

**Entrepreneurship education: The implementation in Year 1
primary school curriculum in Malaysia. A case study of one
district in East Peninsular Malaysia**

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Abstract

In recent years, there has been an increasing interest in entrepreneurship education and it has taken hold across the world, including Malaysia. In 2011, the Malaysian Ministry of Education (MOE) reformed its primary school curriculum and introduced entrepreneurship education into the new curriculum on a cross-curricular basis. Based on field work undertaken in one of the districts in Malaysia, this study investigates the perceptions of a selected group of respondents concerning the implementation of the government's new entrepreneurship education programme in Year 1. It looks at respondents' understanding of the entrepreneurship element, their views on the purpose of its implementation and the pedagogical and political issues faced during the implementation process. The research also focuses on other important theoretical issues including curriculum reform, human capital and entrepreneurship education.

This is a qualitative research study using a case study approach. It was conducted based on in-depth interviews with 48 respondents from five different groups of professionals (officers, headteachers, subject teachers, expert teachers and teachers' trainers). Respondents were selected using different sampling methods and the acquired data were analysed using Nvivo 9 software. A thematic analysis approach was used to identify themes. The findings suggest that there were relatively different views on the concept and purpose of entrepreneurship education. Specific differences between the implementers (the teachers), headteachers and curriculum developers were also identified. Nevertheless, most respondents agreed that the implementation was a positive development and most respondents had similar opinions concerning the cross-curricular approach. As expected, the findings also showed that the lack of monitoring and poor training had slowed down the implementation. Since there has been little research carried out on entrepreneurship education in primary schools especially in Malaysia, this study will be relevant for the design of future policies in the region and future academic research. It not only reveals the respondents' perceptions and the actual practice in schools, but it also contributes to the body of knowledge on entrepreneurship education and curriculum reform for future reference.

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Declaration

I hereby declare that this thesis is an original piece of work of mine. No part of this thesis has been previously published or submitted for another award or qualification in other institutions or universities.

I declare that all the material in this thesis which is not my own, has to the best of my ability, been acknowledged. The material in the thesis has not been submitted previously by the author for a degree at this or at any other university.

CHAPTER 1

Introduction

1.1 Introduction

Entrepreneurship education programmes have been proliferating rapidly over the past twenty years (World Bank, June 2013) and the benefits of these programmes have attracted many countries to implement them. For instance, the European Commission has long supported entrepreneurship education among its member states as it knows that entrepreneurship education helps to develop an entrepreneurial mindset and to provide the necessary knowledge and skills for developing an entrepreneurial culture (European Commission, March 2012). Entrepreneurship education also helps individuals to participate in entrepreneurial activities (World Bank, 2013). A recent report by the European Commission indicated that student participation in entrepreneurship education at secondary school level had resulted in 15% to 20% of students starting their own businesses (European Commission, February 2013). Noel (2001) also reported that entrepreneurship graduates are more likely to be involved with business and to become entrepreneurs.

As a fast growing programme, entrepreneurship education has clearly attracted attention (Mwasalwiba, 2010). Policy makers have been attracted to opt for entrepreneurship education as it can help to solve high youth unemployment rates (UNESCO,¹ 2013). Entrepreneurship education also supports the growth of small business enterprises which help to contribute to economic development through job creation (Falkang & Alberti, 2000). Because of its contribution to economic growth, awareness of the importance of entrepreneurship education has been raised (Carland &

¹This memo resulted from the 2nd UNESCO-APEID (Asia-Pacific Programme of Educational Innovation for Development) meeting on Entrepreneurship Education held in China (26-27 March 2013). This information can be extracted from the UNESCO website at <http://www.unescobkk.org/education/apeid/entrepreneurship-education/2nd-unesco-apeid-meeting-on-entrepreneurship-education/>

Carland, 2004). Malaysia, like other countries, has recognized the importance of entrepreneurship education. Because of the positive contribution which entrepreneurship may make to national and individual growth, the Malaysian government, through the Ministry of Education (MOE), has recently initiated entrepreneurship education² in primary schools. An entrepreneurship education element was introduced as part of a curriculum reform in January 2011 and this research study will look at its implementation.

The aim of this study is to investigate the views of curriculum officers, headteachers, expert teachers, teachers' trainers and subject teachers³ concerning the implementation of entrepreneurship education in the new 'Standards-based Primary School Curriculum' (KSSR⁴). Under this new curriculum, all Year 1 teachers have to incorporate entrepreneurship education into their subject and it has to be embedded using a cross-curricular approach. There are many people who are involved with the implementation of this new element and this study will explore their perception of the entire process. Their understanding of entrepreneurship education and the issues they have faced (especially the teachers) during the implementation are also explored. This research study was conducted in one single district and all the respondents were interviewed using semi-structured interviews.

1.2 Background of the research

Malaysia is moving toward becoming a developed country and the development of human capital in the nation is very important (Norasmah, Norashidah & Hariyanty, 2012). This goal can be achieved through education (Malaysia, 2010). According to Becker (1975), there is a positive connection between human capital and education; when we improve education, the quality of human capital also increases and this can

²Entrepreneurship education in primary school had been implemented as a cross-curricular element. This element is called the 'entrepreneurship element' (E-element). This will be explained further in Chapter 2.

³Subject teachers will also be referred simply as 'teachers' hereafter.

⁴KSSR is a Malay acronym used for the new curriculum and it stands for *Kurikulum Standard Sekolah Rendah*.

improve people's social lives. Investment in human capital also helps to improve economic growth (Galor & Tsiddon, 1997). Realising the potential benefits of this, the government established a strategy for developing human capital through education and entrepreneurship training (Ab. Aziz, 2010).

As mentioned above, entrepreneurship education was incorporated in the curriculum reform introduced in 2011. According to the Curriculum Development Centre (2011), the purpose of the transformation of the curriculum was to ensure that students are provided with essential and required knowledge, skills and values to prepare them for facing the challenges of the twenty-first century. The world is changing rapidly and technological advancement has been boosted by increasing globalisation and development in the twenty-first century (Hamdan & Nasrudin, 2000). In order to face these changes, Abdul Said *et al.* (2013) have argued that the government must provide a suitable curriculum which is consistent with the changes in the education world. There is also a need to develop students' competencies and problem-solving abilities (Jerald, 2009). Therefore, the introduction of entrepreneurship education is seen as an ideal approach as it will help to develop competent and skilled human capital (CDC,⁵2012).

The MOE's approach to entrepreneurship education was not new. In 1993, the Ministry introduced Primary School Living Skills (referred as Living Skills hereafter) as a subject which incorporated an entrepreneurship component into the primary school curriculum. Living Skills was a practical-based education and one of the subjects which was taught to Level 2 students (Year 4 to Year 6); it was therefore already part of the previous curriculum. This subject was formulated to instil an awareness of technology by allowing students to master basic general knowledge and practical skills of *technology* and *entrepreneurship* (CDC, 2004a). Learning Living Skills provides students with real experience of playing with real tools and materials while at the same time encouraging them to be creative and innovative. The Living Skills syllabus was divided into two major components, *Design and Technology* and

⁵CDC is acronym for Curriculum Development Centre

Business and Entrepreneurship. Through these two components, students were given opportunities to be involved in several activities including designing and carrying out projects using a range of materials, as well as learning about electricity and electronic components, repairing, sewing, seed planting, business transaction and many more.

According to the CDC (2011), the new entrepreneurship education in primary school will involve processes which develop students' entrepreneurial characteristics, attitudes, thinking skills and individual values toward becoming entrepreneurs. It is seen as an effort to face globalisation and meet current and future challenges (*ibid.*). As part of the new curriculum, entrepreneurship education is compulsory and has to be taught by all primary school teachers. According to Hughes (2006), curriculum reform is the heart of educational change and for that reason, this study will look at the curriculum reform focusing on the implementation of entrepreneurship education.

Macdonald (2003) argued that curriculum reform is “normal, widespread, constant, and optimistic” (p.140). However, there have not been many reforms which have focused on developing entrepreneurship education. According to Seikkula-leino (2011), it is still uncommon to see entrepreneurship being developed through general education. Nevertheless, Malaysia, in particular, has promoted entrepreneurship education in all levels of the education system. The latest attempt was introducing entrepreneurship education as part of the learning process in the newly-introduced curriculum reform. Curriculum reform in Malaysia is a normal process and the MOE introduces it constantly in order to ensure the quality of the education system, but its implementation is not problem-free. Some Malaysian scholars have carried out research related to curriculum reform and their findings have revealed that there are various problems which arise during the reform of the curriculum. Hamida (2006) studied the implementation of a revised English subject and suggested that the lack of in-service training, inadequate and irrelevant materials, and time constraints had been factors which had impeded its implementation. Noor Azmi (1988) also found similar problems affecting teachers who were involved with curriculum reform. The problems that Noor Azmi indicated were the lack of supervision and guidance, and the lack of

training. Mohd Isa (2007) also reported that “lack of training, lack of computers and resources, shortage of time, the pressure of a heavy syllabus and examination-centred learning” (p.xiii) had hampered the success of education change in Malaysian Smart Schools.

In short, it can be concluded that encountering problems during curriculum reform is normal. From the findings of the three studies described above, it can be argued that lack of training and lack of materials are the most common problems faced in curriculum reform in Malaysia. Virtually the same problems were highlighted by the European Commission (2012) in a report on the challenges faced by member states during the implementation of entrepreneurship education; “inadequate and poorly integrated curricula, outdated learning methods and inadequate trained teachers” (p.2). In view of this, it might be argued that however good the changes, the implementation of curriculum reform is likely to raise some problems and vital attention needs to be given to this to improve the situation. Therefore, since entrepreneurship education was recently introduced and implemented in the new curriculum reform (KSSR), it seems appropriate to study the implementation of this element. As the literature has suggested, there are many problems encountered when implementing curriculum reform. It is therefore likely that the implementation in Malaysia might face these same problems. Dyer (1999) stressed the importance of having research on the implementation process as this could shed important light on the actual implementation and the problems which arise, and could suggest solutions to overcome them. This current study responds to Dyer’s suggestion by looking at the curriculum reform with a specific focus on the implementation of the entrepreneurship education in primary schools.

1.3 Rationale for the research

In early 2011, the MOE announced that it would revise the Living Skills subject and that the *Business and Entrepreneurship* (B&E) component would be removed – the

new Living Skills subject focusing only on the *Design and Technology* component.⁶ So when the new Design and Technology starts to be taught in 2014, primary school students will not be given the opportunity to learn practical skills related to entrepreneurship education because the B&E component will have been removed. I shall argue that removing the B&E component from the system could seriously undermine the education in the country, because teaching young people basic practical entrepreneurship skills is necessary for developing the economy..

Many studies on entrepreneurship education have shown that it can lead to students and young people developing a long-term interest in entrepreneurship (Henderson & Robertson, 2000; Matlay, 2008; Torimiro & Dionco-Adetayo, 2005). Among the entrepreneurship programmes that have been successful in developing interest in students aged from eight to twelve are the ‘Mini Society’ and ‘YESS!’ programmes. These programmes were introduced in the US by Marilyn Kourilsky and many experimental researches have affirmed their effectiveness (Kourilsky & Carlson, 1996). Another programme which has successfully increased elementary students’ knowledge of and attitude towards entrepreneurship in the US is the ‘Entrepreneurs in Kentucky’ programme initiated by the Kentucky Council. Code (2006) studied the effectiveness of that programme and found that students’ knowledge of and attitude to economic and entrepreneurial concepts increased and improved. According to Zaidatol (2007), increasing interest in entrepreneurial activities at an early stage could lead students to choose entrepreneurial careers in future. The growing number of entrepreneurs might of course also give a personal advantage in terms of personal income, and in the long term it could also have a positive impact on the economic growth of a country.

Interestingly, when the MOE introduced the new KSSR curriculum for Year 1, it also introduced entrepreneurship education. This was surprising because it was introduced at a very early stage as a cross-curricular element. In my view, this was a very clever

⁶However, since the presumed changes will not take place until 2014, there is currently not sufficient information (there have been no circulars or any detail of the changes as it is still in the discussion stage at the Ministry level).

way to promote entrepreneurship education in primary school children. As a professional woman who has been involved with business and entrepreneurship (learning it as a student, running a very small-scale business on my own, working with a multinational corporation, and most importantly teaching the subject in school and at a teacher training college), I feel that this is a field that needed examining – not least because academic research on the issue is non-existent.

In addition, I had other reasons to undertake academic research on this topic. First, the way in which entrepreneurship education is taught using a cross-curricular approach. Although this was not the first time that the MOE had introduced a cross-curricular element into the curriculum, not every attempt in the past has been successful. Take the case of environmental education in which the cross-curricular element failed. Recent research by Noraziah and Latipah (2010) found that most teachers in primary schools had not integrated environmental education into their teaching because they were unable to master it. Likewise, studies by Mohammed Zohir and Sharifah Norhaidah (2005) and Abdul Rashid, Sharifah and Hashimah (2006) also highlighted the failure of the implementation in the classroom. Pauziah (2004) revealed that the lack of exposure during the training on environmental education, time constraints and poor pedagogical resources had all contributed to teachers' failure to implement environmental education.

Now that the MOE has introduced entrepreneurship education as a cross-curricular element, my major concern has been the success of its implementation in the classroom. I had doubts about the effectiveness of the government's approach and I keep wondering whether this element would be implemented or would be lost in the process (due to the usual reasons of lack of training, poor understanding and time constraints). I also had concerns over teachers' understanding of entrepreneurship education in a cross-curricular context. The cross-curricular approach can be a positive input, and Taplin's (2011) integration of "silent sitting" in the classroom as a cross-curricular approach suggested that it was effective. However, my pedagogical concern is still whether teachers really execute these elements consistently in their lessons.

My other interest in the matter was over teachers' training and understanding. Teachers are the main implementers of the curriculum and they play important roles in curriculum reform (Zuraida, 2007). Nonetheless, the important question remains whether teachers really understand the implementation. A study by Mukherjee and Singh (1983) three years after the previous curriculum (KBSR⁷) was implemented revealed a series of problems during the implementation. Lack of understanding among teachers, lack of expertise to handle remedial work, hours spent preparing the teaching materials (insufficient pedagogical resources), reluctance to change, and training given hurriedly were among the problems which they identified. Similar problems were highlighted by Noor Azmi (1988), who focused on in-service training during the KBSR curriculum, and Mohd Isa (2007), who concentrated on the impact of educational change in Malaysia. Both of those studies emphasized lack of training among teachers as a major difficulty.

The implementation of the KBSR had revealed some problems, especially regarding teachers' understanding and the lack of training. Curriculum change is a complex process (Nurul-Awanis *et al.*, 2011) and teachers are the main agents for change (Fullan, 1993). Thus, their understanding of the curriculum and its implementation are crucial (Fullan, 2001). However, if given their values and beliefs, teachers fail to understand the principle of a reform, this would undermine the implementation and become a barrier to curriculum change or reform (Anderson & Piazza, 1996). The disparity between teachers' understanding and the intended curriculum aims could affect the effectiveness of curriculum change (Nurul-Awanis *et al.*, 2011).

As stated above, entrepreneurship education was introduced as part of the new curriculum (KSSR) and teachers were required to implement it in their lessons using a cross-curricular approach. Aware of the findings of previous studies, my concerns were deepened about the risk of failure of the implementation. Furthermore, the thought that entrepreneurship education is to be taught by subject teachers alone and

⁷ KBSR is a Malay acronym for the previous curriculum standing for 'New Curriculum for Primary School'.

not by specialized teachers in the entrepreneurship education field concerned me, which was why I decided to look at the Year 1 teachers' understanding and how they implement the element into their lessons.

A third factor that led me to undertake this research relates to students' practical entrepreneurship skills. As already discussed, projects such as 'Mini Society', 'YESS!' and 'Entrepreneurs in Kentucky' had been successful in developing entrepreneurial interest and skills among pupils. One of the reasons for their success was that pupils had some exposure and experience by participating in the activity themselves. They were involved with programmes known as *learning by doing*. In the newly-introduced element in the KSSR curriculum, however, pupils are exposed to entrepreneurship education through the cross-curricular approach in their learning sessions with no practical skills involved. Teachers are merely required to embed entrepreneurship education as a cross-curricular element. So, with no practical skills and with the B&E component removed from the Living Skills subject, I wondered how students would be able to experience practical skills. Thus, my concern is also about the future of entrepreneurship education and the approach used in instilling it.

According to Kourilsky (1990), in order to encourage entrepreneurship education in primary schools, the emphasis should be on creating divergent thinking skills. She said that learning experience should focus more on explanation and inquisitiveness. In this way, students would be more involved in entrepreneurial thinking and behaviour, and the learning should focus on providing them with some entrepreneurship foundation. A recent report by the European Commission indicated that entrepreneurship education is about developing an entrepreneurial manner, attitude and behaviour and that these can be achieved through "people-led enquiry and discovery that enables students to turn ideas into action" (European Commission, 2011, p.2). But on this basis, would discussion be enough to develop entrepreneurial characteristics and attitudes in students, let alone develop an entrepreneurial culture? Furthermore, given the nature of the entrepreneurship education instilled as a cross-curricular element, would discussion on entrepreneurship take place in the learning process and how deep

and creative could the discussion be? These questions raised my concern about the implementation of this element.

It is easy to see that the introduction of this element in schools is a positive thing because entrepreneurship not only benefits countries by creating economic growth, but it can also have a positive impact at the individual level – it gives people opportunities for greater “financial independence, dignity and self-respect” (Wilson, Marlino & Kickul, 2004, p.178). As Malaysia is becoming a more developed country, the need for skilled human capital has become apparent. This need was reflected in the national education system in 2006. The MOE promoted an Educational Development Master Plan (PIPP⁸) that focused on developing human capital in Malaysia looking for individuals who are capable and have personality, discipline, character and self-esteem (MOE, 2006). Thus, entrepreneurship education is intended to develop human capital with individuals who are capable of tackling the challenges of the future, as well as the present (CDC, 2012). Therefore, the implementation of entrepreneurship education into the education system is very important.

Given the spread and development of the three factors discussed above (entrepreneurship education as a cross-curricular approach, teachers’ understanding and training, and practical skills), academic research looking at the implementation of the entrepreneurship element at the school level is a very important task. As agents of change (Fullan, 1993), teachers’ views seem necessary because teachers are the implementers of the curriculum; they are the ones who need to absorb the changes (in both content and method) and subsequently deliver them to students (Little, 1993). Therefore, I argue throughout my work that their view is important.

The latest curriculum reform in Malaysia is a national reform, and as such it involves many people from all levels of the education system to plan, coordinate and execute the change (Fullan, 2007). According to Fullan (2007, p.87), people at the *local level*

⁸PIPP is a Malay acronym for Educational Development Master Plan, and stands for *Pelan Induk Pembangunan Pendidikan*

(district, community, principals and teachers) are the decisive factors affecting the quality of the implementation. In view of this, my research also takes into consideration the perceptions of other professionals involved directly in the dissemination and implementation of this element, curriculum officers, headteachers, expert teachers and teachers' trainers, who are all related to the implementation and their views are also considered to be important.

The KSSR curriculum is still new and entrepreneurship education has now been in use for almost three years (since 2011). To date, however, to the best of my knowledge, no academic research examining the implementation of the entrepreneurship education process has been produced. This current doctoral research study is therefore might be the first of its kind, providing an overall analysis of the implementation of the element in schools. My personal interest and experiences described above place me in a unique position to identify and understand the faults and limitations of the implementation, and at the same time to make recommendations for overcoming the problems identified. I am hopeful, therefore, that the findings of this study will be beneficial to the people of Malaysia and to the government. However, due to the nature of this research, the findings cannot be generalised to other states and districts in the country, but I am nevertheless confident that my research will give an insight to the MOE for future actions to improve the delivery of the element.

1.4 Research objectives

The main objective of this research study is to look at the key respondents' perceptions and understanding of the implementation of the entrepreneurship element through cross-curricular learning in the Year 1 curriculum in all primary schools in Malaysia. In order to achieve this main objective, the following subsidiary aims were identified:

1. To study the key respondents' perceptions of the concept of entrepreneurship education and its implementation;

2. To explore the key respondents' opinions concerning the official reasons for the introduction of the entrepreneurship element; and
3. To investigate the key respondents' perceptions of the issues surrounding the implementation process.

1.5 Research questions

Based on these defined research objectives, the following research questions were posed.

Main research question

How does a sample of key respondents perceive entrepreneurship education and its implementation in the Year 1 curriculum in primary school?

Specific research questions

1. What are the key respondents' perspectives and understanding of entrepreneurship education?
2. What are the key respondents' perceptions of the purpose of the implementation of entrepreneurship education?
3. What were the issues encountered by the respondents, especially the teachers, as they implemented the entrepreneurship element?

1.6 Significance of the research

So far, to the best of my knowledge, there is a lack of empirical research on entrepreneurship education in Malaysia, particularly in primary schools. Most academic research and journal papers have focused on secondary schools and the tertiary education level. The nearest research article that I have been able to find was concerned with teachers' readiness to teach the B&E component which was part of the Living Skills subject in primary school (Azlina & Mazlifah, 2010; Bakri, Hatta &

Mohammad, 2007)⁹. In the light of this, I am confident that my study will add to the body of knowledge on entrepreneurship education in general and especially in primary schools in Malaysia.

As for recent curriculum reform in primary schools in Malaysia (KSSR), many of the articles that I have found discuss school-based assessment. As far as I know, no official reports or articles have been written which focus on entrepreneurship education *per se*. However, there is one preliminary report that was published by the MOE when the curriculum reform was piloted in 2010.¹⁰ That report looked at the whole curriculum reform implementation (MOE, 2009) and suggested that the numbers of teachers incorporating the entrepreneurship education into their lessons were low, and that this was due to their difficulties in integrating it into their lessons. Other than that, no official report could be obtained either from the internet or from the MOE official website pertaining to the implementation of the new curriculum. Nevertheless, there have been some research papers and dissertations which have looked at the implementation of the previous curriculum.¹¹ On the basis of these few studies, it can be suggested that curriculum reform implementation is not without problems and that there have been several issues identified during the implementation. So, by conducting this current study, I am not only adding depth to the literature on curriculum reform, but also providing an opportunity to see whether my findings are in line with those of other researchers or not. In other words, my findings could agree or disagree with those of others on the implementation of curriculum reform.

In addition, using the format of this current study might reveal what implementation issues are faced, especially by teachers. This research study could be beneficial for the MOE because it gives details of how teachers have perceived the changes and

⁹I used several search engines (such as Yahoo, Google, Google Scholar) to find articles on entrepreneurship education especially in primary school in Malaysia and I could not find many articles. I also browsed the MOE library and some Malaysian public universities' libraries and only managed to find the two articles that I mentioned on teachers' readiness to implement the B&E component in primary school.

¹⁰This pilot project was conducted to test the curriculum reform and it involved only few schools from each state in Malaysia.

