initial training in the School Enterprise programme	0.244	20.0%	0.600	Reject	-
Students participate in business innovation competitions	0.304	60.0%	0.613	Reject	-
Students prepare their	0.301	46.7%	0.547	Reject	-

own business plan/proposal					
Students undergo 'internship' training in selected businesses.	0.315	46.7%	0.564	Reject	-
Students organize entrepreneurship seminars	0.282	60.0%	0.538	Reject	-
Students engage in entrepreneurship forums	0.224	60.0%	0.578	Reject	-

i. the element of programme training reflection/feedback

Training requires feedback and enables students to improve themselves and further develop to become good entrepreneur. Therefore, all items listed in Table 10 have been agreed upon by experts for strengthening students' skills and knowledge. Based on the ranking, feedback from teachers and peers is essential, followed by other aspects such as the presentation of progress reports and formal discussion/dialogues with selected entrepreneurs.

Table 10
The Element of Programme Training Reflection/Feedback

Item	*Triangular Fuzzy Numbers*		*Defuzzification Process*	Experts' consensus	Ranking
	The threshold value, d	Percentage of experts' consensus, %	*Fuzzy score (A)*		
Students receive teacher feedback for improvement	0.217	80.0%	0.667	Accept	1
Students receive peer feedback from discussions conducted	0.217	80.0%	0.667	Accept	1
Students present their results of visits to selected businesses	0.239	73.3%	0.653	Accept	2
Students write a report on the entrepreneurial training activities carried out	0.239	80.0%	0.653	Accept	2
Students hold formal dialogues with selected entrepreneurs	0.228	66.7%	0.613	Accept	3
Students present business analyses made in the form of statistics	0.266	73.3%	0.613	Accept	3

Programme Implementation

Programme implementation refers to the actual performance of School-Enterprise in the student learning process. The programme involves the entire organisation of a business enterprise in college with specific commodities or services that will be traded. Thus, there are three main elements: elements of knowledge and skills applications, elements of achievement assessment, and reward elements involved in this programme implementation.

i. the element of knowledge and skills applications

The implementation of School Enterprise will apply both the knowledge and skills taught in the classroom setting. Students have to manage the whole business resources which involve the sales of products, the management of resources, marketing, financial management and even human resource management. Table 11 lists out the items in detail and communicates confidently with customers has become the main item suggested by experts. Besides, students will also apply various knowledge and skills necessary to manage the business through direct sales or online. In addition, 4 items have been rejected as they are unable to fulfil the acceptable values for Triangular Fuzzy numbers for both the threshold value (*d*) and percentage of experts' consensus.

Table 11
The Element of Knowledge and Skills Applications

Item	*Triangular Fuzzy Numbers*		*Defuzzification Process*	Experts' consensus	Ranking
	The threshold value, d	Percentage of experts' consensus, %	*Fuzzy score (A)*		
Students can communicate with customers in confidence	0.171	93.3%	0.707	Accept	1
Students can promote the businesses either directly or online	0.174	93.3%	0.693	Accept	2
Students communicate well with suppliers	0.196	86.7%	0.680	Accept	3
Students explain to other members of the business	0.190	86.7%	0.667	Accept	4
Students manage business resources effectively	0.196	80.0%	0.640	Accept	5
Students demonstrate self-competence as an entrepreneur	0.163	86.7%	0.640	Accept	5
Students set up their own business online	0.282	73.3%	0.627	Accept	6
Students set up a business organization	0.247	73.3%	0.627	Accept	6
Students set up their own business directly	0.272	46.7%	0.587	Reject	-
Students seek capital from various sources	0.244	33.3%	0.600	Reject	-
Students manage business finances systematically	0.244	26.7%	0.600	Reject	-
Students set up the entire operation of the business	0.244	33.3%	0.600	Reject	-

ii. the element of achievement assessment

At the end of the programme, an assessment is required to test the overall students' achievement of the programme learning outcomes and the ability of students to conduct their own business. Therefore, Table 12 consists of all items for the students' assessment which is comprehensive enough to measure their performance as an entrepreneur. All items are accepted and received high consensus among the group of experts.