¹¹That is, the curriculum that was introduced before KSSR

implemented them. The MOE could use the findings of this research as guidance when it wants to make changes to its approach on entrepreneurship education in the future. This study will also provide empirical evidence and pedagogical recommendations for future policy-making concerning curriculum reform in Malaysia.

This study will also contribute to the academic knowledge of entrepreneurship education and curriculum reform in a more global context. Although the findings and the approach of this research cannot be generalized and might not be applicable to other countries due to differences in the curriculum system, the conclusions may be relevant and could be used as a paradigmatic reference on issues surrounding curriculum reform and entrepreneurship education at primary school level.

1.7 Operational definitions

1.7.1 Standards-based Primary School Curriculum (KSSR)

This is the new curriculum being used in primary schools in Malaysia starting from 2011 as the result of educational reform. This curriculum is applied to all primary schools in the Malaysian education system. KSSR is the Malay acronym used to refer to the new curriculum.

1.7.2 Entrepreneurship element (E-element)

Entrepreneurship education in Year 1 is introduced as a cross-curricular element and is known as the *entrepreneurship element*. This element needs to be incorporated in all subjects taught in primary school and in this research it refers to implementation in Year 1 classes. All teachers need to include the element into their teaching and learning activities.

1.7.3 Key respondents

In this study, the key respondents are the respondents for my research and they are the important people related to the dissemination and implementation of the new KSSR

curriculum. They are officers (from the Curriculum Development Centre, the State Education Department and the District Education Office), headteachers, expert teachers, teachers' trainers and subject teachers (Malay language, Arts and English teachers).

1.7.4 Level 1 and Level 2 students

Primary school students in Malaysia are divided into two levels. In this study, Level 1 students refers to those studying in Year 1 (seven years old), Year 2 (eight years old) and Year 3 (nine years old), and Level 2 students are those who are in Year 4 (ten years old), Year 5 (eleven years old) and Year 6 (twelve years old). Year 6 is the highest level of education in primary school in Malaysia.

1.7.5 Bumiputra

The word *Bumiputra* or *Bumiputera* (from the Sanskrit *Bhumiputra*) in Malay translates literally as 'son of the earth (or soil)'. There is no single definition of who constitutes a *Bumiputra* and who does not, but generally it is used to define Malays and other indigenous peoples such as the Iban. Politically, however, it is often used synonymously with Malay (Abbott & Franks, 2007, p.355).

1.8 Overview of the constituent chapters

This thesis consists of seven chapters. Chapter 2 is divided into four sections which include a brief country profile and the theoretical framework related to the research topic. The first of these four sections provides general information on Malaysia's geographic situation and education system and a brief examination of the Malaysian curriculum reform. It also discusses the issue of positive discrimination within the education system in the country. The second and third sections discuss human capital theory and curriculum reform. Using the framework of human capital theory and curriculum reform, these sections look at the fundamental issues related to education and also focus on teachers and reform in Malaysia. Teachers are the human capital resources in the education system and because of that, these sections argue the

importance of essential training and exposure prior to reform. In addition, these sections also look at the issues related to the implementation of curriculum reform. The final section discusses definitions and issues related to entrepreneurship education. This section also includes some details of entrepreneurship education in Malaysia.

Chapter 3 describes and justifies the research methodology adopted. It begins by explaining the research paradigm that was used in this research. This is followed by a detailed justification for choosing a case-study approach. The chapter continues with an explanation of how the samples were selected. It also describes how the findings were analysed. Finally, triangulation, the validity and reliability of the research, the ethics of the research, confidentiality issues, respondents' rights and the role of the researcher are presented and discussed.

Chapters 4, 5 and 6 present the findings of this research study. All the data obtained are analysed and discussed in detail to contribute to the knowledge and understanding of the issues and concerns of the current research. Chapter 4 discusses respondents' perceptions of the concept of entrepreneurship education. In this chapter, findings are reported about the contrasting perceptions of the concept of entrepreneurship education among the respondents and compared with the official definition published by the MOE. Chapter 5 brings together three themes which emerged from the findings when respondents were asked about their perception of the reasons for the MOE implementing the entrepreneurship education. Chapter 6 discusses issues surrounding the implementation of the element. There are six themes which arise from the findings and all these themes are related to respondents' perceptions regarding the concept of the cross-curricular element, pedagogy, support, monitoring and training.

The final chapter, Chapter 7, presents a summary of the findings and the conclusion. This chapter also discusses the research implications, the limitations encountered while conducting the research, and some recommendations for future research. This thesis then ends with some final reflections from the researcher.

CHAPTER 2

Literature Review

2.1 Introduction

This chapter contains a discussion of some of the theories and concepts that are closely related to the concerns of this study. As stated in Chapter 1, the aim of this study is to explore key respondents' perceptions about the implementation of the entrepreneurship education into the new Year 1 curriculum in all the primary schools in Malaysia. The key respondents involved in this research were curriculum officers, headteachers, subject teachers, expert teachers and teachers' trainers who are involved in the dissemination of the new curriculum. Entrepreneurship education in Year 1 is introduced as a cross-curricular element which is called as *entrepreneurship element* (E-element). This element has to be incorporated into teachers' teaching and learning activities. The E-element was included in the curriculum across all primary school subjects as part of the government's plan to develop a balanced human capital for the nation and also to revitalize education in the twenty-first century.

The E-element was introduced into the Year 1 curriculum through the curriculum reform implemented in 2011. It is well explained in all the Ministry of Education (MOE) publications and guidelines (Entrepreneurship Element Guidebook, 2012; KSSR Guidebook, 2011) that the objective of the new curriculum in the Malaysian education system is to produce and develop human capital which is consistent with the National Education Philosophy. It is therefore important in this chapter to explain all the theories and concepts that are related to the implementation of this element into the new curriculum. This chapter is divided into four sections which offer discussions on the Malaysian context, human capital, curriculum reform and entrepreneurship education.

The first section will give an overview of the country and the education system practised in Malaysia. The section will also explore certain aspects of education in the country from the fourteenth century and will then focus on the most recent reform introduced by the MOE in 2011 in all primary schools in Malaysia. The discussion will be further developed by considering positive discrimination in the education system in Malaysia.

The second section will then look at human capital theory and its relation to the education system. This will be followed by a detailed discussion of human capital in the context of the Malaysian education system. In addition, this section will also discuss teachers as human capital in general and more specifically in the Malaysian context. The discussion will then move on to consider the relationship between human capital and curriculum reform.

The chapter continues with a discussion of curriculum reform. This third section will consider the concept of curriculum reform and the process and the challenges of the reform. An analysis of issues related to curriculum reform will then be presented. Four issues will be discussed: the pressure of change, curriculum reform and teachers' professional development/training, the role of teachers in curriculum reform, and assessing the reform.

Finally, in the fourth section there will be a brief discussion of the definitions and concepts of entrepreneurship and entrepreneurship education. This will be followed by an explanation of the development and the teaching of entrepreneurship education in Malaysia.

2.2 SECTION A - The Malaysian Context

In this section, I shall first give an overview of the country describing general issues of geographical location, climate, historical background, type of government and social background. Then I shall examine the education system focusing on the systems used in pre-school, primary school, secondary school and pre-tertiary education. This will be followed by an explanation of curriculum reform in Malaysia. Finally, I shall discuss the issue of positive discrimination in the Malaysian education system.

2.2.1 An overview of the country

2.2.1.1 Geographical location and climate

Malaysia is a multi-racial country located in South East Asia and is an independent member of the ASEAN (Association of Southeast Asian Nations). Malaysia is a federal country and was formed in 1963. It consists of thirteen states and three federal territories. Malaysia is neighbour to Thailand in West Malaysia and with Indonesia and Brunei in East Malaysia through land borders. Singapore is a very close neighbour which is separated only by a narrow strait and Malaysia shares its maritime borders with the Philippines and Vietnam (*see* Figure 2.1). The country, defined as a Constitutional Monarchy,¹² is divided into two parts; Peninsular Malaysia and East Malaysia (Sabah and Sarawak which are on the island of Borneo); the two parts are separated by the South China Sea. The country has a total land area of 330, 252 sq.km. (Malaysia, 2004) and the climate is hot and humid throughout the year (Kaur, 1999).

¹²Constitutional Monarchy in Malaysia means that a Monarch (called *Yang di-Pertuan Agong*) acts as a Head of State and in accordance with the advice of the Cabinet. In other words, the *Yang di-Pertuan Agong* is the Head of State, while the Prime Minister is the head of government. This information is derived from the government agency website, *Majlis Keselamatan Negara* (National Security Agency) which can be retrieved from http://www.mkn.gov.my/mkn/default/article_m.php?mod=4&fokus=12. See the Laws of Malaysia, Federal Constitution, Article 32 (1)

Figure 2.1 Map of Malaysia



2.2.1.2 Historical background

Malaysia has a long history involving both trade and colonization. Since the earliest days, traders from different parts of world came to do business there and it has been known as a very important hub for traders since the fifteenth century. The modern country had its origins in the Malacca Sultanate Empire. Malacca was founded by Parameswara, a prince from the Palembang in Sumatera in the 1400s. It was originally a fishing village and later became a great empire under the rule of the Malacca Sultans (Ruslan, Mohd Mahadee & Zaini, 2010). The strategic location of Malacca caused it to become an established trading centre in the 1400s. Its location at the convergence of major trade routes made it an extremely important port in the region. Its strategic position as a crossway to trade routes from East Asia to the Indian Ocean gave added advantage to Malacca. It became one of the wealthiest places in Southeast Asia and this in turn made it a target for many of the European colonizing powers (Jesudason, 1990).

The year 1511 was an important turning point for Malaysian history. This was when it was first colonized by a foreign power, a situation which lasted for 446 years. In that

year, Malacca was conquered by the Portuguese when it was at its prime as a centre for world-wide business (Ooi, 2008). The Portuguese colonization lasted for 130 years before the Dutch ruled Malacca from 1641 for about a further 140 years. Both conquerors only sought the profits to be made from spices, which at that time were a very expensive commodity. The Portuguese and the Dutch had less impact on the economy of Malaysia at that time. In 1824, the English took the reins from the Dutch and ruled Malaysia (called Malaya at the time). During the Second World War, the Japanese took over Malaysia and forced the British out but after the Japanese surrender, the British regained full control of Malaya in 1945 (Malaysia, 2004). Under the British administration, a ‘divide and rule’ policy¹³ was enforced and was implemented until Malaysia gained its independence on 31 August 1957 (Zafar, Jumaat-Mahajar & Allon, 2005).

2.2.1.3 Social background: ethnicity, language and religion

Malaysia is a multi-racial country which can be classified into two main ethnic categories, *Bumiputra* and non-*Bumiputra*. The *Bumiputra* are the Malays and the indigenous groups who share cultural affinities, such as Bidayus, Ibans, Kadazans and others. The non-*Bumiputra* on the other hand are those whose origins and affinities lie outside the region, for example Chinese and Indians (Jessudon, 1990). According to the Department of Statistics (2010a), Malaysia has a population of 28.3 million and Malays are the predominant group, making up about 67.4 per cent of the population. The Chinese constitute 24.6 per cent, followed by Indians at 7.3 per cent and others at 0.7 per cent (Department of Statistics, Malaysia,¹⁴ 2010a). Bahasa Malaysia (the Malay language) is the national language for education and administration purposes, whilst English is the second language and is widely used, especially in the business sectors.

¹³This ‘divide-and-rule’ policy refers to the well-known British approach to conquest and colonial power. In the case of Malaysia, the British divided the three main ethnic groups in the country (Malay, Chinese and Indian) which later resulted in sharp social and economic differences, as well as ethnic conflict prevailing even today. On this issue, see also Firdaus (1997)

¹⁴The population number was derived from Department of Statistic Malaysia official portal at http://www.statistics.gov.my/portal/index.php?option=com_content&id=1215

The dominant religion in Malaysia is Islam, whose followers make up 61.3 per cent of the population. Malaysia practises a secular constitution, yet Islam is recognized as the state religion.¹⁵ All Muslims are bound by the Islamic laws according to the Quran.¹⁶ The Chinese population in Malaysia mostly practises the teachings of Buddhism and Taoism (about 19.8 per cent) and Hinduism is practised by the majority of Indians (6.3 per cent). The Christians in Malaysia constitute 9.2 per cent (*ibid.*)

2.2.2 Education system in Malaysia

The education system in Malaysia is categorized into five levels; i. pre-school education, ii. primary education, iii. secondary education, iv. pre-tertiary and v. tertiary education. This system provides basic education at pre-school and primary school level, whilst more comprehensive and specific knowledge is taught in secondary schools. It is compulsory for students to attend eleven years of schooling in Malaysia, six years in primary school and five years in secondary school. Higher education is not compulsory as it an option for students either to enter any further education level or not.

- Pre-school education

The pre-school education in Malaysia is the early education provided for students before they enter the formal eleven years of schooling in primary and secondary schools. There is pre-school education which is overseen by the government and there are kindergartens which are privately-owned but which operate with valid licences from the government. The normal age to enter a government pre-school is six years, but there is no age limit for the private kindergartens. The purpose of pre-schools is to give children basic knowledge and skills prior to entering primary education. In order to provide the best quality of education for young students in the pre-school stage, the government developed a “curriculum guideline that allows for flexibility in the medium of

¹⁵Article 3 (1) says that “Islam is the religion of the federation; but other religions may be practiced in peace and harmony in any part of the Federation” (*Laws of Malaysia*, 2012, p.20)

¹⁶The Quran is a holy book for Muslims.

instruction as well as in teaching methods and approaches” (EPRD,¹⁷ 2008, p.30).

The National Pre-school Curriculum puts emphasis on six learning components; “language and communication, cognitive development, morality and spirituality, social and emotional development, physical development, and creativity and aesthetics” (*ibid.*,p.30). More precisely, the focus of the pre-school in Malaysia is to develop students in terms of personal development, socialization and preparation for primary school (*ibid.*).

- Primary education

Primary education in Malaysia is compulsory. The government introduced a compulsory Education Act in January 2003 to ensure that everyone in the country is entitled to free basic education.

There are two types of government primary school in Malaysia, the national school and national type of school (namely, Chinese and Indian schools). Primary education is divided into two levels, Level 1 and Level 2. The first level involves students from ages six to nine years and they attend Year 1, Year 2 and Year 3 respectively. In this level, students are introduced to basic knowledge and skills, including reading, writing and arithmetic. The second level comprises Year 4, Year 5 and Year 6, and learning becomes tougher for the students because at this level, they are expected to master basic skills and learn the foundation of basic sciences. Level 1 students have about twenty-two school hours per week and for Level 2 students this rises to twenty-four hours per week.

Malay language is the medium of instruction in all national schools except for the English and languages classes. In the national type of school, however, the

¹⁷ EPRD stands for Educational Planning and Research Division. It is one of the agencies under the MOE that is involved in planning for educational growth and development.

mother tongue is kept for medium instruction. After six years of learning in primary school, students sit a national exam (Primary School Evaluation Test¹⁸) at the end of Year 6. Nevertheless, regular assessments are still made through the years and at all levels in primary school.

- Secondary education

Secondary education is the continuation of the primary school. As in primary school, secondary education is also divided into two levels; the lower secondary level takes three years to complete and students pass through Form 1, Form 2 and Form 3 subsequently from ages 13 to 15. The upper secondary level takes two years to complete and students stop learning in school at the age of 17. At the end of their schooling years in secondary school, students have to take another major exam known as Malaysian Certificate Examination. This is an important exam in Malaysia because it determines whether students are qualified or not to enter a university, college or other higher education centre. The results of this exam also determine the students' capabilities for entering the job market in Malaysia, especially the government sector.

- Pre-tertiary education

Pre-tertiary education usually consists of preparation courses before students enter the university level to pursue degree or diploma programmes. The most common programmes offered by the MOE are the Form 6 classes and the Matriculation Programme. Both of these programmes can only be entered after passing the Malaysian Certificate Exam. The Form 6 classes consist of a two-year course and are conducted in the normal secondary schools. Students following this course have to sit the Higher School Certificate Exam (STPM) at the end of their schooling years. For the Matriculation Programme, which is the pre-university programme, only selected students with good grades are selected for entry. This is a one-year programme, and two fields of study

¹⁸This is an exam that all the primary school students need to take and this exam is ministered by the Malaysian Examination Syndicate who is accountable for all the public/national examination under the Ministry of Education

(humanities or sciences) are offered to students. Students also have to sit a major exam prior to entering the university with a minimum pass mark set by individual universities' requirements.

Many programmes have been introduced by the MOE to ensure the quality of education for students (EPRD, 2008). Some of these programmes are designed to strengthen unity and integration among students, to strengthen basic knowledge and skills, especially for weak students, or to help the indigenous people in Malaysia. The MOE has also introduced special schools to cater for particular needs in education such as smart schools, special education schools, cluster schools, sports schools, national religious schools, arts schools and others (*ibid.*).

Other than formal education, the MOE has also emphasized co-curricular activities in schools. It is compulsory for every student to take at least one co-curricular activity. There are three types of activity offered to students: the uniformed bodies, societies and sports clubs. The reason for having these co-curricular activities is for “students to interact, develop social skills, encourage team building, camaraderie, tolerance and leadership qualities through play and activities” (EPRD, 2008, p.46)

2.2.2.1 A note on illiteracy and literacy rates

It is important to observe that both the government and international data concerning literacy levels in the young population show very high levels of literacy in the country. The World Bank source¹⁹(2010) cites the figure of 98.4 per cent (%) illiteracy amongst 15-24-year-olds. This is by any standard a very high literacy rate. In many ways this could indicate that the 2010 government policies were working. According to the Malaysian Department of Statistics’ (2010b)²⁰ own analysis: “The literacy rate

¹⁹Data retrieved from The World Bank website at

<http://search.worldbank.org/all?qterm=literacy+rate+in+malaysia&title=&filetype=>

²⁰ See the government publication ‘Education and Social Characteristics of the Population 2010’, Department of Statistics, Malaysia. This publication can be retrieved from government portal at http://www.statistics.gov.my/portal/download_Population/files/census2010/education/3.Summary_Findings.pdf (p.2).

among Malaysian citizens age 10-64 years in 2010 reached 97.3% compared to 93.5% in 2000” (*ibid.*).

However, whilst officially accurate, these figures appear controversial because illiteracy rates are slightly higher in certain sectors, such as rural areas (Department of Statistics, 2009).²¹ Furthermore, government agencies such as the Performance Management and Delivery Unit (PEMANDU²²) also revealed that the numbers of students in Year 1 who do not achieve targeted literacy at the end of their schooling years had increased (*see* Figure 2.3). In addition, the earlier figures shown by World Bank and the Malaysian Department of Statistics might not reflect the nature of *functional illiteracy*²³ and the impact of this wide and under-researched phenomenon. Thus, during my own experience as a teacher (2002-2007), I came across a significant number of functionally illiterate students. The issue of functional illiteracy is itself a topic for further research, but is not within the scope of this current study, even though a common complaint I encountered during my field work was that students had poor numeracy and poor literacy skills (*infra*).

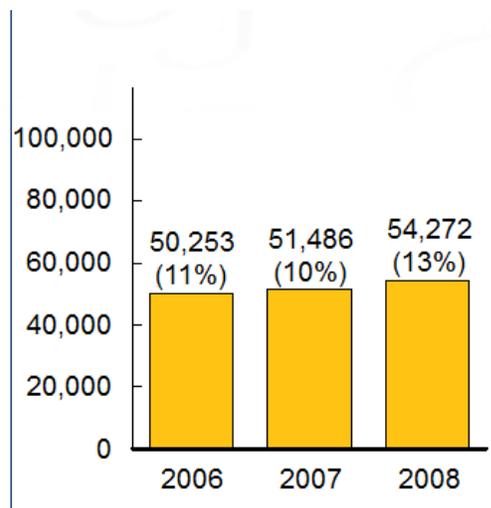
²¹ Statistics on the literacy rate according to urban and rural area divisions can be retrieved from http://www.statistics.gov.my/portal/download_Labour/files/BPTMS/PST-Siri11.pdf (p.12)

²² PEMANDU was established in 2009 and is part of a unit in the Prime Minister’s Department. The role of this agency is “to oversee the implementation, assess the progress, facilitate as well as support the delivery and drive the progress of the Government Transformation Programme (GTP) and the Economic Transformation Programme (ETP)”.

Information retrieved from (<http://www.pemandu.gov.my/about.aspx>)

²³ For a definition of Functional Illiteracy, see Freire, P and Macedo, D (1987) in ‘Literacy: Reading the Word and the World’.

Figure 2.2 Number of students who did not achieve target literacy standards at the end of Year 1 from Year 2006 to 2008



Source: PEMANDU

2.2.3 Curriculum reform in Malaysia

In many ways, the current education system in Malaysia is not different from those of other countries in the world, but it was, naturally, designed to meet Malaysia's specific needs, as well as to reflect the country's specific cultural background and legacy.

Indeed, the informal education system in Malaysia goes back to the fourteenth century with the spread of the Islamic religion by Arabic and Indian merchants to the Peninsular Malaysia, and the Malay Archipelago who established the *sekolah pondok*²⁴ (Sufean, 2008). During the period of the Malacca Sultanate, Islamic religious teachings were expanded more widely (EPRD, 2008). Since that period, a complex link between religion and education was developed, making them dependent on each other, and resulting in a rather intricate and sophisticated educational arrangement.

²⁴*Sekolah pondok* (literally 'Hut school') is a term in the Malay language referring to a school that was built basically in those days to learn Islamic religious teaching. These schools were managed by an *Ulama* (Muslim parson) and they taught subjects related to the teachings of the Islamic religion (International Law Book Services, 2011). Even though times have changed and a more systematic education system has been introduced, this type of school still exists in Malaysia and is well supported.

Education has since undergone profound changes. Malaysia was invaded by several conquerors – including the Portuguese, Dutch and British. Judging from the literature available, there were no significant changes in education in Malaysia during the Portuguese and Dutch rules (*ibid.*). But, formal education can be said to have really originated when Malaysia (formerly known as Malaya or *Tanah Melayu*) came under British colonial rule.

The above-mentioned ‘divide-and-rule’ strategy of the colonial masters left the legacy of an ethnically divisive schooling system, and many types of school were built to suit the needs of an ethnically complex society. According to Sufean (2008), the British *laissez-faire* policy resulted in the education system being divided into five vernacular schooling systems, namely; Malay vernacular schools, Chinese vernacular schools, Indian vernacular schools, English schools and Islamic religious schools (known as *madrasah*²⁵).

After independence in 1957, Malaya strived hard to unify all the races and build a united nation (Wan Mohd Zahid, 1991), moulded according to its constitution. In order for this to happen, a sound education system was developed with national unity as its top priority (*ibid.*). This brought the establishment of the National Education System of Malaysia, and as a result, the Education Act 1961 was introduced. To accomplish the national unification agenda reflecting the interests and culture of all the ethnic groups in Malaysia, the existing curriculum was reviewed and reformed (Rahimah, 1998).

Backed by the Razak Report produced in 1956 and the Rahman Talib Report in 1960, the existing curriculum was redesigned, and, as in many newly independent countries at the time, it was designed with the simultaneous purposes of *educating* and *unifying* the population (Omar, 1991; Sufean, 2008). There were three basic principles that both reports suggested were crucial for achieving national unity:

²⁵ The word *Madrasah* means religious school where Islamic religion is taught to young students. In Malaysia, this term is used only for schools that teach the Islamic religion. It is not used by other schools that teach other religions.

1. The same education system for all;
2. The national language as a medium of instruction in all the schools; and
3. The same curriculum and examination for all.

(INTAN, 1980)

These two reports were the backbone of the curriculum that Malaysia has now. Undeniably, the curriculum in Malaysia has changed since independence in 1957, but the above principles prevail to this day. Thus, the National Curriculum was introduced across the whole nation and the medium of instruction was changed from the English language to the Malay language, especially in all government-run schools (Chan & Tan, 2006). All subjects (except for minority languages and English) were required to be taught in the Malay language. The aim was to ensure that the education system stayed competitive and accomplished the intended objectives, and curriculums were changed accordingly. Prior to any changes to the education system, especially to the curriculum, committees were established, gathering members with great expertise in that particular field.

During the post-independence period, the curriculums used were a continuation of the methodologies practised during the colonial era, which were moulded according to the Malaysian context. According to Rahimah (1998), the objective of education at that time was still the unity of the nation, but it gradually changed and human resource development become part of the aim as well. The curriculum developed after independence and one problem identified with it is that there was no continuity between academic subjects. In 1979, a committee was set up, led by the then Education Minister, to review the existing curriculum. A report known as the Cabinet Committee Report was then formulated. In that report, the committee suggested that the existing primary school curriculum be revised, as what was being offered in schools during that era was not sufficient as basic/foundation education. The report touched on many aspects such as improving the quality of the school curriculum, teachers' education, education management, support services and education

innovation (Omar, 1991). In the report, the committee recommended that the 3R²⁶ system be emphasized at primary-school level (Mukherjee & Singh, 1983; Sufean, 2008). It also proposed the importance of emphasising the skills of the subject, rather than the importance of the subject (Omar, 1991; Sufean, 2008).

After much deliberation, a new curriculum was introduced in 1983 - the New Curriculum for Primary Schools (its local acronym was KBSR). This curriculum emphasized the 3Rs, replacing the old system which was more subject-matter oriented. After ten years, a new improved version of the curriculum was introduced. It was known as the Integrated Curriculum for the Primary School and still used the acronym KBSR. The KBSR methodology used student-centred approaches and demanded more student participation during the teaching and learning processes (Omar, 1991). Teaching materials were developed to meet the requirements of the new curriculum (Mukherjee & Singh, 1983). In addition, remedial and enrichment components were added to help strengthen students' achievements across a varied range of abilities (Mukherjee & Singh, 1983; Sufean, 2008). Aspects of life and education such as moral values, health education, study skills and other related activities were incorporated to broaden the curriculum. The KBSR was the result of combining all aspects together under one umbrella to assist students' development in the knowledge and the skills required of them. The KBSM²⁷ (Integrated Curriculum for Secondary Schools), which was introduced in 1989, was a continuation of the KBSR. At that stage, the integration of skills, knowledge and subject was more emphasized. Student potential was enhanced by the use of a common and integrated curriculum. Student-centred activities were still the major component of the learning process and additional values and norms were also integrated simultaneously.

The development of education in Malaysia was basically controlled and monitored by the government of the ruling party in the country (Sufean, 2008). For the past 55 years, it has been under the same political party and all the decisions on education and

²⁶3Rs refers to Reading, wRiting and aRithmetic.

²⁷KBSM is the local acronym for *Kurikulum Baru Sekolah Menengah* which in English means 'New Integrated Curriculum for Secondary School'.

curriculum development are made through the Ministry of Education. All the changes after independence in 1957 have been made entirely under the responsibilities of the same government. There have been six Prime Ministers and several Education Ministers since 1957, but the goals of education are still the same; they were manifested in the National Education Philosophy which was developed in 1988 and revised in 1996:

Education in Malaysia is an on-going effort towards further developing the potential of individuals in a holistic and integrated manner, so as to produce individuals who are intellectually, spiritually, emotionally, and physically balanced and harmonious, based on a firm belief in and devotion to God. Such an effort is designed to produce Malaysian citizens who are knowledgeable and competent, who possess high moral standards, and who are responsible and capable of achieving high levels of personal well-being as well as being able to contribute to the harmony and betterment of the family, the society, and the nation at large. (CDC, 2012, p.XI)

This philosophy avers that the government put the emphasis on holistic individual development and on producing individuals who adhere to the tenets of their community's own religion. The establishment of this philosophy was to create good and perfect Malaysians with the following characteristics:

- a) Belief in God,
- b) Knowledgeable,
- c) Honourable,
- d) Responsible to oneself, society, country and religion,
- e) Serving and contributing to the society and country,
- f) Possessing a balanced and integrated personality.

(Wan Mod Zahid, 1991)

As discussed earlier, Malaysia is a multi-racial society, and it can be argued that to have a well-balanced curriculum is not an easy task. The history of being colonised by several conquerors and the divide-and-rule policy of the British had caused the

Malaysians to become socially and economically separated. In addition, the *laissez-faire* policy of the British towards the education system had left a huge gap between rural and urban education (Sufean, 2008). According to Sufean (2008), during their colonization, the British took no responsibility for the advancement of education in rural areas and thus caused the education setback in those areas compared with urban areas. Due to all these issues, the Malaysian government had been very conscious of the unity aspect and the economic differences among the ethnic groups, and the 13 May 1969 incident²⁸ made the government realize the weaknesses in management, and the education system and reforms were therefore planned. The education system at that time was believed to be not enough to unite the ethnic groups and therefore the curriculum was revised.

Curriculum plays an important role in creating “equality and diversity” (Jessop & Williams, 2009, p.105). Jessop and Williams (2009) studied six black ethnic minorities and found that the students experienced some shortfalls in the curriculum that was being introduced to them. They felt that there was a lack of cultural diversity in the curriculum and therefore called for a “more consistently diverse, globally relevant, and inclusive curriculum” (p.96). That study emphasised the importance of having a curriculum that understands the existence of and the need to understand other cultures. Malaysia is a multi-racial country and therefore there are some issues that have to be considered before any education reform can take place. According to Anwar (1989), who was the Education Minister at that time, there are seven issues that need to be considered when reforming education in Malaysia. The issues are:

a) National Education Philosophy.

Having a national education philosophy is important because it provides a guideline to achieve the aims and objectives of education. According to Anwar (1989), the education strategy should be based on the philosophy of producing

²⁸The 13 May 1969 incident was a racial dispute between the two largest ethnic groups in Malaysia, the Malays and the Chinese. The incident caused the destruction of properties and many deaths (INTAN, 1980).

knowledgeable people with good characters, who are balanced and harmonious.

b) Malay language as the medium of instruction.

The Malay language is a national language and should be enhanced to become a language of knowledge and instruction at all stages. The National Language Act was established in 1967 (Sufean, 2008) and it was hoped that it would help in strengthening the unity and closing the gaps between the ethnic groups. The racial discord in 1969 made the government put more stress on the education system and the Malay language became more important. But at the same time, other languages such as English, Chinese, Tamil and other ethnic languages were not affected. In the Razak Report, the position of the Malay language was explained. In Malaysia, the Malay language is the priority language in education and government affairs, followed by the English language and then the Chinese and Indian languages (Anwar, 1989).

c) Unity.

Unity and national integration is important (Anwar, 1989) because Malaysia is a multi-racial country. The uniqueness of this has caused Malaysia to become a fragile country. The multi-ethnic groups with their diverse cultural and religious beliefs force the government to consider many circumstances in setting the law and policies for the country as well as the education system.

d) Education for developing human beings.

In the Malaysian education system, two subjects, Islamic religious subjects and moral education subjects related to character formation, were introduced long ago. These subjects were intended to instil and cultivate good values in students. A good human being with good values is believed to help in developing a good nation. In the Malaysian context, these values are hoped to develop good students with positive values. According to Ahmad (1991)

character formation should not only happen in these two subjects but also through all the subjects and with the efforts of all the teachers.

e) Education democracy.

In making the reforms, it should be ensured that there are equal opportunities and a good quality of education for everyone at all levels of education (Anwar, 1989). Anwar added that it is not only about democracy but also about the democratization of access to quality education.

f) Nation development through government policies.

In order to achieve developed nation status, the young generation's abilities in science and technology should be developed (Anwar, 1989) and for that the vocational and technological school system needs to be extended (Ahmad, 1991). The introduction of the Living Skills subject in the primary and secondary curriculum was expected to enhance students' abilities in technology because they are introduced to the use of machinery and electronic gadgets.

g) Releasing people from the narrow thinking style.

According to Anwar (1989), people should change their way of thinking and develop more positive thinking abilities so that they are able to see the phenomena surrounding them in a more open-minded way and understand globalization. He added that the openness suggested should be universal but should be relevant to Malaysia's particular conditions.

In recent years, the quality of the existing education curriculum, especially at primary-school level, has been a topic of considerable debate. In 2006, during the UMNO²⁹ General Assembly, the Prime Minister of Malaysia demanded that the national education system should emphasise human capital, producing students with insightful

²⁹UMNO stands for United Malays National Organization and it is one of the political parties in Malaysia.

minds, and forming citizens who can master knowledge, skills and information, and should also emphasise the development of human thinking to produce people with *Ulul Albab*.³⁰ The Prime Minister's speech sparked the reformation of the existing curriculum and brought about the establishment of a new revised curriculum. Various measures and strategic approaches were taken by the MOE to execute the new curriculum. According to the Curriculum Development Centre's³¹ website (<http://kssr.bpk.my>), the MOE conducted research and the outcome of the study signalled specific changes in the education system, particularly the transformation of the curriculum for primary schools in 2011. The new curriculum was a reorganization and improvement of the existing curriculum and with it the government expects that students will have all the appropriate values, skills and knowledge to face the twenty-first century.

In January 2011, these discussions and debates culminated in the establishment of a new curriculum for the primary school level, known as 'Standard Curriculum for Primary School' (KSSR³²). This transformation of the curriculum made a holistic change to the existing one by changing the design, organization, content, pedagogy, time allocation, assessment, materials and curriculum management in schools (CDC, 2011). Bearing in mind all the policies and programmes for developing the core curriculum, the government outlined four purposes for establishing the new curriculum: to develop students who are balanced mentally, spiritually, physically and emotionally; are global players; responsible citizens; and knowledgeable workers (*ibid.*).

³⁰*Ulul Albab* is an Arabic word that refers to people using their minds intellectually in seeking for things until they manage to put everything in the right perspective. This was a new programme in the Malaysian education system, combining religious activity with academic studies in an integrated way, scientifically and systematically.

³¹The Curriculum Development Centre (CDC) is a government body under the MOE which is involved in the drafting, developing, spreading, implementing and monitoring of the curriculum. The CDC also prepares the supporting materials for the curriculum and is involved in monitoring and conducting the assessment of the curriculum

³²KSSR is the local acronym for *Kurikulum Baru Sekolah Rendah*

As with the previous curriculum, the KSSR also focused on students' development through active participation using student-centred teaching approaches. The new curriculum focused on 4Rs, standing now for Reading, wRiting, aRithmetic and Reasoning. Through this curriculum, students are exposed to limitless education opportunities made possible because of various learning approaches based on the different levels of students' intelligence. This new curriculum is a continuous programme that starts with the Year 1 students, carrying on into the following levels of education. In other words, these Year 1 students are the pioneers of the new curriculum and a few years are therefore needed before evident results can be seen. The KSSR curriculum was developed on the basis of four principles: an integrated approach, the holistic development of an individual, the same opportunities and quality education for all, and long-life education (CDC, 2011). These principles are expected to help to develop a human capital that meets the education philosophy requirements. According to the CDC (2011), students at the end of their primary school education should have acquired basic skills that can be used in their daily life. Among the human capital characteristics outlined by the MOE are:

- a) Mastering the basic skills which are reading, writing and arithmetic;
- b) Acquiring reasoning and creative and innovative skills;
- c) Being aware of personal wellness;
- d) Believing in God, being honourable and practising good values;
- e) Having personal identity and patriotism; and
- f) Understanding and appreciating national cultures.

In order to strengthen these human capital skills in students, the MOE introduced three new cross-curricular elements into the new curriculum which were designed to help students to be more competitive and able to face the future challenges in their life (CDC, 2012). This study will focus on one of these elements, the *entrepreneurship element* (E-element). This element will be discussed further in the next section. In addressing the changes and education reform, the MOE planned a concrete strategy to form the National Education Philosophy and Vision 2020 (Wan Mohd Zahid, 1993).

One of the emphases in the curriculum is to foster an entrepreneurship culture and a business culture.

As with all new curriculum implementations, there are always challenges and problems that have to be dealt with. For instance, when the government introduced the previous primary school curriculum, the KBSR, in 1983, there were a few issues brought up by Mukherjee and Singh (1983) during the implementation of the curriculum. From their observations and discussions with key personnel such as teachers, headteachers, administrative officers and curriculum officers in the education system, they identified several obvious issues during the implementation:

- a) A lack of teachers trained in handling remedial classes, which meant that remedial-trained teachers had to teach in multi-purpose classrooms.
- b) Teachers' confusion over the form, content and practices that were considered to be important and appropriate to be taught as enrichment activities. In some cases, faster students were asked to wait until all the other students had finished their work and then do the enrichment activities together; in others, students were asked to keep on doing the task because others had not yet finished.
- c) Financial problems had impeded the extra training for teachers to help them have a deeper understanding of remedial and enrichment activities.
- d) It was time-consuming to prepare teaching materials. Due to insufficient materials supplied by the CDC, teachers had to spend their own time producing teaching materials which suited their teaching and learning activities. The problems with these materials are sometimes that teachers were not sure how to select, grade and arrange the material. To address that, Mukherjee and Singh suggested that teachers be taught efficiently by focusing them on producing appropriate materials and using them in their classes.
- e) A different attitude towards change where the senior teachers were more resistant to change than their younger colleagues. This was probably because they had not seen any benefits or incentives for accepting the changes.

- f) The curriculum changes happened so fast and were made without proper planning and preparation. The training for the teachers was given so quickly that some teachers did not grasp the fundamental ideas of the curriculum change. Furthermore, the teaching resources were prepared too hastily in order to meet the execution dateline. This impeded the implementation.

In 1989, the MOE produced a report on the evaluation of the KBSR curriculum which was implemented in primary schools in 1983. This report was produced after seven years of implementation. Among the contents of the report (MOE, 1989) were:

- a) Teachers' training was conducted too briefly, and this led to some teachers and school administrators failing to fully understand the changes.
- b) Group learning activities suggested by the Ministry as part of the teaching and learning strategies were not fully implemented by teachers. Mostly, teachers continued to use whole-class teaching, giving as their reasons too many students in the class, lack of materials, difficulties of preparing materials for different ability students, and time management.
- c) The remedial and enrichment activities were rarely conducted by teachers. Some teachers were not well-versed in teaching the remedial classes and some gave the time-constraint reason.
- d) The new curriculum had increased teachers' workloads. Teachers needed to prepare teaching materials and make continuous assessments of their students and record them. Thus some teachers' complained that the clerical work had increased.
- e) The text books could be improved in terms of their content, format, language and suggested activities.

Nevertheless, the implementation has not been entirely without success. Two main improvements were that the new curriculum increased students' abilities to read and write, and that students were more active and more able to master the learning skills³³

³³Learning skills such as questioning, discussing and making remarks as well as giving ideas.

(Sufean, 2008). According to Mukherjee and Singh (1983), through the newly-implemented curriculum, teachers admitted that their interaction with students had improved. The student-centred activities had given more space for students to develop their skills and this showed a positive impact on the teacher/student relationship. The other success was in students' reading abilities. With the new approach, their reading abilities had improved. In one respect, the KBSR curriculum concentrated on the "low ability groups" (*ibid.*, p.255) and this raised concerns from parents whose children were of higher ability and had greater educational experience from their time in kindergarten. But according to Mukherjee and Singh, this was solved by parents sending their children to those tuition classes which offered more advanced knowledge than the basics that the school taught them.

From the report published by the MOE in 1989 and the work of Mukherjee and Singh (1983), we can see that the newly-implemented curriculum (the KBSR at that time) had both strong and weak points. Undeniably, there were some issues such as understanding the curriculum, training, contents and strategies, which needed to be dealt with. Personally, I believe that the issues which were raised are normal in any education reform or change. There are always issues that arise after the implementation of change (Chan, 2010; Chun, 2005; Park, 2008). No matter what the changes are and how they are introduced, what is important is that the objectives of the change are understood. According to Kerr (1968), what and how to teach any subject cannot be decided until the reason for the change is known. In relation to these issues, I agree that in any curriculum reform or implementation, there are always advantages and disadvantages, but what is important is that the reason for the change or introduction is understood by everyone who is involved with it. Changes do take time, but things will gradually be developed and become right eventually. Just as earlier in Malaysia, after a few years of being implemented, the old curriculums, the KBSR and KBSM, were well accepted by teachers, after a few years the implementation was achieved without any problems. But due to the constant need for change to meet new requirements, once again, the system needed to be reformed.

2.2.4 Positive discrimination in the Malaysian education system

Positive discrimination occurs in a situation where “individuals are accorded special treatment in educational selection because of their membership in a disadvantaged group or groups, thus departing from strictly achievement-based criteria of recruitment” (Wang, 1983, p.191). Such discrimination has been practised in various countries such as the US, Malaysia, India and Sri Lanka (Wang, 1983) and is also known by other terms such as preferential treatment, reverse discrimination and affirmative action (Wang, 1983; Wasserstrom, 1976). According to Pincus (2003), affirmative action refers to “policies intended to promote race/gender equality that take race/gender into account” (p.3). This action (affirmative action) is part of the government strategy and its policies include a wide range of issue such as goals and timetables which take race/gender into account, as well as quotas and set-asides (Pincus, 2003). The terms positive discrimination, preferential treatment, affirmative action and reverse discrimination are used interchangeably by some scholars. However, the term reverse discrimination is normally associated with a context that criticizes affirmative action (Pincus, 2003). However, for this current study, the terms positive discrimination and preferential treatment will be preferred and used interchangeably according to their suitability to the argument.

The British colonization of the country had an impact on the economic and education systems. Agadjanian and Liew (2005) stated that the British policy on unrestricted immigration and separate educational systems had resulted in Malaysia becoming ethnically stratified. In regard to the education system, there was a huge imbalance in the opportunities available (Selvaratnam, 1988). The vernacular education systems practised by the British had caused the Malays to be left behind compared with other ethnic groups because they were only provided with elementary schools where they were taught basic numeracy and literacy skills (*ibid.*). The Chinese, on the other hand, were given more freedom in terms of education in that they could build their own privately-funded vernacular schools (Pong, 1993), which had given them greater education opportunities. In addition, the establishment of English-medium schools in urban areas had given more opportunities for the Chinese and Indians to benefit. Only

a few feudal Malays had opportunities to pursue education to the higher level (Spaulding & Hussain, 1989). In addition, the divide-and-rule policy during the British colonization had resulted in the imbalance of the economy which in the long term triggered the racial riots of 1969. Following these riots, the government introduced the New Economic Policy (NEP³⁴) with the aim of eradicating poverty and restructuring the various societies (Lee, 2008). The restructuring process involved introducing inter-ethnic equality into education, employment and corporate wealth (Jomo, 1994).

After independence, it was realised that the Malays, as the larger and foremost community (King & Lillard, 1987), had been left behind both economically and educationally (Pong, 1993). So under the NEP, the government gave privileges to the *Bumiputra* in the areas of education, employment and ownership of assets (Pong, 1993). Malays, as the majority, had been the least advantaged group (Chiu, 2000) and were given special treatment which was regarded as preferential treatment. This treatment had been given constitutional status under Article 153, which stated that

It shall be the responsibility of the *Yang di-Pertuan Agong*³⁵ to safeguard the special position of the Malays and natives of any of the States of Sabah and Sarawak and the legitimate interests of other communities in accordance with the provisions of this Article. (*Laws of Malaysia*, 2012, p.188)

This provision gave the Malays a special position, particularly in education, through a system of quotas applied for entering higher education and also scholarships (Pong, 1993). Furthermore, through the NEP the *Bumiputras* were also given privileges in school admission, and in employment opportunities and promotion (Spaulding & Hussain, 1989; Wang 1983). In the literature, there are three possible reasons for being given preferential treatment (Wang, 1983, p.192):

³⁴ The NEP will be further explained in the entrepreneurship education section later.

³⁵ *Yang di-Pertuan Agong* is the head of all the states in Malaysia and includes the leaders of all the Sultanates and the Governor in Malaysia. The *Agong* is elected every five years.

1. The group or groups in question had suffered significant negative discrimination in the past, and society must therefore make restitution for this injustice;
2. The group(s) have special rights in society by virtue of certain historical positions or constitutional provisions; and
3. In the interests of the political integration of a plural society, the lines of economic and educational inequalities should cut across rather than coincide with racial or ethnic lines.

In Malaysia's case, preferential treatment or positive discrimination were given to the Malays based on the second of these reasons (Wang, 1983), because the Malays were given rights under Article 153 as discussed earlier. However, giving these privileges to the *Bumiputra* was not accepted by the other ethnic groups (Spaulding & Hussain, 1989). Pong (1993) claimed that the Chinese and Indians lost privileges for entering the local university because of the quotas given to Malays. Pong also said that the government's refusal to accept academic degrees from a few universities in Singapore, Taiwan and India had adversely affected them in seeking entrance in higher education because they had to seek alternative higher education establishments in more expensive places such as Australia, the UK and the US. Chiu (2000) reported that Malaysian Chinese students, especially from the Chinese mainstream, were worried about their opportunities for entering the local universities in the country. It was believed that because of the preferential treatment, large numbers of qualified non-Malays were denied admission while the Malays with a lower cut-off entry point were granted admission to the universities (Chiu, 2000; Selvaratnam, 1988). In addition, Tzannatos (1991) claimed that the privileged quota for *Bumiputra* was never revealed to the public, and that the quota for entering university was set at 75 per cent for Malays in the early 1970s and was annually decreased to 55 per cent by the early 1980s. Despite all the claims made about the government being biased and positive toward the Malays, it cannot be denied that through the MOE, the government had allowed provision of scholarships for the lower income groups in all ethnicities

(Spaulding & Hussain, 1989). However, most of the scholarships were actually awarded to Malays compared with non-Malays (Pong, 1993).