Table 12
The Element of Achievement Assessment

Item	*Triangular Fuzzy Numbers*		*Defuzzification Process*	Experts' consensus	Ranking
	Threshold, value, d	Percentage of experts' consensus, %	*Fuzzy score (A)*		
Students receive customer feedback on the products/services being traded.	0.171	93.3%	0.680	Accept	1
Students evaluate the profitability of the business conducted	0.171	93.3%	0.680	Accept	1
Students present reports on the programme conducted	0.163	93.3%	0.667	Accept	2
Students present a summary of the programme conducted	0.190	93.3%	0.667	Accept	2
Students receive teacher feedback on the business they conduct	0.190	86.7%	0.667	Accept	2
Students evaluate the success of other group programmes	0.228	80.0%	0.640	Accept	3
Students receive supplier feedback in handling business resources	0.228	80.0%	0.640	Accept	3
Students receive 'reviews' from the online business they conduct	0.261	80.0%	0.640	Accept	3
Students specifically evaluate the success of the business they have run	0.177	86.7%	0.627	Accept	4

i. the element of reward

A reward has always become a motivation that could help learners to improve themselves. It is a form of appreciation and internally supports all the hard work and efforts students have presented throughout the learning process. The following items in Table 13 show various forms of rewards obtained by students at the end of

the programme. The ultimate reward will be the marks that can present students' overall achievement in the School Enterprise programme and follow several other forms of compensation due to achievement in managing School Enterprise.

Table 13
The Element of Reward

Item	*Triangular Fuzzy Numbers*		*Defuzzification Process*	Experts' consensus	Ranking
	The threshold value, d	Percentage of experts' consensus, %	*Fuzzy score (A)*		
Students receive marks commensurate with the commitment given	0.152	100.0%	0.707	Accept	1
Students receive shares of the profits generated	0.196	86.7%	0.680	Accept	2
Students can increase their knowledge in the field of entrepreneurship	0.171	93.3%	0.680	Accept	2
Students can improve their skills in entrepreneurship	0.171	93.3%	0.680	Accept	2
Students can improve their business management experience	0.196	86.7%	0.680	Accept	2
Students can understand the values contained in entrepreneurial knowledge	0.171	93.3%	0.680	Accept	2
Students receive praise for the success of running a business	0.163	93.3%	0.667	Accept	3
Students add to the network of relationships in business	0.190	86.7%	0.667	Accept	3
Students receive rewards from teachers based on their commitment to managing the business	0.149	93.3%	0.653	Accept	4

DISCUSSIONS

Based on the findings obtained from the analysis conducted, there are four main dimensions for an effective School Enterprise programme: programme preparation, programme module delivery, programme training and programme implementation. There are five elements found for the programme preparation dimension, two elements for programme module delivery, two elements for the programme training dimension and three elements for the programme implementation dimension. All these elements prove the common process includes in most instructional design models particularly the models that are more applicable for hands-on and practical experience (Kurt, 2021; Smaldino, Russell, Heinrich & Moldenda, 2005; Schlegel, 1995 and Merrill, 2002).

The profile that has been designed based on expert views prove that effective teaching requires an organised curriculum structure as suggested by John, Foley, Frank and Olson (2008). It starts with the component of programme preparation to ensure that all parties can prepare well and implement the curriculum more effectively. Based on the findings, students personally need to prepare themselves with the appropriate preparation. There are several elements included in the phase of programme preparation with a similar pattern as the previous studies. These studies also prove that preparation can include the process of gaining students' attention, setting up the programme objectives and all the relevant material needed for the curriculum implementation and execution (Kurt, 2021; Smaldino, Russell, Heinrich & Moldenda, 2005). Generally, the learners will understand the objectives of the study, content and the context so that to remove the barriers that reduce their engagement in the lesson.

Besides, teachers also need to equip themselves with entrepreneurial knowledge and skills. The school organisation's readiness is also taken into account specifically in providing optimal facilities and teaching resources, mainly to ensure the smooth training programmes in practice. A suitable module or syllabus consisting of a comprehensive and balanced entrepreneurship curriculum is vital for implementing the School Enterprise programme. This study also supports the study by the Technical and Vocational Education Division (2014), which emphasises the programme/curriculum's content that can increase the interest, knowledge, and skills of teachers and instructors. It can be generated through active learning such as hands-on experience in line with the Kolb's Four Stages of learning (Kolb, 1984). The element of teacher readiness, for example, emphasises the need for teachers to have qualifications and experience in conducting entrepreneurship programmes as well as ready to guide students to improve their knowledge and skills. Also, teachers in this programme need to have a good network of entrepreneurial training and knowledge on entrepreneurship issues from the outside world. All these efforts will give aspirations to students to learn entrepreneurial curriculum effectively.