All the positive discrimination toward the Malays in the education system successfully narrowed the education gap between the Malays and other races (Agadjanian & Liew, 2005; Chiu, 2000; Pong, 1993). Nevertheless it created other problems in the various societies as well (Chiu, 2000; Pong, 1993; Selvaratnam, 1988; Tzannatos, 1991). It seems that Malays being favoured and benefiting from the positive discrimination had exacerbated the tensions and frustration among the other ethnic groups in Malaysia (Chiu, 2000; Selvaratnam, 1988). The disparities in educational opportunities and the distribution of financial aid resulted in greater social inequalities (Selvaratnam, 1988). Furthermore, Tzannatos (1991) showed that the Malays who had benefited from the positive discrimination were from the better-off families and not the poorer Malays. He argued that in determining the group which should receive preferential treatment, the government should not focus only on one group but should look at the socio-economic characteristics of all the ethnicities. Selvaratnam (1988) claimed that the NEP had not really reached the poorer *Bumiputra* in the country.

Spaulding and Hussain (1989) argued that in solving the inequalities among the Malays, the government had created other inequalities. By applying positive discrimination, the government had managed to reduce the inequality for the Malays but at the same time had increased the inequalities for the other ethnic groups such as the Chinese and the Indians (Pong, 1993). For instance, when less-qualified Malay students were accepted in the universities through the quota system, the non-Malays took it as the erosion of their own educational rights (Spaulding & Hussain, 1989). Even though the government had emphasised unity and integration in the country, the preferential treatment had caused other ethnic groups to feel offended (*ibid.*). Newton (1973) wrote that by favouring someone/some groups in a society by allowing positive discrimination, injustice is actually being done to others and said that “all discrimination is wrong *prima facie* because it violates justice, and that goes for reverse discrimination too” (p.310).

In addition, the positive discrimination actually also did injustice to those in the selected group themselves (Wang, 1983). Problems over preferential treatment were likely to occur when weak students from the targeted group were given an advantage to enter a higher learning institution (*ibid.*). Wang (1983) stated that with this enrolment, the educators might be exposed to political pressure to either lower the standards of their teaching or use different examination grading for these students so that they can pass the programmes, otherwise they might risk failing the examinations. Thus, it could be argued that by lowering the standards of teaching and of the grading scale, the graduates might actually be less qualified and would not be competitive in the job market. This would be disadvantageous to the students themselves. Furthermore, the preferential treatment would also do injustice to the bright students from the targeted group because other people would think that they had been accepted into the university due to the special treatment given to them and not because of their own merits (Spaulding & Hussain, 1989; Wang, 1983).

Referring to the Malaysian case, many scholars (Agadjanian & Liew, 2005; Chiu, 2000; Pong, 1993; Selvaratnam, 1988; Spaulding & Hussain, 1989; Tzannatos, 1991) have highlighted the positive discrimination and special treatment given to the Malays and have argued that their preferential treatment in education had affected the opportunities available to Chinese and Indian students in the education system. However, Wang (1983) suggested that the education disparity among the ethnic groups could be addressed by improving the access to and quality of schooling at the lower levels of education in Malaysia.

2.3 SECTION B - Human capital

In 2011, the MOE introduced a new curriculum called the Standard Curriculum for Primary Schools (KSSR) in every Year 1 in primary schools in Malaysia. The aim of this curriculum was to educate students and to develop human capital in terms of citizens who are intellectually, spiritually, emotionally and physically balanced and harmonic (CDC, 2012). To realise this aim, the MOE introduced three cross-curricular elements in the new curriculum one of which was the entrepreneurship element. This element was introduced to develop and strengthen the human capital skills in students (*ibid.*). The KSSR curriculum was developed on the basis of four principles and these principles were expected to help to develop human capital that meets the Malaysian education philosophy requirements and is consistent with the National Education Policy (CDC, 2011). Thus, in discussing entrepreneurship education and the new curriculum, it is not possible to avoid also discussing the human capital theory and its relationship to education.

In this context, I shall first explain the human capital theory. Then I shall discuss the relationship between human capital and education in general. This will be followed by a discussion about the human capital in the Malaysian education system, and will be further developed by discussing teachers as human capital, and I shall also relate it to the Malaysian context. To finish, I shall relate human capital to curriculum reform in Malaysia.

2.3.1 What is human capital?

Human capital is always associated with humans' knowledge, ability and skills and is likely to be associated with investment in human resources. Welch (1975) stated that there are arguments indicating that human capital theory was derived from the assumption that "labour skills or market perceptions of skills are both durable and malleable" (p.63), but this statement does not refer to the employment market philosophy (Welch, 1975). According to Becker (1962), investing in human capital

involves investing a specific amount in people and this will later affect what they earn in the future. Becker explained this by stating that investment in human capital means activities that “influence future monetary and psychic income³⁶ by increasing the resources in people” (p.9). Becker explained that there are many activities which are related to investment and all these activities will improve the social life of people and enable them to raise their earnings and their psychic income. Kumar (2006) described human capital as the “knowledge and skills embodied in humans that are acquired through schooling, training and experience and are useful in the production of goods, services and further knowledge” (p.153). Kumar emphasized education, which he said is the key to human capital. This is in line with Olaniyan and Okemakinde’s (2008) claim that in human capital theory, education plays a role by investing in the human cognitive level whereby increasing the level of workers' cognitive abilities will also increase their productivity and efficiency.

2.3.2 Relationship between human capital and education

Education is an important investment in human capital development (Becker, 1992; Kumar, 2006) and most countries are investing in their human capital through their schooling system (Hanushek, 2009). It seems that education has a positive relationship with the development of human capital and economic growth. Nelson and Phelps (1966) stated that the “process of education can be viewed as an act of investment in people that educated people are bearers of human capital” (p.75). The relationship between education and human capital can be seen in Sweetland's (1996) comment that it is difficult to separate the literature on human capital from that on the economy of education. It is generally acknowledged and believed that those who are educated will have a high-value human capital themselves because it helps them to be better employed and to receive better income (Walter, 2004). Fafchamps and Quisumbing (1999) conducted a study in Pakistan related to human capital and found that those families with educated males received a higher income from work which was related

³⁶According to the Oxford English Dictionary, 'psychic income' is defined as the non-monetary or non-material satisfaction which accompanies an occupation or economic activity.

to non-farming activities. By having a good education, they had managed to get better jobs and thus increase their income.

According to Weiss (1995), people who receive high salaries are usually those who are highly educated and have worked before and have vast working experience. In discussing education's contribution to economic growth, we cannot fail to see the contribution that had been made by schools. Schools teach what is not being taught through socialization (Walter, 2004). School is also the place where students are given the knowledge and develop the skills which will help them to be successful and to earn a better income (*ibid.*). These are the reasons why students try to study hard and further their study because, according to Walter (2004), when lower achievers enter the working world, they will be positioned in the lower ranks of working level. This is different from those who are high achievers and have continued their education to a higher degree, and this has motivated them to be knowledgeable and skilful so that they end up in a better economic position.

In the literature, researchers link economic growth and education. Lee and Lee (1995) explained the relationship well: using the results from a science test, they studied the effect of human capital on economic growth and found that the economy of a nation shows a higher growth rate when it is rich in human capital resources and that those nations which have lower initial income tend to have faster economic growth (Lee & Lee, 1995). They also demonstrated some findings that showed that economic growth was determined by students' achievements but not by the school enrolment and years of schooling. They argued the existence of non-economic growth factors such as "school curriculum, teaching method, student aptitudes, and even the socio-demographic and cultural environments in different countries" (p.224) in economic growth. This showed that the school curriculum together with other factors does have a direct influence on the development of human capital. This finding supports Welch's (1975) view of human capital theory that the previous belief in the income/schooling relationship has proven to be shallow and not profound. His consideration of various studies led him to argue that the relationship "seems superficial" (p.69).

The relationship between economic growth and education can further be explained by Levin and Raut's (1997) investigation of the connection between exports and human capital in economic growth. They found that there is a vigorous relationship between "trade policies and education expenditures" (p.157). That result showed a significant relationship between average education and export growth; and unless it can exploit and use the educated human resources, the export sector will not be successful. This demonstrates a good relationship between human capital and economic activity and indicates that investing in human capital through education will help to develop knowledgeable and skilful workers which clearly has positive significance for export activities and simultaneously increases economic growth.

According to Becker (1992), investing in human capital is not the same as investing in other sectors such as finance and physical assets because human capital has specific intrinsic criteria such as "knowledge, skills, health or values" (p.85). Human capital comes with all these criteria and this means that we have to accept them as they are and that these criteria cannot be moved or sold. In relation to education, if this human capital is given good exposure to education either through formal or informal means, it can be developed, because Becker (1992) emphasised that "education and training are the most important investment in human capital" (p.85).

Human capital theory has not been unchallenged. Rubinson and Browne (1994) explained that the existence of some new perspectives in the sociology of education had caused some dissatisfaction among the human capital theorists. Walter (2004) discussed the work of a few scholars (Bernstein, 1973; Bowles & Gintis, 1976; Brown, 1995; Smith, 1990) that challenged human capital theory. He gave four conclusions:

- a. "First, it is limited because it does not adequately address the fact that those from upper classes benefit" (p.101).

- b. "Second, it also has been challenged for not dealing with social and structural arrangements, which, along with individual factors, are responsible for the reproduction of inequality" (p.101).
- c. "Third, human capital theory is also criticized because it does not devote enough attention to the fact that some people are socially and culturally better prepared to gain access and succeed within the education system than others" (p.102)
- d. "Fourth, human capital theory is questioned because it provides little insight into why different post-secondary programs (degrees) are correlated with particular jobs rather than years of schooling" (p.102)

Olaniyan and Okemakinde (2008) also raised an issue pertaining to the relation between education and economic development by arguing that many commentators had failed to look at the gap concerning skills and knowledge attained by people with the declining number of occupations which suit their qualifications, especially in developing countries. Some scholars have said that education helps to develop human capital and that by learning and increasing their individual knowledge, people are able to get better jobs. But there have been worries that there would not be enough suitable jobs in the market to suit their qualifications, and that if the demand for jobs is greater than the number of jobs available, this would lead to unemployment which would have an impact on the economy.

From most of the literature discussed above, it appears that the application of human capital theory in education is important because investing in education is the best option for producing good quality workers. According to Becker (1992), any expenditure on education can be assumed to be investing in capital. Undeniably there are issues raised by sociologists that challenge the human capital theory, but effective solutions to the problems discussed above would help to increase the qualified human capital in each country. Education produces better citizens and helps to improve their lives in society (Olaniyan & Okemakinde, 2008).

2.3.3 Human capital in the Malaysian education system

Human capital management has long been discussed in the Malaysian education system. Although it was after the Ninth Malaysian Plan³⁷ that people started to talk more about human capital, efforts to develop human capital through education had long been going on since 1897, when the first formal vocational education was introduced by the British to train Malaysian young people to operate the railway lines (Zakaria, as cited in Ramlee & Abu, 2001). This vocational education was aimed at giving the learners the knowledge and skills that they needed to become skilled workers. Realizing the importance of education in developing the human capital and having skilled workers, the first trade school was opened in Kuala Lumpur. This was a three-year course offering basic training to enhance the knowledge and skills of fitters, electricians, carpenters, brick layers and tailors (MOE, 1967). This was among the earliest investments in education for preparing skilled workers to ensure economic growth.

Investing in and developing human capital in Malaysia is an on-going process and it has become a national mission. This was outlined in the Ninth Malaysian Plan. In his speech presenting the plan in 2006, the former Prime Minister Datuk Seri Abdullah Ahmad Badawi urged that the development of human capital should become a main thrust in building the new generation. He emphasized the importance of developing human capital and stressed that it is vital to pay attention to it in becoming a nation with a knowledge-based economy. The human capital approach is expected to be holistic with the emphasis on the development of knowledge, skills and intellectual capital in science, technology and entrepreneurship, attributes which are in line with the development of a culture that is progressive and has high moral and ethical values.

³⁷ The Ninth Malaysia Plan involved five years of long-term planning (from 2006 to 2010) that included strategies, programmes and financial provisions required for the purpose of realizing the national mission. It was prepared by Economic Planning Unit and Finance Ministry and had to be presented in Parliament for approval by the Cabinet of Malaysia.

In ensuring the success of the national mission declared in the Ninth Malaysian Plan, five thrusts³⁸ were introduced of which one was to enhance the national capacity for knowledge and innovation and to nurture citizens with 'First Class Mentality'.³⁹ Under this thrust, the nation's education system was reviewed as the government took various actions to improve the education system. To produce human capital with a first-class mentality, four essential steps were introduced: "increasing the capacity for knowledge; strengthening R&D capacity, science and technology; fostering a cultured society with strong moral values; empowering youth and women" (Abdullah Ahmad Badawi, 2006, pp.24-30). These approaches were expected to help the government by producing knowledgeable and skilful future manpower in accordance with the National Education Philosophy.

The government's investment in human capital through education did not stop there. In 2006, the Educational Development Master Plan (PIPP) was introduced. This was a five-year plan from 2006 to 2010 and was established as part of the programme to support the Ninth Malaysian Plan. It focused on providing quality education for all, and to achieve this, the government listed six strategic thrusts, the second of which referred to developing human capital (MOE, 2006). In order to develop human capital, the MOE devised a system of values, discipline, and students' personalities, characters and self-esteem. This thrust was also intended to help to produce students who are competent in science and technology, innovative, creative and employable (*ibid.*).

Education development is a never-ending process. Plan after plan has been formulated to ensure the success of education and the development of human capital in Malaysia. It seems that all the changes in the education plan involve curriculum change as well. From the period of British colonization to post-independence education and until the recent changes, education in Malaysia has been transformed and has undergone many changes (Mior Khairul Azrin, 2011). The curriculum had been changed and reformed

³⁸This speech can be read on the Malaysian parliament website at: (http://www.parlimen.gov.my/news/eng-ucapan_rmk9.pdf).

³⁹The first class mentality in the Malaysian context is defined as people who have the wisdom to make judgments and decisions in all aspects of life and can manifest it in their behaviour and actions.

according to the changing demands and needs of Malaysians and following the nation's development and globalization.

After independence in 1957, the evidence shows that the education focus in Malaysia was more on national integration and uniting all the ethnic groups (Sufean, 2008), but as the country developed, the focus changed. The establishment of the Education Act 1961 showed the government's determination to change the education system (Mior Khairul Azrin, 2011). There are many factors which have brought about changes to the system, such as globalization, economic development, changes in the education systems of other countries, the discovery of new knowledge and technology, technological development and advancement, and demands on the workforce. One of the approaches showing the experience of investment in human capital and the education system in Malaysia is the establishment of soft-skills elements in all the universities in Malaysia.

As mentioned earlier, one of the main agendas in the Ninth Malaysian Plan was investment in human capital and to achieve that, the Minister of Higher Education gave instructions that changes be made to the undergraduate syllabus by embedding soft-skills⁴⁰ elements into the existing syllabus (Roselina, 2009). According to Roselina (2009), there were two reasons that underpinned the changes. The first was the critical comments from employers regarding students' abilities in terms of soft skills and the second was the changes and demands in the workforce and the labour market. These circumstances necessitated the changes so that graduates would be more competitive when they enter the labour market.

On 10 June 2010, the current Prime Minister, Dato' Seri Najib Tun Razak, introduced the Tenth Malaysian Plan.⁴¹ This is a continuation from the Ninth Malaysian Plan and

⁴⁰The Malaysian Institute of Higher Learning interprets soft skills as "incorporating aspects of generic skills which include non-academic skills such as leadership, teamwork, communication and lifelong learning" (Roselina, 2009, p.310)

⁴¹ The Tenth Malaysia Plan involves five years of long-term planning (from 2011 to 2015) that includes strategies, programmes and financial provisions required for the purpose of realizing the national mission. It was prepared by Economic Planning Unit (EPU) and Finance Ministry and had to be

will be executed in the five years from 2011 to 2015. In the report, the accomplishments that were achieved by the Ninth Malaysian Plan are stated. The data presented in the Tenth Malaysian Plan (*see* Appendix 1) show an increase in enrolment numbers for all levels of schooling and also in the universities. It also shows that the intakes for the technical and vocational training institutes had risen.

The Tenth Malaysian Plan shows that the objectives of the Ninth Malaysian Plan for the education sectors had made positive progress and that the investment in human capital in the education system was showing signs of success (Malaysia, 2010). Developing human capital in Malaysia is an economic imperative and is central to the journey towards a high-income economy (*ibid.*). To achieve this requires “consistent, coordinated and concentrated efforts to leverage our diversity internationally as well as to nurture, attract and retain top talent in Malaysia” (*ibid.*, p.242).

2.3.4 Teachers as human capital

According to Sufean (2008), the most important aspect of the Malaysian education system is the teachers themselves since they are the implementers of any educational or curriculum reform. Teachers are not only mediators between the curriculum and their students, but also workers themselves. They are the human capital in the education system. So, the importance of investing in all teachers to ensure the success of educational reform is clear. According to Smylie (1997), teachers’ education is becoming more important and for that, on-going professional development is needed so that their productivity and efficiency can be increased (Olaniyan & Okemakinde, 2008).

As discussed above, some argue that there is a relationship between human capital and education (Becker, 1992) and it seems that knowledge is not the only element that comprises human capital. According to Chen, Zhu and Xie (2004), the other elements

presented in Parliament for approval by the Cabinet of Malaysia. The plan can be read at EPU’s website at http://www.pmo.gov.my/dokumenattached/RMK/RMK10_Eds.pdf.

that form human capital are employees' competence, attitudes and creativity. Knowledge, skills, talents and capability are part of the competencies that should be possessed by employees (Chen *et al.*, 2004). It is clear that knowledge is only part of the human capital theory but undeniably it plays an important role in the future success and economic survival of a country (Kang, 2005). In determining the effectiveness of schools according to human capital theory, teachers have to be prepared to show an understanding of prior and new knowledge required in their teaching and learning (Smylie, 1997). Thus, the knowledge, skills and commitment of teachers should be developed (Rowan, 1990). Building human capital in schools starts with investment in teachers and this can be achieved by providing training and professional development for them (Smylie, 1997).

Interestingly, it is said that when teachers have a master's degree, it can improve their students' achievement (Betts, Zau & Rice, 2003). However, research by Pil and Leana (2009) suggested otherwise. They found that an individual teacher's formal education did not have any effect on students' performance, but that teaching experience and teaching ability did. They also found that when an individual teacher works in a group together with educated teachers, this benefits the teacher and the students as well. This is because the exchanges of ideas between the teachers in the group enhance the availability and flow of ideas of the individual teacher (Pil & Leana, 2009). That study showed that teachers' experience, teaching ability, working in groups and collaborating with other teachers all have a positive impact on students' achievement. Thus, Pil and Leana (2009) suggested that the professional development of teachers' expertise is an effective investment for schools. However, Hanushek (2003) suggested otherwise. He showed that teachers' experience and level of schooling has an impact on students' achievement, but only for the first few years. Factors such as peers, family, incentive and evaluation were found to have a significant impact on students' achievement (Hanushek, 2003). Parcel and Dufur (2001) showed that children's achievement in school is enhanced by family and social support. It is not easy to develop human capital in schools, but doing it and promoting teachers' learning do have great potential for bringing valuable change to schools (Smylie, 1997).

Since Malaysia achieved independence, the MOE had been responsible for restructuring and improving the education system so that it meets current requirements and this has been done by introducing and emphasising human capital (MOE, 2008). Teachers are seen as the curriculum implementers as well as human capital themselves. So it is understandable if the MOE is concerned about teachers' education. In a newly-published book on the Malaysia Education Blueprint 2013-2025, teacher training is emphasised as the best means to produce teachers who are professional, competent, competitive and honourable, and who practise noble values, skilful thinking and technological efficiency (MOE, 2012a).

In Malaysia, teachers' education is regarded as important and to ensure teachers' personal and professional development, the MOE provides in-service training for all teachers (EPRD, 2008). Through this training, teachers can be updated on all the latest developments in education and on their own particular subject areas. This is done to enhance teachers' understanding and capabilities for teaching the new reformed curriculum. The need for this training is given a clear emphasis in the Tenth Malaysian Plan:

Developing and enhancing the quality of teachers will be the focus towards driving improvements in student outcomes. Schools and principals will be made increasingly accountable for student performance, and will be provided with the corresponding support and autonomies. (Malaysia, 2010, p.242)

Realizing the importance of training for all public services employers, the government issued Circular 6, 2005 on training, and that circular stipulated that employees should be allowed to go on government-provided, seven-day training courses each year.

Recognizing the importance of the efforts of human resource development in the public sector, Human Resources Training Policy Public Sector has been set in which each member of the public service should be equipped / completed with appropriate attitude, skills, and knowledge, through the planned human resource development based on competence development and continuous learning (Circular number 6, 2005, p.3)

Each Ministry / Department shall prepare the annual budget equivalent to at least one percent (1%) of the emoluments for the purpose of training provision (Circular number 6, 2005, p.4)

Each Secretary General / Head of Department shall ensure that each member at all levels attend courses at least seven days in a year (Circular number 6, 2005, p.4)

This circular applied to all the teachers employed by the MOE. The training provision was designed to help teachers to develop their personal careers because, according to Wayne *et al.* (1999), training has a positive relationship with career satisfaction. The MOE also issued a circular (Circular 21) which stipulated that new teachers should be given continuous training in order to develop their quality (MOE, 2012b). It can be seen that in realizing the objectives of the National Educational Philosophy and the production of first-class human capital, the MOE had taken the necessary action by providing appropriate support and opportunities for teachers to develop themselves. It is believed that support and guidance from the government and from superiors will lead to employees' career success (Wayne *et al.*, 1999).

The MOE Deputy Minister Datuk Razali Ismail, leading the National Teachers' Days in Sabah, reminded teachers that it is crucial for them to be aware of the fact that the task of generating human capital is not as easy as they thought ("Guru," 2008). He added that the task needs high-level commitment and sacrifice from all teachers and also a passion for dealing with challenges because they need to educate the new generations of students. Therefore, to produce human capital, the roles of the government and of teachers are the main pillars of its success (Aminuddin, 2013). To support the professionalism of teachers, various incentives were given to them. According to Sufean (2008), the government developed various salary schemes for teachers and the establishment of 55 teachers' associations showed the government's support for their professional development. According to the human capital theory on wages, there is a positive relationship between wages and employees' self-esteem (Goldsmith *et al.*, 2007). Employees with low wage levels will possess low self-esteem compared with those on middle-income wages (*ibid.*). It can therefore be

argued that giving employees salaries that are on a par with or higher than their capability level will enhance their self-esteem.

2.3.5 Human capital and curriculum reform in Malaysia

In the literature, the years from 1957 to 1970 were considered the crucial period in the history of education in Malaysia (Sufean, 2008) since that was the period in which the reconstruction of education in Malaysia was being carried out and many changes were made to the education system. This was believed to ensure that the education system in Malaysia was competitive and consistent with the nation's development. In the 1960s, the nation went through economic changes and it needed many skilled workers in various fields. This was when the education system played a crucial role. The nation's development had caused the education system to be reformed and one of the focuses was on the curriculum structure for schools, teachers' learning and higher institutions. This was to ensure the sustainability and relevance of the curriculum in all levels of education (*ibid.*). The growing demand for skilled workers and the changes in education resulted in the establishment of many universities, colleges and training centres.

The nation's progress resulted in the government making changes to the curriculum system. As already explained, in 1983, the New Primary School Curriculum (KBSR) was introduced and this was followed by the New Integrated Curriculum for Secondary Schools (KBSM) in 1989. The KBSR curriculum provided students with basic knowledge and skills and the KBSM curriculum emphasised students' development. It was hoped that changing the curriculum would produce citizens who would then contribute to the success and harmonization of the nation. This was in line with the National Education Policy which sought to produce Malaysian citizens who would give something back to the benefit of both society and nation.

To keep up with the nation's development, especially in agriculture, commerce and technology, the MOE introduced the Living Skills for Primary Schools subject in

primary schools in 1982 and the Integrated Living Skills subject in secondary schools in 1989. Both curriculums were reformed in later years to cope with the demands of the workforce and the country's development. The Living Skills curriculum in primary schools aimed to ensure that students had basic knowledge of technology and entrepreneurship so that they could later become involved in 'do-it-yourself work' (CDC, 2004a, p.3). The Integrated Living Skills curriculum, on the other hand, aimed to produce students who were knowledgeable, had positive values and were able to face future challenges (CDC, 2002). These changes in the curriculum showed the government's concern over the need for knowledgeable and skilled workers in the labour market and were implemented with the intention of producing good Malaysians who were well-matched with the education philosophy. Although the term 'human capital' is widely used to describe knowledgeable and skilful workers, the meaning is still the same: it underlines the values that a good worker should have.

The relationship between human capital investment and curriculum reform in Malaysia can further be understood by relating it to the newly-introduced primary school curriculum. In 2011, the MOE introduced a new curriculum entitled The Standard Curriculum for Primary School (KSSR). This was a reformed curriculum for Year 1 primary school students in Malaysia. The idea of the reform was driven by the Prime Minister's keynote speech to the UMNO General Meeting in 2006. In that speech, the Prime Minister demanded that national education should put emphasis on several issues, one of which was human capital development. The human capital issue was earlier raised in the Ninth Malaysian Plan and the Educational Development Master Plan. Taking human capital and other issues into consideration, the MOE realised that the existing curriculum needed to be changed to ensure that it would be relevant for producing human capital capable of handling the future as well as the immediate challenges which had to be faced (CDC, 2011). The new aim of the curriculum is to generate students who are intellectually, spiritually, emotionally and physically balanced, global players, responsible citizens and knowledgeable workers - all qualities which are consistent with the National Education Philosophy (*ibid.*).

The new Year 1 curriculum was established in such a way as to ensure that pupils in the future will manage to cope with their lives and with the challenges ahead of them (*ibid.*). To ensure that the best generation of students was being produced, the MOE introduced three cross-curricular elements into the curriculum: Information, Communication and Technology; Entrepreneurship; and Creativity and Innovation. These elements are intended to help students to have added value in themselves. According to human capital theory, investment in human capital can be achieved by providing individuals with knowledge and skills. As Laroche and Marette (1999) explained, human capital is “the aggregation of the innate abilities and the knowledge and skills that individuals acquire and develop throughout their lifetime” (p.89). Knowledge and skills can be built through schooling, training and professional development, so giving students exposure to these elements while they are still young will help them to develop and become valuable human capital later. This aim is consistent with the education policy and education plans proposed by the government. The ability to compete with other countries in an era of globalization and the ability to seize opportunities and move forward not only depend on a sound infrastructure but also on first-class human capital (Abd Rahman, 2006). The government believes that the development of human capital will shape the direction of the country and is the determining factor for the success of Vision 2020⁴²(Ab. Aziz, 2009). Without a quality, competitive and competent stock of human capital, it could be argued that the aim and objectives of the country cannot be achieved. Realizing the importance of human capital, the government allocated about 25 per cent of the Malaysian Ringgit 200 million budget in the Ninth Malaysian Plan to the MOE and the Ministry of Higher Education for implementing and continuously evaluating the education agendas (Ab. Aziz, 2009).

Students are regarded as the human capital of the future and thus it can be argued that education needs educators who are proactive, creative and able to develop students’ potential. These educators are expected to tap all the potential that each student has (Wan Mohd Zahid, 1993). Ab. Aziz (2009) suggested that to provide entrepreneurship

⁴²Vision 2020 is a government program and would be explained further in Section D (p. 103)

education, teachers have to develop students' potential by exposing them to the entrepreneurship acculturation which is accepted as one of the specialities that all students must have in order to be able to face career challenges in the future. For that, teachers should act as think-tanks, catalysts, drivers and also injectors of entrepreneurship knowledge for their students (Ab. Aziz, 2009).

2.4 SECTION C - Curriculum Reform

In this section, I shall discuss in detail the concept of curriculum reform, the process of curriculum reform, and the challenges and issues surrounding the reform.

2.4.1 The concept of curriculum reform

Curriculum reform is believed to be the essence of all educational changes because it is “the process whereby intentions are translated into reality” (Hughes, 2006, p.2). These changes are a normal process and are usually executed to improve the quality of education in any schools, colleges and universities or any other institutions which involve an education system. There are reasons behind every change and the need to change the curriculum occurs because different requirements are constantly arising (Doll, 1996). Factors such as political, economic and social changes have an impact on education and indirectly drive the curriculum to change as well (Clough & Nixon, 1989; Doll, 1996). Reform can happen at school level when the administrators and teachers initiate changes by developing new teaching materials for their students or at a national level when the initiative for change comes from the top management in an attempt to strengthen the national identity and improve the education system (Chun, 2005).

Fullan (2007) argued that “educational change involves change in practice” (p.30) and identified three dimensions that need to be taken into consideration when implementing any changes to an educational system. These three change components are in the materials (instructional materials such as curriculum materials or technologies (p.30) that are being used, in the teaching strategies implemented within the changes, and in the principle that lies behind the education system. Fullan (2007) explained that all these components are crucial and that together they will help to achieve the goals of change. It is well accepted that curriculum changes are part of educational changes and that the need to reform the curriculum became evident in order to face challenges in the education system and also to counter the impact of

globalization. This is in line with the view of Montero-Sieburth (1992) who regarded curriculum reform as the “preferred vehicle for educational reform” (p.175).

In order to explain curriculum reform, it is first necessary to understand the meaning of reform. According to the Collins English dictionary, ‘reform’ as a verb means “to improve (an existing institution, law, etc.) by the alteration or correction of abuses”, and as a noun bears the meaning of “an improvement or change for the better” (Collins English Dictionary, 2000, p.996). According to Ahmad (1991), ‘reformation’ is a planned change and the use of the right actions with the hope of fulfilling targeted objectives. Ahmad added that reformation is also about how change happens and he referred to educational reform as “various efforts to improve the theory and practice of education” (Ahmad, 1991, p.3). Wan Mohd Zahid (1991), on the other hand, defined reform quite simply as a change made to something that transforms it to a new form or pattern. However, he distinguished reform from a normal change by claiming that reform occurs because there are needs for change which arise from specific aims and intentions. He also added that reformation is made with a specific intention and is planned to achieve a target.

Razali Arof (1991) claimed that the curriculum change concept is specific and that during the process of curriculum change, the existing curriculums are infused with new elements to improve them and make them more effective. A similar idea was put forward by Chun (2005), who looked on curriculum reform as changes that are made to the existing educational system which focus on changes of more precise issues in the content and organization of the curriculum. However, Zhong (2006) had a slightly different idea and viewed curriculum reform as “a process of transformation both in educational thought and curriculum paradigm which is a great campaign to drop the obsolete and build the new” (p.380).

Curriculum reform is regarded differently by different people according to their values and understanding of change (Doll, 1996). Doll (1996) explained that if a person smokes cigarettes but later changes to taking drugs, it is still considered a change but

very few people would consider the change to be an improvement. The same concept, he said, applies in education. A positive change for one person might not be the same for another because they judge the change according to their own value systems (Doll, 1996). Almost half a century earlier, Mackenzie and Lawler (1948) had stated that people hold different concepts about what makes a curriculum and how they visualize the changes. Basically, people view a curriculum as what learners gain from an academic institution. They believe that when curriculum change occurs, it also changes the factors that influence what learners have learned. Many factors contribute to this situation, and changes in the curriculum also change people. This will only occur when the values, understanding and skills of an individual are being altered or changed. Mackenzie and Lawler (1948) further argued that if curriculum change is seen as course modification, it will then tend to give very little consideration to the process of change.

Some scholars tend to use the terms ‘change’, ‘reform’, ‘improvement’ and ‘development’ interchangeably to explain changes in an education system as well as changes in a curriculum. Doll (1996), however, regarded improvement and change as having different meanings. He stated that improvement is something that increases value and he included the terms “betterment, amelioration and enrichment” (p.306) in this category. Change, on the other hand, is something that can go in two different directions, either it is favourable or it is unfavourable: “improvement can best be ensured by evaluating the true effects of change” (p.306). The Organization for Economic Co-operation and Development (OECD) (1975) used both the terms ‘curriculum development’ and ‘curriculum reform’ in its handbook on curriculum development, and explained that curriculum development should be defined in broader terms. The OECD said that the definition should go far beyond the narrow scope that relates it to prearranged changes in the curriculum. It should involve processes of “analysing and refining goals, aims and objectives, together with the translation of these into the content of courses by formal or informal methods” (p.12). The OECD used the term ‘curriculum development’ to refer to a bigger picture in explaining the changes made either to the education system or to subject changes, and the term

‘curriculum reform’ for more focused issues that relate to changes in the curriculum. For me, this indicates that both terms can be used but that development brings a broader meaning than change. Hargreaves (2005) said that change tends to be “multi-dimensional” (p.3) and that makes it complex to define. He added that while the literature defines some scopes that relate to change, there are still a few issues that need consideration and attention. However, Blenkin, Edwards and Kelly (1992) argued that change should only be seen as change and not as development because knowledge, values and societies are constantly evolving and nothing in human life is static. For that reason, change should be directed correctly and accepted as part of life so that the evolution process does not slow down; they called this the “sociology as well as philosophy of change” (p.13).

From the definitions discussed above, I conclude that ‘change’ and ‘reform’ have different meanings but that sometimes they can be used interchangeably in particular circumstances. For the purpose of this current study, I use the term ‘curriculum reform’ because I feel that this term best suits my study.

2.4.2 The process of curriculum reform

A significant number of strategies are used to bring about curriculum reform. Hunkins (1985) created a systematic seven-step model for curriculum development which provided “a linear and rational approach to curriculum development” (Hunkins, 1985, p.23). In that model, Hunkins (p.24) listed the following seven steps of approach. (1) “Curriculum conceptualization and legitimization” – a major stage in which students' weaknesses in their understanding and performance are identified and analysed using the ‘front-end analysis’ method. (2) “Curriculum diagnosis” – focusing on finding the reasons for the weaknesses; this is the stage in which aims, goals and objectives are created. (3) “Curriculum content selection” – this is the process of selecting the right curriculum to make learning meaningful; various criteria have to be met and content selection is structured and sequenced. (4) “Curriculum experience selection” – the curriculum developer chooses the right approach for delivering the content to

students.(5) “Curriculum implementation” – at this stage the new curriculum is implemented after a small-scale pilot study has been carried out to identify any problems in the curriculum before it can be implemented on a larger scale. (6) “Curriculum evaluation” – this is a process to ascertain that the implementation follows the planned action. In the event of any default in the implementation of the curriculum after positive results from the pilot, Hunkins (1985) suggested that it lies in giving improper instructions. And (7) “Curriculum maintenance” – to ensure the continuing success of the implemented curriculum, a well-planned maintenance programme should be carried out; this involves finding the right methods to ensure that the curriculum will be maintained to function successfully.

In 1996, Kennedy and Kennedy discussed English Language Teaching (ELT) teachers’ attitude and its link to the implementation of change. They argued that a person’s attitude will cause an “individual’s intention to act in a certain way” (Kennedy & Kennedy, 1996, p.355). They described the subjective norms as an element which is part of the intention which reflects what a person believes in other people’s perception of his/her behaviour. When teachers and educators believe that they have other people’s support, their attitude becomes positive. But if they are opposed, this creates negativity in the individual’s intention. Kennedy and Kennedy (1996) suggested that any change process should involve the “respected/powerful group” (p.360) and that any attempt at changes by the classroom teachers should be supported by the top-level administration. This will ensure success in the long run. The active involvement of people from all levels of the education hierarchy helps in achieving the target for educational changes. Any initiatives from bottom-up or top-down level should be encouraged and fully supported.

In more recent years, Macdonald (2003), referring to physical education (PE) subject, listed three models of curriculum change and reform that have been introduced by educational policy makers into education system. These changes have had impacts on students’ learning processes. The models are the “Top Down Model, Bottom Up Model and Partnership Model” (pp.140-142). In the top-down model, the curriculum

uses a more centralized approach and instructions come from the top administrative officers. Teachers as implementers are required to carry out and implement the given instructions. At this level, teachers usually do not have much involvement in the decision-making. Top-level administrators are usually exclusively involved. In the bottom-up model, educators have more freedom and more say in the education system. The curriculum itself is developed by the educators, but as teachers are the implementers, there is the likelihood that they will know the situation at the chalk-face. Macdonald (2003) acknowledged that curriculum developers began to realise that teachers play an important role in curriculum reform and wrote “to improve the ‘fidelity’ of innovations, curriculum researchers began to advocate the central role of teachers in curriculum reform and the need for teachers to ‘own’ aspects of the changes that were sought” (p.141). The third model is more reliable and promising because it engages people at all levels of the education system. It involves partnership and collaboration between administrators, curriculum developers, professional associations, researchers, teacher educators, teachers and parents (*ibid.*).

Normally, change is associated with a positive outcome but as already observed not all changes are good, successful and problem-free. Sometimes conflict can occur in the process of reformation (Zhong, 2006) and this can affect the implementation progress. Zhong (2006) said that reformation in China has shown that the reforms made there were not without any problems. When the new curriculum was introduced, there was a conflict because on the one hand, the reform was known to be important and necessary for the country, but on the other there were many misperceptions and misunderstandings that arose during the implementation process. Such conflicts can be resolved and Zhong identified three bottleneck situations⁴³ that had impeded the implementation. Elmore (1999) argued that the reason for unsuccessful educational practice in the US is the “incentive structures” (p.253) in which curriculum developers work.

⁴³The three bottlenecks were “lack of national-level college entrance examination system”, “lack of education legislation” and “lack of research on teachers” (Zhong, 2006, pp.371-372).

Conflict in curriculum change was also examined by MacPhail (2007), who studied physical education teachers' views of a curriculum innovation in Higher Grade Physical Education (HGPE) in Hong Kong. She sent questionnaires to 170 secondary schools and found that there had been tension and conflict among the teachers when their interpretation and reconstruction of the change in HGPE differed from what they were expected to deliver. The findings also revealed a lack of understanding among the teachers and that the one-way relationship between the curriculum agents and the schools had left teachers longing for more direction and clarity on what changes should be carried out and how it should be done.

In a study of elementary school teachers in northern Portugal, Flores (2005) examined the implications of changes for professionalism. She identified contradictory trends in the teachers' professionalism because her respondents had accepted and acknowledged the changes in their school but at the same time they questioned the implementation. The issues of bureaucracy, collaboration and lack of training and resources, together with a lack of support and guidance, had been raised by the teachers. Flores said that "it is important to support teachers and to understand the ways in which they interpret and deal with the change process and the impact of change initiatives on their beliefs and values as teachers" (p.411).

Even though the examples discussed above are associated with the problems of change, some studies have found otherwise. Fisher and Lewis (1999) found that teachers showed more positive views than the criticisms made in the press of the National Literacy Strategy (NLS) in the UK. The teachers did have some negative views as well, but the general positivism that the teachers showed towards the issue was greater than Fisher and Lewis had anticipated. They found that teachers were positive about the structure of the NLS framework, the materials and resources, the increasing emphasis toward literacy and the use of shared reading materials (p.24). Fisher and Lewis also said that teachers were more positive than educational commentators toward the implementation of the NLS and that they were more concerned with the practical issues than the underlying theoretical and educational

philosophy. Those findings showed that in some conditions and situations, where teachers think that the changes suit them, they do appreciate and welcome them.

An earlier study by Alexander and Pallas (1984) in the US showed that benefits as well as drawbacks can result from the implementation of curriculum reform. They studied curriculum reform in high school which meant that students had to take 'Five New Basics' subjects in order to be able to pursue their study to take diplomas. The data for the study were taken from the Educational Testing Service's Study of Academic Prediction and Growth and the respondents were students who had graduated in twelfth grade in 1969. The aim of the study was to examine the popularity of the subjects highlighted by the reform and the benefits that the programme might have for the cognitive development and outcome of students using the School Aptitude Test. The results revealed that the reform had produced positive feedback. Students who had fulfilled the New Basics guideline subjects achieved higher test scores than those who did not comply with the proposed reforms. The authors therefore suggested that a good planned programme or curriculum can help students to achieve better results in their exams. Nonetheless, there were a few drawbacks that the authors found from that study. Despite the positive test results, the researchers admitted that the reform was not a thorough planning of work but just a simple "course-count across several areas of study" (p.413). It did not take into consideration the qualitative differences in the courses and also in classroom atmosphere.

Curriculum dissemination is also part of curriculum reform and is as important as any other reform process. It is believed that one of the reasons why the School Council in the UK failed to execute the curriculum change effectively was the dissemination strategies used during the implementation (Kelly, 2010). For teachers to fully accept any changes, curriculum developers need to find a strategic way for curriculum diffusion and to make them understand and accept it (Cooper, 1977). The term 'curriculum dissemination' is often used synonymously with 'curriculum diffusion' (Noor Azmi, 1988) but sometimes in the educational process, "the dissemination

should replace diffusion” (Kelly, 2010, p.125). Becher and Maclure (1978) explained Peter Kelly’s definitions of dissemination and diffusion. They explained that the former is about “what a curriculum developer intends to happen” (p.110) and the latter is about what is in practice at the moment. For Fullan (1985), dissemination refers to planned activities used to give people new information for possible use, and diffusion refers to the natural spread of information. Johnson and Brown (1986) defined diffusion as the general spread of an innovation, whereas dissemination is “a planned and deliberate pattern of diffusion” (p.129) and they thought that dissemination is more suitable to be used to cover both conditions. To achieve change, dissemination should be allowed to take place (Kelly, 2010) because this is what is planned by the curriculum developers. Diffusion is important, but curriculum reform would not be successful without dissemination (Becher & Maclure, 1978). It seems that the terms have slightly different meanings, with ‘dissemination’ focusing more on the directed and planned spread of news and ideas and ‘diffusion’ focusing on spontaneous and unplanned spread (Rogers, 1995). For this current study, I have preferred the term ‘dissemination’ because it implies that efforts have been made by one particular group to spread information about the intended curriculum change to another group of people, which in this study is a planned curriculum change being communicated by the MOE to headteachers and teachers in primary schools.

Craig (2006) studied curriculum dissemination from the perspective of Bernadette, a teacher and coordinator in Cochrane Academy in the US. The Cochrane Academy had been given a major school reform grant for the development and dissemination of a new art-based curriculum. Bernadette worked hard for the reform to be successful but finally she resigned and moved to another school. Her resignation was not because she was not inspired by her work in Cochrane Academy but because of the problems that she encountered during the dissemination of the change. According to Craig (2006), the problems encountered by Bernadette were:

1. She faced a dilemma in choosing whether to emphasise what her students needed to learn or to do what she was told she should teach the students;

2. She was more concerned about the quality of the dissemination of the art-based curriculum while the national funding organization was more concerned about the number of teachers and time that were needed to accomplish the change;
3. Teachers in her school had the same idea as the federal agency about being most concerned about the accomplishment of the change despite the issues of quality which Bernadette had raised.

Bernadette's experience shows that the concept of teachers as curriculum implementers, the dissemination of a new curriculum and educational policy itself all need to be challenged and considered in disseminating curriculum change. When curriculum reform is correctly visualised and put into action, any obstacles to implementation will eventually stop (Becher & Maclure, 1978) and people will begin to accept the curriculum and implement it. Becher and Maclure (1978) added that in certain cases, people will learn from their misinterpretation of the reform and change their ways accordingly, or they will realise that in order to make a change succeed, they should essentially adopt the change and make it work in the situation that they are in.

McBeath (1997) described six specific tactics which had been used in disseminating a new curriculum into the vocational education and training sector in Western Australia (pp.60-63):

1. Distribution of curriculum materials

McBeath emphasised the importance of giving the curriculum materials directly to the teachers rather than expecting the materials to be given to them through the system. The curriculum materials were expected to help the individuals to be aware of the new curriculum and to understand it.

2. Meetings

All the lecturers involved in the dissemination of the new programme had to attend a series of professional development meetings during which they were

able to familiarise themselves with the change and their roles in the change process, and could develop appropriate teaching materials together.

3. Newsletters

This tactic involved in keeping a record of all the discussions and decisions made at the meetings and this newsletter was circulated and also given to those who had not attended the meetings. This not only helped the absentees but also those who were not involved in the project so that they could have a clear idea about the change as well.

4. The network

McBeath stressed that a network between those involved in the project should be established and developed because this will help to encourage the concepts of responsibility, ownership and sharing of ideas and knowledge. She said that such a network will help the lecturers to develop a sharing and support basis between them. However, she acknowledged that the effect of the network would be difficult to measure.

5. Questionnaires

There were two types of questionnaire used; one explored the lecturers' views on the curriculum change and the other explored their involvement in the change process. McBeath claimed that these questionnaires gave more information to the change agents on the views and involvement of the lecturers in regard to the change.

6. Materials

The lecturers involved with the change had to take responsibility for preparing the teaching materials because this ensures the development of well-prepared teaching materials.

Initially, McBeath suggested only these six dissemination strategies but she later added a seventh tactic which was having face-to-face contact with the lecturers. This tactic overcomes the problem of poor attendance at the meetings. Leithwood (1985) identified three stages of curriculum dissemination: sending out information, the acceptance of the information by the user of the ideas, and the user attending to the information provided. In the case of the curriculum dissemination in Malaysia, many aspects of the changes are delivered to the teachers through in-service training courses (Noor Azmi, 1988).

2.4.3 Curriculum reform challenges

According to the literature, there are many challenges and barriers that impede the implementation or success of curriculum reform. Kelly (2010) argued that the major reason for failure is poor dissemination of the reform.