The findings of this study are also in line with the opinion of Tom (2003). He stated that teachers and students' training and skills are equally essential to achieve the set learning objectives. It will only be implemented if the school organisation is also involved in providing a conducive environment and relevant resources to maintain the skills of teachers and students. Among the results of this study also stated the need for schools to create cooperatives to help launch programme management, build networks with various forms of business outside, and build communication networks with various entrepreneurship training centres. All these efforts are seen to develop and maintain the interest, knowledge and skills of teachers and students towards producing an effective and impactful School Enterprise programme.

Among the important findings of this study was the component of programme implementation which consist of the knowledge and skills application, achievement assessment and the element of reward. It proves that students need to be evaluated on their understanding of the content knowledge and the relevant skills so that to be able to apply in the real context and situation. These findings support the study by Smaldino, Russell, Heinrich & Moldenda (2005) which highlighted the need for students to be assessed so that to confirm that the programme has been delivered effectively. This phase is also particularly important for students to have time and opportunity to integrate and apply the new skills. This kind of integration then allows students to apply it to their daily life and resolve any concern and issues pertaining to the field. (Merrill, 2002).

LIMITATION OF THE STUDY

Despite the data collected for this study was derived from the view of experts, it was still subjected to several limitations. The overall findings were presented based on the background of knowledge and experience of the individual experts which might affect their opinion on the elements of the School Enterprise programme. In addition, the findings of this study could not be generalized to other schools that also established their Entrepreneurship programmes as this study was based on the context of Vocational colleges and might differ from other types of schools.

CONCLUSION

In conclusion, this study successfully listed four main dimensions in School Enterprise management: programme preparation, programme modules delivery, programme training and programme implementation. This study has also listed the content for each Vocational College's dimensions in the School Enterprise operations. Therefore, various stakeholders, whether curriculum developers or schools and teachers as implementers, need to take a proactive approach to ensure the quality of the School Enterprise programme and its effectiveness. Overall, this study is expected to guide vocational/technical / entrepreneurship schools in implementing the entrepreneurship curriculum, especially School Enterprise programmes. Apart from that, it can also guide curriculum developers in entrepreneurship to consider various vital elements in an effective curriculum, including in the aspect of curriculum preparation/programmes carried out. The theoretical component has succeeded in producing a proposal model that can support a more practical Entrepreneurship Education curriculum. From this change in practical aspects, it can also guide institutional management on the provision of Teaching Aids (ABM) of entrepreneurship courses that are more relevant and necessary for the achievement of effective learning outcomes.

ACKNOWLEDGEMENT

This research was supported by the University of Faculty Research Grant (GPF 2018) no. GPF014O – 2018. The financial support covered the entire research process, including data collection, analysis and presentation of results.

REFERENCES

Academy of Science Malaysia. (2020). *10-10 Malaysian Science, Technology, Innovation and Economy (MySTIE) Framework: Trailblazing the way for prosperity, societal well-being & global competitiveness*. Kuala Lumpur: Academy of Science Malaysia

Bodjanova, S. (2006). Median alpha-levels of a fuzzy number. *Fuzzy Sets and Systems, 157,* 879-891. Doi: 10.1016/j.fss.2005.10.015

Chen. (2000). Extensions of the topics for group decision-making under Fuzzy environment. *Fuzzy Sets and Systems, 114*(1), 1-9. Doi: https://doi.org/10.1016/S0165-0114(97)00377-1

Cheng, C.H., & Lin, Y. (2002). OR Applications: Evaluating the best main battle tank using fuzzy decision theory with linguistic criteria evaluation. *European Journal of Operational Research, 142,* 174-186. Doi: 10.1016/S0377-2217(01)00280-6.

Chu, H.-C., & Hwang, G.-J. (2008). A Delphi-Based approach to developing expert systems with the cooperation of multiple experts. *Expert Systems with Applications, 34*, 2826-2840. Doi: 10.1016/j.eswa.2007.05.034

Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational research: An introduction (7th ed.).* Boston: Allyn & Bacon.

Hanim Zainal. (2016). *Kesediaan pensyarah teknikal terhadap pelaksanaan School Enterprise di Kolej Vokasional Wilayah Utara.* (Unpublished master's thesis). Universiti Tun Hussein Onn Malaysia, Johor.

Hannon, P.D., Collins, L.A. & Smith, A. J. (2005). Exploring graduate entrepreneurship: A collaborative, co-learning based approach for students, entrepreneurs and educators. *Industry and Higher Education, 19*(1), 11-23

Holmes, Scott and Hanley, Penelope. (1989). School Based Enterprise in Australia: Where do we go from here? *Journal of Education and Work, 2: 3,* 17 — 28

Hytti, Ulla & O'Gormon, Colm. (2004). What is "Enterprise Education"? An analysis of the objectives and methods of enterprise education programmes in four European countries. *Education + Training, 46(*1), 11-23.