Fullan (2007) suggested that the greatest challenge for educational change is the need to plan and coordinate the change process by involving large numbers of people. He said that planners tend to see only the policy and programme changes but forgot to see the people who are involved with the process. They forget the importance of seeing what people do and what they do not do. This is in line with Montero-Sieburth's (1992) view that teachers are the main people who make daily decisions in the classroom and yet planners overlook their ability and capability of delivering the change. I think that one of the weaknesses or challenges is to make sure that the reforms are being accepted and understood by the teachers. Teachers deal with the daily situation in the classroom and sometimes they are required to make on-the-spot decisions about their teaching. Thus, a clear understanding of the change is important. Basically, problems occur when the people who designed and planned the reform do not take into consideration the key people who have to receive it, understand it and deliver it in their classrooms (Montero-Sieburth, 1992). This is not necessarily true in every situation. In some cases, teachers might not want to be involved with the

curriculum design anymore and this is probably due to their frustration at not being heard or given any authority during the process of change (Kerr, 1968).

Looking at the challenges of curriculum reform in China, Zhong (2006) identified two principal gaps in the design of the curriculum reform, curriculum standards and teaching activities. The first was the gap between the design and the curriculum standard, which he claimed can be resolved by discussing the “curriculum reconceptualization” (p.374). The second was the gap between the curriculum standard and teaching, which can be solved by giving the teachers the necessary training.

Becher and Maclure (1978) identified three barriers related to curriculum change which they claimed had contributed to curricular fragmentation:

1. Barriers between different educational stages (p.93)

Becher and Maclure (1978) explained that students go through different stages and levels from their first day in primary school. Education in primary and secondary schools is different, as is tertiary education. So what students learn in primary school is basic, and in secondary school it is more about specialising and the subjects are tougher. The teachers in both schools are different with different educational backgrounds and pedagogic training. The teaching and learning styles change and the materials used are different. These differences can contribute to fragmentation.

2. Barriers between different curricular subjects (p.95)

The separations between the different subject disciplines can cause curricular fragmentation especially in secondary schools. They argued that this problem does not happen much in primary schools because there is not much separation between the subjects and because, usually, only one teacher will teach all the subjects; the teachers are not allied to any specific discipline. This is different in secondary schools where teachers are more focused on their own subject

areas and different subjects are taught by different teachers. All the subjects are more focused and blocked into time-tables which are very different from those in primary schools.

3. Barriers between different pupil abilities and interests (p.99)

The dissimilarities and differences in pupils themselves become a cause of fragmentation. Students have different abilities and backgrounds so they have different attitudes and different intelligence and capabilities. To cater for this, different curriculums are needed, especially in secondary schools where there is more specialisation. Becher and Maclure (1978) added that in secondary schools the fragmentation is more obvious because the differences in the courses offered to the students are based on their academic potential. This is almost the case in Malaysia, where students are segregated according to their capabilities and interests, especially in secondary schools when they enter form 4. Students who are bright will usually be encouraged to take the science stream and the rest will be offered arts or technical classes.

Dalin (1978) discussed four barriers to educational changes: 'value barriers', 'power barriers', 'practical barriers' and 'psychological barriers' (p.25). Value barriers exist because of the different ideologies and faiths that people have and this creates obstacles because different people hold different views, perceptions and understandings of the change. Power barriers exist because of the "power redistribution in the system" (p.25). Practical barriers are caused by the practical side of the implementation of the change. Teachers' understanding might be different from that of curriculum developers and this can impede the success of the change. Psychological barriers involve the teachers themselves who reject the implementation even though the changes do not challenge their beliefs or authority.

Changing any curriculum is not easy (Carter, 1973) and the process always involves challenges and obstacles. Olatunbosun and Edouard (2002) studied "how emerging principles of reproductive health can be implemented through curriculum reform in

medical education” (p.16). They stated that a new curriculum was absolutely necessary to prepare medical students to face the challenges and demands of the community. They claimed that the traditional medical curriculum was too focused on vast amounts of knowledge, so amendments were made by adding “free-standing courses to existing curricula, delegating subject areas of reproductive health to parts of existing curricula and integrating new interdisciplinary courses into the general curricula” (p.17). The researchers found that adopting the new philosophy and integrating it into the existing curriculum were the two challenges that were faced during the implementation process. They summarized four important findings: “reduction in the amount of course content; replacement of didactic teaching by active, participatory and self-initiated problem solving learning; stimulation of student interest in research; and the inclusion of primary care setting at an early stage of training” (p.19).

Carter (1973) discussed the strategy for curriculum reform in the Faculty of Agriculture at University College Dublin. This strategy was developed on the basis of Ralph W. Tyler’s work and was used to help fifty members of the faculty by guiding and involving them throughout the curriculum development project. Problems had been identified in the existing curriculum offered by the department and curriculum redesign strategies were developed. All fifty members were involved and although the project took five years, positive results were eventually seen. The members of the faculty had changed their views and approaches to the curriculum. Carter concluded that curriculum reform does not come easily. He stated “those who are to implement change must be involved in deciding what changes to make. The quality of their decisions depends upon the quality of their understanding of the curriculum and all its ramifications” (Carter, 1973, p.78).

2.4.4 Issues surrounding curriculum reform

Other issues have been raised by scholars when discussing curriculum reform or change. For example, Datnow, Borman and Stringfield (2000) identified three major

issues in understanding curricular reform. The first was the issue of philosophy, authority and political interference in the curriculum and curriculum change. The second pertained to the failure between theory and practice in the curriculum reform, and the third was the difficulty of evaluating the consequences of curriculum reform. This is a normal situation in implementing any reform. Chun (2005) touched on four areas of curriculum reform when discussing the issue of the political change on curriculum development in Hong Kong and Macau: the personnel for curriculum development, school-based curriculum development, assessment, and textbooks.

Michael Fullan, the author of the influential *The Meaning of Educational Change* (1982) and *The New Meaning of Educational Change* (2007), discussed several issues related to the meaning of change in education; change at local levels which involves the participation of teachers, headteachers, students and the community, and at regional and national levels which involve the government's participation. Becher and Maclure (1978) had earlier discussed agents of change, the barriers, evaluation and the politics of acceptability in relation to the teachers' role.

In the literature related to education and curriculum change or reform, there are many issues related to reform and change. For instance, teachers' participation in reform (Fullan, 2007; Kelly, 2009; Sayer, 1989), agents that spread the reform (Chun, 2005; Fullan, 1982; Mackenzie & Lawler, 1948), evaluating the reform (Chun, 2005), teaching materials used in the reform (Chun, 2005) and many other issues. However, for this current study, I have selected only those issues which are closely related to my research topic on the implementation of the entrepreneurship education element in the primary schools. The selected issues are:

- Curriculum reform and teachers' professional development and training;
- The role of teachers in curriculum reform; and
- Assessing the reform.

2.4.4.1 Curriculum reform and teachers' professional development and training

“A new approach to curriculum and implementation in a new era normally requires schools and teachers to take more responsibility for students' learning” (Chan, 2010, p.93). Schools are the institution where students acquire basic knowledge and are taught various subjects as part of the curriculum. Teachers, on the other hand, are the executers of the curriculum and without them the curriculum would not be implemented. Hargreaves and Evans (1997) discussed teachers' responsibility in educational reforms and pointed out that “no-one is more aware of the turbulence of these reforms than the teachers who have had to implement them” (p.1). Teachers at the chalk face are the implementers of the curriculum and are also responsible for what is being taught and delivered in their classrooms. Researchers generally accept that the success of any kind of curriculum reform, change, innovation or design really depends on teachers' understanding and ability to execute it (Kelly, 2009). According to Fullan (1982), “if educational change is to happen, it will require that teachers understand themselves and are understood by others” (p.107). Teachers' knowledge is the crucial component in curriculum reform (Tobin & Dawson, 1992) and as agents of change, teachers should be prepared to take double responsibility as both informers and learners (Anwar, 1989). If teachers are not willing to learn, they might become blockers and adversaries to new ideas (Anwar, 1989).

Teachers play a prominent role as curriculum executers, but undeniably they are learners too. It is generally acknowledged that in order to stay competitive and consistent with educational development, teachers are expected to constantly enrich themselves with the necessary knowledge related to their work and profession and to be updated on all issues pertaining to the education system, especially in their specialist fields. Clough and Clough (1989) observed that teachers are also learners who know what is right and what is wrong, given ample space and confidence to reflect on issues. They also added that training and development help teachers to empower themselves.

As already observed, Zhong (2006), in his article ‘Curriculum reform: challenges and reflections’, identified two gaps in the curriculum design chain in China: ‘overall design - curriculum standard – teaching’, with the first gap between the overall design and curriculum standard, and the second between the curriculum standard and teaching. Zhong suggested that by teacher training, the second gap can be filled. Teachers can be made to fit the role of curriculum implementers. Thus, good training and professional development courses would help teachers to be more prepared to execute their responsibilities. Tobin and Dawson (1992) assumed that curriculum developers believed that teachers could be taught to implement the curriculum correctly and agreed that teacher education is important in any curriculum reform. This awareness had been previously shown by the OECD in 1975 in its handbook on curriculum reform. The OECD claimed that teachers’ development is an important element in curriculum change and that ignoring this element might affect the change process. This suggested the importance of teachers’ development training prior to any reform. It is clearly seen that training is crucial but, undeniably, the amount of training given to teachers is also important. If they are given only a very short introduction to the reform, especially that related to the teaching methods and pedagogy, this will affect their performance as well as the reform implementation. According to Kerr (1968), in many circumstances, giving only one single short course to teachers would not bring any changes to the intended reform, and even full support over a period of time would only bring small changes to the planned reform.

From a study of eighth-grade teachers in Dutch schools, Van der Sijde (1989) found that limited exposure had only a very slight or perhaps no effect at all on the changes expected. Van der Sijde looked at “the effect of a brief teachers’ training on student achievement” by grouping 33 mathematics teachers into four groups with different conditions. The first group were given one day of training, a manual, a lesson observed sometime after the training, an achievement test and an attitude test on their students (a pre-test and two post-tests). The second group had the same treatment except that the training was given after the observation. The third group were only sent the manual through the mail and both tests were conducted with their students. There

was no support to help them in understanding the manual and the teachers had to read, understand and conduct the class according to their own perception and understanding. The fourth group were left on their own without any manual or training but the tests were still conducted on their students. The manual given was the content of the training presented as a 40-page manual comprising three sections, the teaching script, classroom management ideas, and instructions for the teachers. One of the many findings was that there was no significant difference between the conditions, either with training and a manual or without training and a manual. The researcher assumed that the minimal intervention with the participants was so little that it showed no differences between all the approaches. If extra time were given during the training, it might have made some difference. It is safe to argue that in any training, the timing is important because it undeniably has effects on the students' attainment (*ibid.*). In the Malaysian case, when the new curriculum was introduced in 1983, there were many people, both professionals and non-political people, who agreed that the training for the teachers was done in haste, which resulted in many teachers failing to understand the fundamental issue of the curriculum and its implementation.

Van der Sidje also found that of the four conditions, the most effective result was the one in which training was given after the observation. He claimed that because teachers received feedback from the observation, this would help them to better understand the training and relate it to their own understanding. He also suggested that when designing any training, the best way is to expose the teachers before and after the observation because this will give them opportunities to improve themselves. He added that the optimum time interval between the two training sessions is only two to three months.

There were two further important findings from Van der Sijde's (1989) study. First, he realised that even though the teachers in the first condition had followed the recommended activity in the manual provided, the change in their behaviour had no effect on the students' increase in the first post-test scores. Although there was an indicator to show changes in teachers' attitudes, it did not have any implication for the

rise in the scores for both the attitude and the achievement tests in students. The second was that although the manual was delivered to the third group of teachers, there were no changes or effects on the students' achievement test. This shows that without proper guidance and help and with only a manual sent by mail, there were no significant differences in either of the students' tests. There are a few assumptions that can be made from these results. The teachers probably did not use the manual because of the hassle of understanding it without any training or guidance. The teachers might also have been resistant to the manual and continued to teach according to their own understanding and practice.

Some of the literature on teachers' development suggests that teachers' training and professional development helps a lot to increase their understanding of the implementation of the planned reforms, but Van der Sijde's findings suggest that even with training, proper guidance and a manual, sometimes the changes made do not make any differences, especially in terms of the benefits to students. This was confirmed by a more recent study carried out in Florida by Harris and Sass (2011), who considered the "effect of various types of education and training on the productivity of teachers in promoting students achievement" (p.798). The findings revealed that professional development had no effect on teachers' productivity. According to Harris and Sass, this was due to the fact that teachers' time had been taken away from their teaching activities, preparation for the teaching and their classroom. They added that sometimes when teachers have to attend professional development training, they have to leave their classes with a replacement teacher and that time constraints and limitations prevent the new learned knowledge from the training that the teachers have attended from being implemented in the classroom. This does not help teachers to increase their productivity which would then help to boost their students' attainment. In the same study, Harris and Sass (2011) also found that, on the one hand, especially in elementary schools and middle schools, the teachers' productivity increased with the experiences that they developed through their job. On the other hand, the formal training that they received while teaching, such as professional development, did not improve their ability to increase their students'

achievements. From the findings of Van der Sijde (1989) and Harris and Sass (2011), it could be argued that not all training and professional development has a positive impact, but that it is better to have training and to be enlightened about the changes because this will help teachers to understand and implement the changes expected of them.

Teachers are the front line in the education system and they are the ones who interpret the curriculum and convert it into action so that it can be implemented. Even though teachers may be very well versed in the curriculum, they should not be allowed to interpret the documents on their own without any appropriate guidance. Chan (2010) used a qualitative approach to explore how teachers and schools react to curriculum reform processes which influence both traditional and current curriculum policies. She found that despite having all the instructions, teachers still had to seek professional help to master the new teaching techniques. She also identified that with only the curriculum documents, teachers faced problems in comprehending and executing the curriculum reforms. Help from others in the form of training would be much appreciated and this might help to enlighten the teachers and everyone involved.

In a case study entitled ‘Teacher collaboration in curriculum change: the implementation of technology education in the primary school’, Rennie (2001) showed how teachers infuse technology into their teaching methods. The study focused on how teachers practised teaching by sharing their knowledge and skills to help others in the school. Rennie (2001) found that two teachers realized the need to help other teachers in the process of implementing technology in classrooms. Despite using the national curriculum and the intended students’ outcome straightaway, the two teachers introduced the content and process of the subject first. They realized that most teachers were unfamiliar with and apprehensive about the new curriculum and concluded that once teachers felt comfortable with the content and process of the subject, it would be more easily understood. According to Rennie (2001), the teachers agreed that more training exercises and professional development was needed to ensure success in implementing a new curriculum. It is natural for teachers to resist

educational changes initially, but with proper training and by understanding the situation, changes are accepted gladly and can be implemented as intended.

2.4.4.2 The role of teachers in curriculum reform

As already discussed, the role of teachers in education is very important; they have to adopt changes, understand them and execute them all at the same time. The way teachers think and react influences educational change (Fullan, 2007). As implementers, teachers' reactions have a big impact on changes expected in the education system. According to Kelly (2009), if any attempts at innovation or change are to take place and be successful, teachers' full commitment is needed in terms of their "understanding, support and indeed approval" (p.141). Reform cannot be successful if teachers do not share the vision and effort necessary to make it a reality. Kennedy and Kennedy (1996) wrote that "change is a complex process and one part of that complexity is the role of teachers' attitude in the implementation of change" (p.351).

Teachers are the link between education policy and the delivering of it (Brain, Reid & Boyes, 2006). They stand between policy makers and students, who are the receivers and users of any changes made. In other words, teachers are the mediators of an education system. They materialize the aim and objective of the intended policy change. Teachers are the agents of change (Ben-Perez, 1980; Fullan, 1982) and with the right instruction, they are able to deliver the curriculum and find the right solutions for it (Ben-Perez, 1980). Teachers should be given a primary role in the curriculum change process because they know their students, their classroom and the school better than anyone else (Ben-Perez, 1980).

Croll, Abbott, Broadfoot, Osborn and Pollard (1994) used the Primary Assessment Curriculum and Experience (PACE) programme to list four models that describe the roles of teachers in education policy, depicting them as partners, implementers, opponents to changes and also policy-makers. In the first role as a partner, Croll *et al.*

(1994) argued that teachers contribute to the development of the education policy and that even though the upper-level management decides policy changes, teachers' involvement in the process cannot be denied, and it can be seen through the teachers' unions. In stressing the teacher's role as an implementer, Croll *et al.* (1994) stated that it is clear that teachers are implementers of education policy rather than partners. They also argued that teachers do not become "de-skilled" nor "de-professionalized" but hold to the "professional model of their role, and in many cases to an active and creative engagement with policy developments" (p.338). In the third role, Croll *et al.* (1994) described teachers as opponents to educational policies and the source of resistance to change. They differentiated implementation into two versions of thinkers, left-wing and right-wing. The first is considered as more a heroic attempt with actions speaking more to the benefits of all teachers. The latter highlights confrontation to change even though it is an illegitimate resistance. As policy-makers in practice, which is the final role, teachers are viewed as those in charge of setting rules and policies according to occurrences from their daily teaching activities. The nature of teachers' working environment makes them policy-makers in their own right.

Although teachers' primary role is seen as that of curriculum implementers, it is believed that at times this role is not carried out properly. Teachers will usually follow and implement a curriculum willingly as long as they think it is reasonable to accept it, but sometimes, circumstances lead to dysfunction in the implementation. According to Tobin and Dawson (1992), teachers accept and exploit curricular resources if it makes sense and is acceptable within the school's culture. If the curriculum suits them and their surroundings well, then the chances that it will be accepted are high. But if it does not, then the possibility of it being implemented is lower.

It is generally accepted that in many cases, teachers will carry out the tasks that are assigned to them. As curriculum implementers, they accept the natural burden of the job willingly even though sometimes it takes its toll on them. Chan (2010) showed that although teachers accepted changes, they felt reluctant due to the excessive workload that comes with curriculum reform. The study also revealed that schools and

teachers acted passively in implementing the curriculum despite all the resources given to them. They followed the guidelines but they reacted unreceptively towards the implementation. In the worst-case scenario, the reform or changes were implemented by force. The “power-coercive strategy”, according to Kelly (2009), undeniably brings change but not innovation.

Sometimes, there can be a conflict between the roles that teachers hold. In discussing the teachers’ role in implementing the General Certificate of Secondary Education (GCSE) in Science in the UK, Ramsden (1989) stated that there were some conflicts of roles that need to be noted and revised. He argued that when active learning was introduced into the GCSE programme, the teacher’s role changed. The teacher became more like a “facilitator of learning and a coordinator of learning experience in which people construct their own knowledge” (p.96). At the same time, in the implementation of active learning, teachers were also required to be assessors, which created a conflict of interest between the various roles. For this reason, the clear function of teachers should be laid out and this would help them to understand their complex role and carry it out successfully.

2.4.4.3 Assessing the reform

Curriculum evaluation and curriculum assessment should be part of the reform process for a better curriculum to be achieved. Some researchers have claimed that the terms ‘evaluation’ and ‘assessment’ are almost the same, but others think otherwise (Astin & Antonio, 2012). Astin and Antonio (2012) referred to assessment as having two different meanings; “the mere gathering of information (measurement), and the use of that information for institutional and individual improvement (evaluation)” (p.3). They believed that there is a difference in the basic purpose for both.

Evaluation on the other hand has been defined as “a broad and continuous effort to inquire into the effects of utilizing educational content and process to meet clearly defined goals” (Doll, 1996, p.257) and this definition “goes beyond simple

measurement and also beyond simple application of the evaluators' values and beliefs" (Doll, 1996, p.257). Parson *et al.* (1996) stated that evaluation involves the evaluators examining a programme, proposing an evaluation plan, assembling all the information needed to analyse the data gathered, and producing a report that has to be presented to a specific audience. This is in line with an earlier definition by Stufflebeam and Shinkfield (1985) of evaluation as a "systematic study that is designed, conducted, and reported in order to assist a client group to judge and /or improve the worth and /or merit of some object" (p.47). A good evaluation plan of a curriculum programme might help in making wise decisions related to the education system (Leithwood & Montgomery, 1980). This plan will help others, especially the curriculum developers, to make improvements or to change and replace the curriculum. Ornstein and Hunkins (1998) defined curriculum evaluation as "a process or cluster of processes that people perform in order to gather data that will enable them to decide whether to accept, change, or eliminate something" (p.320). Worthens *et al.* (1987) defined evaluation as "the identification, clarification, and application of defensible criteria to determine an evaluation object's value (worth or merit), quality, utility, effectiveness, or significance in relation to those criteria" (p.5). So assessment and evaluation have slightly different meanings and scope. Kelly (2009) said that a good "assessment of pupils and evaluation of teachers and schools" is needed. She separated the term 'assessment' and linked it to the pupils, and the term 'evaluation' to something broader that relates to teachers and schools. So, the terms are slightly different but surprisingly they are sometimes used interchangeably (Astin & Antonio, 2012). In my understanding, evaluation and assessment play different roles in an education system. The first has a larger picture, always relative to the educational system or curriculum evaluation as a whole, while the latter is frequently related to the teaching and learning processes.

A regularly-asked question is about when it is necessary to evaluate a curriculum. Cronbach (as cited in Stenhouse, 1975) differentiated three situations in which evaluation is needed: when enhancing a course, when making decisions regarding people's needs and what is good for them, and when evaluating the organizational

system. Doll (1996) looked at the need for evaluation on a larger scale and explained that there are differences in the need for evaluation in developing countries and in developed countries. For the former, evaluation is needed to see whether the curriculum being implemented has shown any improvement. In the latter countries, evaluation is more about assessing a long-existing curriculum and also a newly-implemented one to ensure that the curriculum has achieved the objectives intended and satisfied the pupils and the teachers.

The important value in the process of evaluation is making the judgment correctly, since if a report does not show any changes, either good or bad, it cannot be considered as an evaluation. Stufflebeam and Shinkfield (1985) listed three types of evaluation: “pseudo evaluation, quasi-evaluations and true evaluation” (p.47). Pseudo evaluation is “politically oriented evaluation” (p.47) in which information is not fully revealed and there is a possibility of information being falsified to mislead others. On the other hand, quasi-evaluation involves finding the answers to evaluation objectives while merely focusing on whether it is a good or a bad change. True evaluation is the best type because it is designed strictly to evaluate the object. Evaluation can also be seen from different terms and perspectives in school. Doll (1996) listed the following; “the evaluation of pupil progress by teachers in the classroom, the evaluation of school and school systems by outside agencies usually for the purpose of checking up but also as part of national, state or regional projects, and the evaluation by the National Assessment of Educational Progress and state departments of education” (p.258).

Leithwood and Montgomery (1980) identified four methods for evaluating programme implementation: “identifying descriptive dimensions of the innovation; specifying practices implied by the innovation; describing actual practices; and comparing actual with intended practices” (p.199). Parson *et al.* (1996), on the other hand, discussed issues that were used in evaluating a “health promoting school”. They said to evaluate a formal curriculum, it is necessary to analyse the syllabuses and the timetables, to interview the staff and the pupils, and to observe the relevant lessons. They claimed that all these documents, interviews and observations are needed to find the evidence

of the health philosophy, attention to individuals, setting, community and wider world health issues, the balance across knowledge, concepts and personal skills development, and “the extent to which the health promoting curriculum is based upon identified needs and selected issues” (p.318).

Sometimes an assessment is not as successful as was predicted. Discussing the problems of a system-based evaluation, Becher and Maclure (1978) highlighted four issues:

- a) The wide objectives of the evaluation made it complicated for the evaluators to measure the specific outcomes;
- b) Sometimes, when the evidence is inadequate, it might spark some disagreement between the witnesses;
- c) “the scale of system based is simply too large” (p.132); and
- d) Sometimes a simple general critique of the situation is more likely to be accepted than an “exercise in formal evaluation”.

In evaluating any programme, but especially a curriculum, a continuous approach is needed because this will help to ensure continuous change and development (Kelly, 2009). Different styles of curriculum development are said to suit different styles of curriculum evaluation (Becher & Maclure, 1978), but it is essential to ensure that any form of assessment that is used should match the specific desired purpose (Kelly, 2009).

2.5 SECTION D - Entrepreneurship and Entrepreneurship education

In this section, the specific topics of this study will be discussed. First, entrepreneurs and entrepreneurship will be defined and discussed. Then I shall look at the issue of whether entrepreneurship can be taught or not. The next issue to be elaborated will be the concept of entrepreneurship education. This will be followed by a consideration of entrepreneurship education in other Asian countries as well as in Malaysia.

2.5.1 The definition and concept of entrepreneurs and entrepreneurship

Many scholars, such as Meredith, Nelson and Neck (1982), Drucker (1985) and Bygrave (1994), have been defining the word 'entrepreneur' for a very long time. According to Kilby, among the earliest definitions was that given by Richard Cantillon, an Irish economist, who defined an entrepreneur as an individual who is "a rational decision maker who assumes risk and provides management for the firm" (1971, cited by Mohd Zahari, 2010, p.18). The word 'entrepreneur' itself is derived from a French verb *entreprendre*, which means 'to undertake' or 'to embark upon' (Adnan Alias, 1992). According to Cunningham and Lischeron (1991), the term entrepreneur was taken from both the French verb *entreprendre* and the German word *unternehmen*, both of which translate as 'to undertake'.

Shefsky (1994), however, defined 'entrepreneur' less conventionally and rather idiosyncratically by dividing it into three words; *entre* which means 'enter', *pre* which means 'before' and *neur* which has the meaning of a 'nerve centre'. He assumed from this that an entrepreneur is someone who enters the business world no matter in what form of business and at what time, and tries to "form or change substantially that business's nerve centre" (p.5). Shefsky emphasised that for an entrepreneur, what matters is the development or changes that are brought to the business, and not how the business was obtained or the size of it. A similar notion was given earlier by Meredith, Nelson and Neck (1982), who defined an entrepreneur as a person capable

of evaluating business opportunities, combining resources and taking appropriate action to ensuring success.

Kirtzner (1979) elaborated on the definition by connecting it to the characteristics of an entrepreneur. He said that an entrepreneur is more than a risk taker and innovator, but someone who can see opportunities that others cannot and produce something that can satisfy the customer. Entrepreneurs are normally associated with having a sound and accurate business instinct (Gürol & Atsan, 2006; Hian Chye Koh, 1996; Zaidatol & Habibah, 1997). These characteristics are common to all entrepreneurs and help them to conduct their business, to survive in the national economic system and to become successful. According to Kuratko and Hodgetts (2007), entrepreneurs who are successful are those who are not afraid to fail. True entrepreneurs are believed to have a quality that will help them to survive any problems, find solutions to them and go on to gain success. Despite all these good traits, however, entrepreneurs cannot run from problems and the darkest moments that they have to face on their own. Entrepreneurs have to challenge themselves by confronting risks, managing the stress that they face while conducting their business, and also handling the entrepreneurial ego that they have (Kuratko & Hodgetts, 2007). Not all entrepreneurs necessarily have to face the same challenges but Kuratko and Hodgetts (2007) said that the possibility of facing them exists.

Entrepreneurs are usually associated with the economic and social activities of a nation (Zaidatol & Habibah, 1997) and are said to be the one of the main contributors to the development of an economy (Nor Aishah, 2002; Zaidatol & Habibah, 1997). Entrepreneurs always contribute to growth through their good qualities and abilities such as good “leadership, management, innovation, research and development effectiveness, job creation, competitiveness, productivity and formation of new industry” (Kuratko & Hodgetts, 2007, p.5). An entrepreneur is also a person who runs his own business and uses all the good traits and qualities, together with endless effort, to expand the business, and this provides employment opportunities and contributes to

the development of the economy through the payment of taxes and by undertaking social responsibilities.

According to Kuratko and Hodgetts (2007), the US economy had shown great achievement in the previous few years and this was the result of developing entrepreneurial activities. They listed three impacts that entrepreneurs have which had led to this economic success:

1. In the 1990s, most of the big firms which had existed in the market learned to be more entrepreneurial by adapting, downsizing, restructuring and reinventing themselves. This benefited them when their sales and profits increased as a result.
2. The existence of new companies created job opportunities.
3. The development of entrepreneurial activities promoted the growth of businesses owned by women, minorities and immigrants.

The discussion above supports the notion that entrepreneurship is related to economic growth but not every scholar agrees with this view. Shane (2009) argued that supporting the establishment of new entrepreneurship is not a good idea. He said that economic growth is not affected by the numbers of new start-ups because start-up businesses are not the main strength of the economy or of employment creation. Start-up companies, he claimed, do not create as many jobs as expected because these companies do not always last long. This is different from an established firm which creates opportunities for employment through business expansion. Shane added that it is much better for the government to invest in high-growth companies because they promise employment opportunities and economic growth.

Entrepreneurs and entrepreneurship are usually discussed together. According to Fayolle, (2000), enthusiasm for entrepreneurs and entrepreneurship is widely acknowledged, especially in the academic arena, and this has resulted in a great deal of writing contributing to these fields, but it is still a relatively recent domain. An

entrepreneur is a person with “an action of a risk taker, a creative venture into new business” (Hébert & Link, 1989). Cunningham and Lischeron (1991) stated that there is no universal definition of entrepreneur and entrepreneurship. The various definitions for both terms have resulted in inconsistent views and ideas about entrepreneurship, entrepreneurs’ activities and characteristics, and learning to become an entrepreneur (Zaidatol & Habibah, 1997). Erkkila (2000) similarly argued that the definition depends on what the concept of entrepreneurship is and that there is no universally-accepted definition of entrepreneur or entrepreneurship.

Certainly there is no generally-accepted definition and none that really captures the whole picture (Gibb, 2002; Kirby, 2004; Low & MacMillan, 1988). One of the earliest and most famous definitions was given by Schumpeter (1934, cited by Low & MacMillan, 1988) which defined entrepreneurship as “carrying out new combinations” (p.140). He argued that innovation and change in the technology of a nation come from entrepreneurs. Kuratko and Hodgetts (2004) referred to entrepreneurship as a dynamic process of visions, change and creation. They argued that in achieving new ideas and creative solutions, energy and passion are required. Kuratko and Hodgetts (2007) later associated entrepreneurship with an “integrated concept that permeates an individual’s business in an innovative manner” (p.5)

Gibb (2007) defined entrepreneurship as focusing on behaviour, attributes and skills. He suggested that change and innovation can be created when an individual or a group possess these three important elements. Sexton and Bowman-Upton (1991) outlined three important actions in their definition of entrepreneurship: the processes of identifying opportunities, organizing resources and committing to actions for long-term personal gain.

2.5.2 Can entrepreneurship be taught?

There has been much discussion about developing entrepreneurs and the fundamental issue in entrepreneurship education is whether entrepreneurship can be taught or not

(Solomon, 2007). Entrepreneurs come from different backgrounds, some seem to be gifted with entrepreneurial talent and some are not, but most scholars argue that it can be taught. Kuratko (2005) claimed that the entrepreneurial perspective can be taught and that combined with the right characteristics can become a special perspective that permeates entrepreneurs. Lewis and Massey (2003) claimed that individuals can be more enterprising and can become job creators or job seekers if the right skills are developed in them. Meyers (1992, as cited in Abd Rahim Bakar *et al.*, 2001) argued that experiences should be given to students to assist them in the development of entrepreneurial skills. Peter Drucker said that entrepreneurship is not a magical, mysterious quality, but a discipline that can be learned (Drucker, 1999).

Ab. Aziz and Zakaria (2004) said that an individual is not born an entrepreneur and that entrepreneurial characteristics cannot be inherited. They added that individuals can become entrepreneurs only when they have been through various processes to develop their entrepreneurial skills. To become an entrepreneur, it is necessary to have both passion and skills in a chosen field (Ab. Aziz & Zakaria, 2004). Sarebah *et al.* (2010) also commented that entrepreneurs are not born nor can the skills be inherited because entrepreneurship is not influenced by genetic factors. However, they admitted that entrepreneurship can be formed at an early age through education and family support. However, not every entrepreneur can be taught through formal education. Gupta (1992) stated that initiatives toward entrepreneurship are determined by experience and not by formal instruction in entrepreneurship. Klein and Bullock (2006) argued that “some aspects of the entrepreneurial function and the entrepreneurship process can be taught, but many more cannot be” (p.430). Hopkins (2004), however, reviewed some successful entrepreneurs in the US and gave examples of those who were born into the family business and claimed that entrepreneurs are born, but he also proved that they can be taught as well.

Interestingly, the issue of ‘can entrepreneurship be taught?’ had been debated by scholars (Solomon, 2007). It appears that not everyone can be an entrepreneur, but then again we do not need everyone in the nation to be one (Garavan & O’Cinneide,

1994). However, Gormon, Hanlon and King (1997) argued that there is evidence supporting the view that entrepreneurship can be taught. Keogh and Galloway (2004) insisted that entrepreneurship can be taught and explained that this discipline had been introduced to engineering students at Heriot-Watt University in Scotland. This they claimed had given students the opportunity to overview and experience what they would face when they are in the working world. Dana (2001) conducted a survey of the education and training of entrepreneurs in Asia and concluded that whether entrepreneurship can be taught or not depends on the definition given. Dana discussed both the Schumpeterian view and the Austrian school of economics' writings on entrepreneurship and resolved that any training programmes on entrepreneurship should be "relevant to the host environment" (p.405). In the light of this, Dana believed that entrepreneurship can be taught. It is just a discipline that can be learnt through formal or informal education. Education and training on entrepreneurship had been successful in teaching managerial skills to people and training them to be successful owner/managers (Dana, 2001). According to Kuratko (2005) "it is becoming clear that entrepreneurship, or certain facets of it, can be taught. Business educators and professionals have evolved beyond the myth that entrepreneurs are born, not made" (p.580).

From the literature discussed above, it can be suggested that in most cases, entrepreneurs are not born and that the entrepreneurship in them is not inherited. Nevertheless, it can be developed through many ways that involve education, exposure and experiences (Ab. Aziz, 2009). Blanchflower and Oswald (1990) conducted a study on self-employed individuals who were British born. The principal criterion they used to select their samples was that participants should be born between 3 and 9 March 1958, but gender and race were not included in the criteria. They looked at the factors that make an entrepreneur. The samples were divided into controlled and uncontrolled groups of which the latter had received some amount of money in terms of a gift or inheritance. Blanchflower and Oswald found that the major problem in making an entrepreneur was the capital and liquidity constraints. They found that those who had received money from a gift or an inheritance were more likely to be self-employed and

run their own business. Although they also found that some entrepreneurs tended to open their own business when their father already owned a small-scale business or was a farmer, this was only a minor finding. The major finding was that financial constraints impeded many from becoming entrepreneurs. From that result, it can be assumed that anyone can be an entrepreneur and not necessarily those who were born into a family business. An entrepreneur is not born but can exist with other factors such as enough capital to run a business. This finding is interesting but unfortunately cannot be generalised to other countries because different countries have different cultures, economic situations and political conditions. The situation in Britain would not be the same as in Malaysia. Nevertheless, the findings made a great contribution because they showed that there is no doubt that capital is very important in starting a business.

2.5.3 The teaching of entrepreneurship at early age

Teaching entrepreneurship at early ages to students and giving them the right exposure can generate interest and instil the culture of entrepreneurship in them. A good curriculum will help this to become a reality. If the entrepreneurship education curriculum is constructed correctly, this will create entrepreneurs who can handle their life and the world surrounding them (Zaidatol & Habibah, 1990). According to Curry and Storer (1990), there are three broad objectives of enterprise education: education through enterprise, education about enterprise and education for enterprise. Clearly there are differences in the objectives where different age-groups are concerned. Curry and Storer emphasised that the enterprise scheme starts with an emphasis on education through enterprise where enterprise is used as vehicle for young people to develop numeracy and communication skills as well as a wide range of interpersonal skills.

Obschonka *et al.* (2011) reported that if adolescents were given entrepreneurship skills at an earlier stage, this would have positive impact for them to venture into a business career later in life. Kourilksy and Walstad (2002) studied 1001 entrepreneurs of high-technology businesses and they suggested that giving students earlier exposure in

school in the technology field would give them advantage. This could benefit them and could probably interest them to become entrepreneurs in the high-tech field. Ab. Aziz (2009) suggested that entrepreneurship education should be a continuous process from primary school to secondary school and then on to upper secondary school. At all these levels, students' interest in entrepreneurship should be refined so that when they leave school they are mature, responsible and prepared to continue their studies at the tertiary level (Widad, 1995). In the light of this, it could be concluded that exposure to entrepreneurship education should be given at the early stage.

2.5.4 Entrepreneurship education

2.5.4.1 Definition and concept

Entrepreneurship education is widely taught in most countries and receives special attention in developed countries such as the US and the UK. Many business schools are now offering entrepreneurship courses for their undergraduate and graduate students (Hébert & Link, 1989). According to Blanchflower and Oswald (1990), one of the reasons that governments take an interest in developing entrepreneurship is because they assume that the small businesses owned by entrepreneurs can be a good source of employment. Entrepreneurship also creates wealth and contributes to industrialization and a nation's economic growth (Dana, 2001)

Entrepreneurship was first introduced in the Harvard Business School in 1945 and has since gained popularity (Mwasalwiba, 2010). In the US and Canada, the term 'entrepreneurship education' is commonly used, but in the UK and some European countries, 'enterprise education' is preferred (Gibb, 1993). Entrepreneurship education and enterprise education may have the same concepts and definitions and can often be used interchangeably (Mwasalwiba, 2010), but in some cases, they may not. It depends on the context and the objective of the education (*ibid.*). In the US, it is more associated with business education, but in the UK the teaching objectives are more focused on helping to develop enterprising people (Gibb, 1993). Chell (2007) made a

distinction between enterprise education as an “agent of change and vehicle of development” (p.10) and entrepreneurship as associated with generating wealth and capital growth. Jones and Iredale (2010) differentiated entrepreneurship education from enterprise education by stating that the main focus of the former is on the establishment and management of a business entity and of the latter is on “the acquisition and development of personal skills, abilities and attributes that can be used in different contexts and throughout the life course” (p.11). So for Chell (2007) and Jones and Iredale (2010), entrepreneurship is more associated with business and enterprise is related to creating productive people and instilling values. North and Smallbone (2006), however, studied issues facing policy makers in five different countries in implementing entrepreneurship and enterprise policies, and regarded entrepreneurship policies as related to “the promotion of an entrepreneurial culture, entrepreneurship education, and policies to help individuals through the nascent and initial stages of starting a business” (p.43) and enterprise policies as “concerned with the growth, survival and competitiveness of existing SMEs” (p.43).

From the discussion above, entrepreneurship and enterprise are shown to have different meanings. My understanding is that both terms are used interchangeably and are defined according to the needs of the specific situation in which the term is used and adopted. In Malaysia, the term ‘entrepreneurship education’ is used across the nation both in business discussions and in schools. Scholars such as Ab. Aziz (2009), Nor Aishah (2002), Zaidatol (2007) and Zaidatol and Habibah (1997) have used the term ‘entrepreneurship education’. So for the purpose of this current study, I shall use the term ‘entrepreneurship education’.

According to Hynes (1996), the use of entrepreneurship education in all future academic programmes in schools, universities and colleges will ensure the acceptance of it in the academic field. Garavan and O’Cenneide (1994) argued that entrepreneurship education and training programmes are aimed at producing entrepreneurs, and that for them to be effective, they have to be taught from more than what is done in the classroom. They argued that moulding an entrepreneur needs more

than the teaching of theories and skills. It has to go further than that. The best route is to give them experience through simulation or practical training.

2.5.4.2 Entrepreneurship education in some Asian countries

Entrepreneurship education has attracted a great deal of attention and there is significant interest in it, particularly in the country members of ASEAN⁴⁴. The cases of Thailand and China are relevant – Thailand being the nearest neighbour to Malaysia, China being the blooming economic power of the eastern world. These two countries are relevant to my research because of the geographical proximity and the cultural similarities, as well as the historical links between the countries since colonial times. Entrepreneurship education in these countries is prominent because their leader understands that entrepreneurs play roles in economic growth (Kuratko & Hodgetts, 2007).

China is an Asian country well known for its recent economic rise and according to the European Commission (EC), the Chinese have a particularly strong inclination for self-employment compared with countries around Europe, the US and Asia (EC, 2010). In China, entrepreneurship education is a new concept in higher educational institutions and has been well received over the past few years (Li, Zhang & Matlay, 2003). The Chinese government has made a great effort to support entrepreneurial activity, especially in the universities, because it has realized the importance of entrepreneurship and its impact on the economy and the employment rate (Wu & Wu, 2008). The open-door policy in China was established in the late 1970s and economic growth has increased by 10% in the past few years (Quer, Claver & Reinda, 2010), and it was after 1977 that the small business sector in China started to grow. In the 1990s, the Ministry of Agriculture helped rural enterprises by coordinating management education and training for them. The training offered constituted of “short programmes and tailor-made vocational education and training for managers

⁴⁴ASEAN stands for Association of South East Asian Nations comprising ten countries; Brunei, The Philippines, Indonesia, Cambodia, Laos, Malaysia, Myanmar, Singapore, Thailand and Vietnam.

and key members of rural enterprises” (Li *et al.*, 2003, p.500). In the late 1990s, entrepreneurship education in China underwent various changes when some universities launched students’ business plan competitions and graduate entrepreneurship was also introduced into universities (Li *et al.*, 2003). Li *et al.* (2003) showed that due to the new economic environment, large numbers of new businesses were recorded and both management and entrepreneurship education became important aspects in the socio-economic development of China.

In Thailand, the government has focused on developing human resources. In order to stay competitive, the Thai government has adopted the relevant curriculum into the education system, training and retraining human resources with appropriate skills and competences (Ministry of Education, Kingdom of Thailand, 2008). The Officer of Vocational Education in Thailand has underlined programmes for initiating the government’s vision. These are intended to improve the professional skills of vocational students. One of these programmes is the New Entrepreneurs Preparation which is intended to “formulate and develop a new entrepreneur network; create and fund a business knowledge channel; and initiate the One College One Company project” (p.134). The Office of the Higher Education Commission in Thailand has also introduced two separate projects, Co-operative Education in Higher Education Institutions and The University Business Incubator Project. Both of these projects are aimed at preparing highly-skilled human resources to meet the need for highly-skilled workers in the labour market (*ibid.*).

It is important to mention that the very fact that there is vast academic literature analysing the cases of China (and to a lesser degree, Thailand) is itself significant because, as explained earlier, that there is very little literature regarding entrepreneurship education in Malaysia. This means that we can use the literature from these two countries and others as references in improving the quality of entrepreneurship education in the country.

2.5.4.3 Entrepreneurship development in Malaysia

After gaining independence in 1957, Malaysia's main objective was to become a fully-developed country, prosperous and united under one democratic system (Ruslan *et al.*, 2010). This is a long road and to achieve it the government has introduced policies for a variety of purposes. Usually, these policies are introduced to meet national socio-economic objectives such as economic growth, income distribution, stability and the well-being of the people (*ibid.*).

After independence, the racial disparities among the ethnic groups were obvious (*Malaysia Kita*, 2011). The three major ethnic groups, the Malays, the Chinese and the Indians, were separated by socio-cultural, economic, political and educational factors. Their separation was not new but had started a long time ago, and the British colonization had worsened the conditions (*ibid.*). During the British rule, the Malays were a rural people and worked as farmers, fishermen and agricultural labourers with very low incomes. The Chinese had a better life, since they were settled in urban areas and worked as tin miners and loggers; some of them were involved in business. This promised a better income and social life compared with the other two ethnic groups. Most of the Indians were brought to Malaysia in the colonial period to work on agricultural estates, although some of them worked as rubber tappers and some as businessmen in the bigger cities. As already stated, the continuing imbalance and economic injustice resulted in a race riot on 13 May 1969. That tragedy caused the government to realise that the reasons for the disparities were the economic factors and various strategies were introduced to promote unity in all aspects including socio-cultural, educational and especially economic. The government proposed many policies to overcome the problems and bridge the economic gaps between the ethnic groups.

Many government policies have been developed to address various issues since Independence Day, but for the purpose of this study, I shall discuss only five policies which are very important in the development of entrepreneurship in Malaysia and also which I think relate to the content of my thesis.

Policy 1 - The New Economic Policy (NEP)

The NEP resulted directly from the racial clashes in 1969. It was a measure taken by the Malaysian government to eradicate poverty by raising income levels and restructuring society to correct economic imbalances and to achieve national unity (Firdaus, 1997; Milne, 1976) in the hope that similar outbreaks would not be repeated.

As discussed above, the economic and social disparities between the ethnic groups in Malaysia were obvious. Many reports and surveys found that the Malays endured greater poverty than the other ethnicities (INTAN, 1980) and they were still left behind and unable to compete with the other communities despite good economic growth. This was the situation that led to the establishment of the NEP, which ran for twenty years from 1970 to 1990. The government tried to improve the economic situation and at the same time eliminate the identification of race with economic function (Firdaus, 1997). In making sure that the Malays and the indigenous people were not left out and could become full partners in the nation's economy, the government took steps involving the modernizing of rural life, a rapid and balanced growth of urban activities, and the creation of a Malay commercial and industrial community in all categories and at all levels of operation (*ibid.*).

The NEP ended in 1990 and although the objectives had not been fully achieved, it did show some good progress in eradicating poverty and restructuring the society. In 1990, the poverty rate in Peninsular Malaysia had been reduced from 49 percent in 1971 to 16 percent in 1990 (Jomo, 2004) and further to 5.7 percent in 2004 (Malaysia, 2006). The NEP's target of restructuring the society was to attain at least 30 percent effective *Bumiputra* equity by 1990, but this target was not achieved. There was rise in ownership in 1990 to about 18 percent and slightly over 20 percent in 2000, but the target of 30 percent is still unaccomplished (Jomo, 2004). Although the target was not achieved, the achievement is still a considerable improvement on what the *Bumiputra* had in the 1970s. Through the NEP, the government made considerable progress towards ensuring economic growth with equality in Malaysia (Ishak Shari, 2000).