John, G., Foley, C., Frank, A., & Olson, C. (2008). Developing and operating school-based Enterprise that empower special education students to learn and connect classroom, community and career related skills. *The Journal for Vocational Special Needs Education, 31*, 1-3.

Kolb, D.A. (1984). *Experiential learning: Experience as the source of learning and development.* Englewood Cliffs, NJ: Prentice Hall.

Kuratko, D. F. & Hodgetts, R, M. (2007). *Entrepreneurship: Theory, process, practice.* Mason. OH: Thomson/South-Western Publishing.

Kurt, S. (2021). Gagne's Nine Events of Instruction. *Educational Technology*, January 1, 2021. Retrieved from https://educationaltechnology.net/gagnes-nine-events-of-instruction/

Meier, D. (2000). *The accelerated learning handbook*. New York: McGraw-Hill

Merrill, M. D. (2002). First principles of instructional design. *Educ. Technol., Res. Dev*. *50*, 43–59.

Ministry of Economic Affairs Malaysia. (2019). *Shared Prosperity Vision 2030: Restructuring priorities of Malaysia's development*. Putrajaya: Ministry of Economic Affairs Malaysia

Ministry of Education Malaysia. (2010). *Garis panduan pelaksanaan School Enterprise Kolej Vokasional, Kementerian Pendidikan Malaysia*. Putrajaya: Kementerian Pendidikan Malaysia.

Ministry of Higher Education. (2007). *Asas pembudayaan keusahawanan.* Sintok, Kedah: UUM Press.

Mohd Ridhuan Mohd Jamil, Saedah Siraj, Zaharah Husain, Nurulrabihah Mat Noh & Ahmad Arifin Sapar. (2019). *Pengenalan asas kaedah Fuzzy Delphi dalam penyelidikan rekabentuk pembangunan.* Kuala Lumpur: Minda Intelek.

Murry, J., W. & Hammons, J., O. (1995). Delphi: A versatile methodology for conducting qualitative research. *The Review of Higher Education. 18*(4), 423=436. Doi: 10.1353/rhe.1995.0008

Musa, S. (1996). *Persepsi guru terhadap keperluan pelajar dan keupayaan mengajar kemahiran keusahawanan dalam mata pelajaran Elektif Vokasional dan Teknologi*. (Unpublished master's thesis). Universiti Putra Malaysia.

Norhana Mustapha, Sumaiyah Mamat Zambi, Rafidah Manap & Mokhtar Pet. (2019). *Siri Kolej Vokasional: Keusahawanan.* Shah Alam, Malaysia: Oxford Fajar Sdn Bhd.

Hannon, P.D., Collins, L.A. & Smith, A. J. (2005). Exploring graduate entrepreneurship: A collaborative, co-learning based approach for students, entrepreneurs and educators. *Industry and Higher Education, 19*(1), 11-23

Saedah Siraj, Muhammad Ridhuan Tony Lim Abdullah & Rozaini Muhamad Rozkee. (2020). *Pendekatan penyelidikan rekabentuk dan pembangunan.* Perak, Malaysia: Universiti Pendidikan Sultan Idris.

Schlegel, M.J. (1995). *A handbook of instructional and training programme design*. ERIC Document Reproduction Service ED383281.

Sheikh Md. Monzurul Huq, Sheikh Mohammed Rafiul Huque & Md. Baktiar Rana. (2016). Entrepreneurship education and university students' entrepreneurial intentions in Bangladesh. In Neeta Baporikar (Ed.). *Handbook of research on Entrepreneurship in the contemporary of knowledge-based global economy.* Hershey, PA: Business Science Reference (an imprint of IGI Global).

Smaldino, S.E., Russell, J. D., Heinrich, R. & Moldenda, M. (2005). *Instructional media and technologies for learning (8th ed.)* New Jersey: Merrill Prentice Hall.

Tang, C.W., & Wu, C.T. (2010). Obtaining a picture of undergraduate education quality: A voice from inside the university. *Higher Education (3),* 269.

Technical and Vocational Education Division. (2014). *Garis panduan pelaksanaan School Enterprise (SE), Kolej Vokasional (KV).* Putrajaya: Kementerian Pendidikan Malaysia.

Tom, B. (2003). *Teaching entrepreneurship to engineers & scientists.* Stanford Technology University: Price Babson.