The relationship between education and the NEP has long been discussed and in 1985 a study was carried out to evaluate the effectiveness of the NEP on the education system. The report showed that the NEP had a positive impact on the education system (MOE, 1985). Najeemah (2006) stated that education is the most important tool for eradicating poverty and restructuring society.

Policy 2 -The New Development Policy (NDP)

The NDP was established on 17 June 1991 by the fourth Malaysian Prime Minister, Tun Dr Mahathir Mohamad. This policy was introduced as part of the Second Outline Perspective Plan (OPP2) and it covered the period from 1991 to 2000 to replace the NEP (Ahmad Sarji, 1993). The main objective of the NDP was national unity and it maintained the basic strategies of the NEP. The NDP outlined four basic objectives. The first was to eradicate the worst poverty and at the same time reduce relative poverty (Malaysia, 1991). The second was to increase the *Bumiputra* participation in the economy by focusing more on their participation in various employment sectors and the fast development of the *Bumiputra* Commercial and Industrial Community (BCIC) (*ibid.*). The third focus was to rely more on the private sectors' involvement in restructuring the society, and the final focus was on human resources development (Ruslan *et al.*, 2010). In order to support development, education played an important role; "Education and training will continue to emphasize the inculcation of positive and progressive values, including good work ethics and industrial discipline" (Malaysia, 1991, p.170). It is important to recognize the critical need for creating an enterprising and entrepreneurial *Bumiputra* and, according to Mohd Salleh (1992), Malaysia has recognized this. In the NDP, the *Bumiputra* were encouraged to participate extensively in manufacturing and services as well as in the Small to Medium Enterprises industry (SME), such as in sub-contracts and franchises. Collaboration between the *Bumiputra* and non-*Bumiputra* is encouraged (Ruslan *et al.*, 2010). The NDP was a continuation of earlier efforts to reduce the economic imbalance and this was done through the implementation of several programmes based

on the principle of balanced development and equitable distribution in order to sustain national unity.

Policy 3 - Vision 2020

Vision 2020 was first introduced by the fourth Prime Minister, Tun Dr Mahathir Mohamad, to the Malaysian Business Council on 28 February 1991 when he presented a paper entitled 'The Way Forward'. The vision is an important mission that is expected to drive Malaysia to become a completely developed nation by the year 2020 (INTAN, 2009). Vision 2020 is a concrete blueprint for the country to move forward to achieve developed-country status in all aspects of economic, political, social and spiritual values and culture.

Vision 2020 stresses development in terms of national unity and social cohesion, in terms of our economy, in terms of social justice, political stability, system of government, quality of life, social and spiritual values, national pride and confidence. (Tun Mahathir Mohamad, 2009)⁴⁵

Vision 2020 was an optimistic projection which envisaged Malaysia achieving industrialized and fully developed nation status by sustaining growth at 7 per cent per annum over a period of thirty years (Performance Management and Delivery Unit, (PEMANDU), 2010). Nine key challenges were outlined in order to achieve Vision 2020 (Ahmad Sarji, 1993):

Challenge 1: Establishing a united Malaysian nation made up of one Bangsa⁴⁶ Malaysia.

Challenge 2: Creating a psychologically liberated, secure and developed Malaysian society.

Challenge 3: Fostering and developing a mature democratic society.

Challenge 4: Establishing a fully moral and ethical society.

⁴⁵Speech by Tun Mahathir Mohamad during the Luncheon Talk at the US Council on Foreign Relations, New York, US, 28 September 1999 as cited in INTAN, 2009, p.169

⁴⁶*Bangsa* is a Malay term meaning 'race'.

- Challenge 5: Establishing a matured liberal and tolerant society
- Challenge 6: Establishing a scientific and progressive society.
- Challenge 7: Establishing a fully caring society.
- Challenge 8: Ensuring an economically just society, in which there is a fair and equitable distribution of the wealth of the nation.
- Challenge 9: Establishing a prosperous society with an economy that is fully competitive, dynamic, robust and resilient.

Vision 2020 is a long-term plan that will take thirty years to achieve. To meet these challenges, education plays an important role (Lee, 1999). According to Lee, “education is seen as a means for social mobility which forms one of the avenues for income redistribution and restructuring the Malaysian society economically” (p.87). Lee pointed out that education is also an important instrument for promoting and strengthening national integration.

Policy 4 - New Economic Model (NEM) Policy

The NEM was a new economic plan for the country that was launched on 30 March 2010 by the Prime Minister, YAB Dato Seri Mohd Najib Tun Abd Razak. It was introduced and discussed in two different sections and was produced by the National Economic Advisory Council (NEAC). This model is expected to help to make Malaysia an advanced country and this is in line with Vision 2020 (NEAC, 2010). The new model focused on three major elements to lead to the improvement of the *rakyat*⁴⁷ quality of life. The three major focuses were: higher incomes for all people, inclusiveness in which the wealth of the country is fully shared by all, and sustainability in that the current needs of the people are met without compromising the future generations. The model was established using a holistic approach which also focused on human development and at the same time narrowed the economic differences and imbalances throughout the country (NEAC, 2010).

⁴⁷*Rakyat* is the Malay term for 'the people' in the country..

To achieve all the goals of the NEM, the government developed eight Strategic Reform Initiatives (SRIs) which were taken from the NEAC paper (2010, pp.18-30):

1. Re-energising the private sector;
2. Developing a quality workforce and reducing dependency on foreign labour;
3. Creating a competitive domestic economy;
4. Strengthening the public sector;
5. Taking transparent and market-friendly affirmative action;
6. Building the knowledge base and infrastructure;
7. Enhancing the sources of growth; and
8. Ensuring the sustainability of growth.

All the SRIs were developed in detail so that every goal in the NEM could be achieved. In the sixth SRI, the plan focused on transforming the country and for that it required “continuous innovation and productivity growth with significant technological advancement and entrepreneurial drive” (NEAC, 2010, p.25) to allow businessmen and entrepreneurs to be successful as global market players. Three specific policy purposes were developed for this: “create an ecosystem for entrepreneurship, promote an environment for innovation, and establish stronger enabling institutions” (NEAC, 2010, p.26).

Policy 5 - Human Capital Development Policy

The fifth Prime Minister, Tun Abdullah Haji Ahmad Badawi, introduced a policy to develop human capital as a platform for generating future excellence and to help to realise the Vision 2020 aim of creating a developed nation with a national identity (Malaysia, 2006). Human capital, as already discussed, is represented by an “individual who is knowledgeable, confident, has good values and a high moral, ethical, virtuous character, is well-mannered, disciplined, dynamic, innovative, creative, healthy, patriotic, just, progressive, resilient and competitive” (Ruslan *et al.*, 2010, p.315). To achieve this, the government established eight core policies:

1. To improve education and training delivery systems;
2. To strengthen the national schools and make them the schools of choice. This will help to improve the unity of all the races in Malaysia;
3. To bridge the gap between the urban and rural schools;
4. To make efforts to further develop the university to become a world class university to meet both market and national requirements;
5. To improve educational opportunities at all levels;
6. To develop an innovative and creative society;
7. To strengthen national unity; and
8. To expand the discussion forum on human capital development between the government, private sectors, parents and community.

To achieve human capital development, a number of implementation strategies were adopted by the government including areas such as services, education, the economy, science and technology, and social factors. For the education system, three plans for producing successful, high-quality human capital were developed: the Master Plan for Educational Development, 2006-2010 (CDC, 2006) and the National Higher Education Strategic Plan, phase 1 and phase 2 (Ministry of Higher Education (MOHE),2007; MOHE, 2011).

2.5.5 Entrepreneurship Education in Malaysia

Entrepreneurship education development in Malaysia is still in the early stages as discussions about entrepreneurship began in the 1970s after the NEP was introduced. The NEP's aims of eradicating poverty and restructuring the economy contributed significantly to the development of entrepreneurship in Malaysia, and many *Bumiputra* are now involved in entrepreneurship. Although the NEP did not achieve its target of increasing the Bumiputra's ownership to 30 per cent, this was the starting point of seeing rising numbers of entrepreneurs in the country. There was only 15.4 per cent of *Bumiputra* involvement in 1971 but it had increased to 24.9 per cent in 1980 (Mat Hassan, 1999). However, although the number of entrepreneurs had

increased, the equity ownership was still low. In 1990, the *Bumiputra*'s ownership was only 20.3 per cent (Mat Hassan, 1999) which was lower than the government's 30 percent target, although it was still an improvement on the previous situation. A National Economic Consultative Council (MAPEN⁴⁸) report in 1991 showed that a large number of *Bumiputra* entrepreneurs were still depending on government projects and they still needed support with financing, space and subsidies (Nor Aishah, 2002).

To address this, the government introduced the NDP in 1990. This ten-year plan gave priority to instilling and developing entrepreneurship culture among the *Bumiputras* (Bukhari, 1994), and this included emphasizing educational aspects and the implementation of young entrepreneurship in schools all over the country (Nor Aishah, 2002). To facilitate this, the Ministry of Entrepreneurs and Co-operative development (MECD) was established in order to monitor the *Bumiputra* entrepreneurs' development.

Realizing the importance of entrepreneurship, the government created many opportunities for it to be developed. Through various programmes and policies, this field is expected to flourish. In the Tenth Malaysia Plan, it is expected that about 2000 new businesses will have been launched by students and graduate students by the end of the plan period. The latest programme to be introduced was the NEM, which has the overall goal of increasing people's quality of life. One of the strategies is to emphasize the entrepreneurship field so that it can contribute to developing the economy and assist in achieving the proposed aim of the NEM.

Fostering an entrepreneurial culture in the Malaysian education system is not a new approach. The integration of entrepreneurship and business education into the education system started in 1968 when small-scale co-operatives were introduced in schools. The main activity of these co-operatives was selling items only to the school residents and this was hoped to expose the students to basic business principles. Various efforts have been taken to develop an entrepreneurial culture. The MOE has

⁴⁸MAPEN is a Malay acronym for *Majlis Perundangan Ekonomi Negara*.

taken action to instil entrepreneurship as part of the curriculum in schools. The earlier exposure to entrepreneurship was achieved by introducing the element into mathematics and this was followed by introducing the integrated Living Skills subject into the secondary school curriculum in 1991. Students were given an option in upper secondary school to choose a subject on commerce and entrepreneurship from a selection of vocational and elective subjects. They also were offered subjects such as economics and business studies. There was also a Young Entrepreneurs Programme (PUM)⁴⁹ offered in secondary schools as informal learning intended to foster an entrepreneurial spirit in students. It was introduced in 1989 and run by the National Entrepreneurship Institute (INSKEN). Its intention was to give exposure and experience to secondary school students on the establishment and dissolution of companies based on the co-operative model. Students were involved in the hands-on training programme for nine months, at the end of which they presented the year-end profit and loss account of their company.

In primary schools, exposure to entrepreneurship was given as early as 1984 under the previous curriculum, the New Curriculum for Primary School (KBSR); it was introduced in 1982 as part of Mathematics and was called Commerce Practice. KBSR students in Level 1 were required to conduct a role-play activity or simulation lasting thirty minutes once a week. The purpose of this was to expose the students to commercial aspects from an early stage and thus foster an interest in business. Since Commerce Practice was part of the mathematics syllabus, most of the concepts and knowledge were closely related to mathematics (Mok & Lee, 1986). Further exposure was given through the Living Skills subject which was introduced in 1993 with business and entrepreneurship education as a small component. This subject replaced Commerce Practice, and its objective was to teach students basic business practices and to promote their interest in business.

⁴⁹PUM is a Malay acronym for *Program Usahawan Muda*. Information about the programme can be read on the official government website: <http://www.insken.gov.my/programusahawanmuda>

In Malaysia, there have been very few published studies of entrepreneurship education in schools involving primary schools. Many studies of entrepreneurship and entrepreneurship education have focused more on secondary schools, universities and the business field. Most of the studies so far have revealed that entrepreneurial characteristics in students are still low or at the average level. Suhaili and Azlan (2006) studied the entrepreneurship tendencies of Muslim students and found that the majority of students preferred to work in organizational employment instead of being self-employed. A study on entrepreneurship education effectiveness carried out by Ming, Wai and Amir (2009) questioned 300 students from two private universities, two public universities and one private college in Malaysia and found that the programmes conducted by the universities had failed to encourage students to take up the challenge of entrepreneurship. The level of understanding of what entrepreneurship actually is was still low among the respondents. Another study involving 1336 Form 4 students in Malaysia showed that aspiration was still low and that, on the whole, students' entrepreneurial attitudes and characteristics were only moderately positive (Zaidatol *et al.*, 2002).

Mohd Amir Sharifuddin *et al.* (1995, cited in Norasmah & Halimah, 2007) studied three secondary schools in Selangor involving 241 students who had participated in the PUM programme and found that students who had undergone the PUM programme had managed to boost their interest in business and showed high motivation. So it can be concluded that the best and most effective way to introduce entrepreneurship education is at the earliest possible stage. It is believed that the ideal stage to introduce entrepreneurship and to foster a positive attribute is during childhood and the adolescent years. In 1994, a school store project was developed in Rice Lake, Wisconsin, for elementary level students. The local high-school marketing education teacher and a team of three fifth-grade teachers developed a curriculum for the project and during the second semester of the course, the fifth-grade students ran the store (Villeneuve, 1996). This case indicates that given the right knowledge and training, students in primary school can be excellent entrepreneurs. An ample and

appropriate educational environment can encourage an entrepreneurial attitude in young people.

2.5.5.1 The Global Entrepreneurship Monitor (GEM) Report

The GEM⁵⁰ research programme is the largest survey-based programme conducted annually to measure entrepreneurial activity between countries. It was established in 1999 as a partnership between the London Business School (United Kingdom) and Babson College (United States) and now conducts research in 59 countries (Xavier *et al.*, 2010). Malaysia joined the GEM in 2009 and the report has indicated that Malaysia's TEA (Total early-stage Entrepreneurial Activity) is considered to be fairly low compared with other countries with efficiency-driven economies (Xavier *et al.*, 2009). However, it also shows that there is an increase in entrepreneurial activity as the government has provided much assistance in increasing the entrepreneurship level in the country (Xavier *et al.*, 2010). Nevertheless, the report has also indicated that Malaysia is still lacking in entrepreneurship education.

According to the 2010 GEM report, one of the factors which are limiting entrepreneurship in Malaysia is the lack of exposure to entrepreneurship education at primary and secondary school levels (*ibid.*). The report has therefore suggested that Malaysia should place a greater emphasis on entrepreneurship education and encourage more people, especially young people, to engage in entrepreneurial activity (*ibid.*). It appears to be that this is not just a problem for Malaysia. According to the GEM report in 2008, the surveys conducted since 2000 have indicated a low rating on entrepreneurship education and training in schools in most participating countries. It has been said that the "adequacy of entrepreneurship education and training in primary and secondary schools is lower than any other entrepreneurship framework condition" (Martinez *et al.*, 2008, p.5). This seems to mean that the lack of exposure in primary

⁵⁰ All the information on global entrepreneurship activities and its reports can be retrieved from the GEM website at <http://www.gemconsortium.org/>

and secondary schools is a worldwide concern, especially in some of the developing countries (*ibid.*).

Challenges in implementing entrepreneurship education

GEM research is categorized into three groups based on countries' economic development. According to the Global Entrepreneurship Monitor Special Report on entrepreneurship education and training (Martinez *et al.*, 2008), there are a few challenges that were identified in implementing entrepreneurship education in these three groups of countries. The challenges are as follows.

1. Factor-driven countries (attractive type of economic activity)

Challenges in these countries are that training on entrepreneurship education is offered to improve skills and create jobs. Thus, the focus is more on giving basic entrepreneurship education that could develop skills and enhance job opportunities.

2. Efficiency-driven countries

The focus and challenge is in enhancing the training from just necessity-based training to opportunities-based and in promoting activities to become innovation-driven countries.

3. Innovation-driven

For some, entrepreneurship education in these countries is established and it is claimed that this field has come to its maturity. Thus some have claimed that it needs to develop outside from the innovation-driven countries. So it appears that it is a challenge to set up and enhance entrepreneurship education in these innovation-driven countries.

(Martinez *et al.*, 2008, pp.12-14)

Malaysia is categorized as an efficiency-driven country. Although the report (Malaysia GEM Report, 2010) indicated that the country received a low score in providing

education in primary and secondary schools, Malaysia had been very helpful in providing support in terms of infrastructure and financial support to encourage more young entrepreneurs. Malaysia had made an effort to introduce entrepreneurship education in higher tertiary education (at diploma, graduate and post-graduate levels). In 2010, there were 35 higher learning institutions in Malaysia which offered entrepreneurship programmes and these programmes were either taught on their own or in conjunction with other disciplines (Mason, 2011).

2.5.5.2 The cross-curricular element as a means of incorporating entrepreneurship element in the new Year 1 curriculum

The cross-curricular technique is also known as curriculum integration (Hayes, 2010), but for this current study, the term cross-curricular will be used. Parker (2005) suggested that cross-curricular education combines aspects such as knowledge, perspective and methods from other discipline and is used to develop deeper ideas on certain issues. Hayes (2010) defined cross-curricular teaching as the combination of subjects “within project or thematic work, incorporating a wide range of sources, related concepts and flexible schedules” (p.382). As for the UK National Curriculum Council, they emphasized that “cross curricular aspects of the curriculum are an integral part of what is needed to meet the requirements of the Education Reform Act 1988” (Verma & Pumfrey, 1994, p.11). It can be argued that all the definitions given above stress the integration or incorporation of more than one element or subject in the curriculum.

In implementing cross-curricular elements, it is important for the school administrator to understand the implementation and the importance of it. Sound guidelines really help with the execution of the elements. Morris and Chan (1997) studied cross-curricular themes and curriculum reform in Hong Kong and found that the Hong Kong government had introduced various new subjects since the early 1980s but that none of them had lasted long in the schools’ time-tables. So the government proposed four themes (moral education, civic education, sex education and environmental education)

to be installed in the school curriculum as cross-curricular themes. They proposed these themes to address the needs that had arisen in society due to the social and political changes that had occurred. The schools were given guidelines on the implementation and these guidelines explained how the themes and assessments were to be carried out and how schools were responsible for creating a suitable context and learning materials to execute the themes in the classroom. Morris and Chan (1997) interviewed twenty school principals and found that the delivery system had failed and the themes had failed to make any impact on the organization. All the principals interviewed showed interest in the implementation of the themes but they had given them low priority and assigned very few resources to support the implementation. Morris and Chan also identified problems with the guidelines that were prepared by the government. Their findings indicated that in implementing any cross-curricular element, the principal and the teachers play vital roles and must understand how important the changes are and how to implement them.

In another study of the implementation of personal effectiveness skills as a cross-curricular theme, Unwin and Wellington (1997) found that the roles that the key staff members play are very important and that teachers and the curriculum become the two most influential factors. They said that the teachers had an important influence on the implementation of the personal effectiveness skills, and that with their teaching and learning styles and their exposure, teachers had influenced how and how many skills the students had been exposed to. That study showed that teachers have a crucial influence on implementation. With the power and strength that they have, they can make the implementation either a success or a failure.

The MOE introduced a new cross-curricular element into the new Year 1 curriculum from 2011. The idea of a cross-curricular element itself is not a new element in the curriculum in Malaysia; it had been installed in the curriculum since 1998 when the MOE introduced environmental education as a cross-curricular element in primary and secondary schools. To ensure the progress of environmental education, the MOE issued teachers with guidance in the 'Teacher Handbook for Environmental Education

across the Curriculum for primary and secondary schools', which was published by the Curriculum Development Centre (Mohammad Zohir & Nordin, 2007). Historically, the term 'cross-curricular element' in the primary school curriculum dates back to 1983 when the MOE announced the incorporation of moral values into the KBSR curriculum. Sixteen moral values were introduced and they had to be integrated into all subjects as cross-curricular elements. Even today, these moral values are still being infused into the curriculum through the cross-curricular method.

In the Malaysian curriculum, there are existing elements which are being used as cross-curricular elements in both primary and secondary schools' curriculums and they include language, science and technology, environmental education, moral values and patriotism. These elements are part of the curriculum and are still being used even after the MOE introduced the new KSSR curriculum in primary schools. With the new curriculum introduced in 2011, the MOE added three more elements into the curriculum, one of which is the entrepreneurship element. This element was added as a complementary effort to enhance the quality of the implementation of the new curriculum. The application of the E-element had to be implemented as early as Year 1 so that students can adopt an entrepreneurial attitude, embrace the mind-set towards producing and generating ideas, acquire basic knowledge and skills in a business context, produce products based on technology and vocational skills, and have moral conduct with high ethical values. These qualities are to be achieved through the relevant topics in all the subjects taught in the Year 1 classes.

The implementation of the new E-element into the new curriculum would not be successful without the help of high-quality and committed teachers (Mohammad Zohir & Nordin, 2007). Teachers are expected to be committed to their work and Louis (1998, p.4) proposed four specific commitments for teachers to espouse in their work:

- 1) commitment to the school as a *social unit*;
- 2) commitment to the *academic goals* of the school;

- 3) commitment to students *as unique whole individuals* rather than as ‘empty vessels to be filled’; and
- 4) commitment to the *body of knowledge* needed to carry out effective teaching.

Teachers play important and varied roles when they are in school and to teach the cross-curricular curriculum effectively, they need to possess particular skills, especially teaching skills such as class management skills, explaining skills, questioning skills, task-setting skills and assessment skills (Kerry, 2011). In implementing the E-element in the new Year 1 curriculum, teachers have to instil five elements that were outlined by the MOE:

E-element 1 – Adopt an entrepreneurship attitude

Students have to learn to adopt the attitude through the activities carried out in the class. It is expected that students will learn and use the entrepreneurial attitude in their daily life until it becomes their culture. There are fourteen attitudes that need to be instilled in students.

E-element 2 -Embrace the mindset towards entrepreneurship in situations that are required.

The MOE emphasized that students should think critically, creatively and innovatively. This will help them to identify opportunities in the environment so that they can continue to be successful or at least persist in their efforts.

E-element 3– Practise basic buying and selling management.

If students are taught the simple and basic techniques of buying and selling, they can learn the skills for doing simple business transactions. These skills can be used in their daily lives.

E-element 4 –Producing knowledge-based products and technology and vocational skills-based products.

Students are expected to be able to invent and produce competitive products that are knowledge-, technology- and vocation-based according to their creativity.

E-element 5 – Practise moral values and ethics according to the entrepreneurship context.

Good values encourage students to develop a responsible attitude.

Teachers are allowed to choose any element to include in any topic of their teaching and learning activities as long as they think the element suits the topic that they want to teach for that day. There are three techniques that teachers can use to incorporate the element in their classroom. The first is the ‘mixing approach’ in which teachers are given the freedom to choose the approach that they want to use and their choice depends on the activity and the time of the teaching and learning in the day. The second method is the ‘integration approach’ which can be used if the topic for the day is not related and not suitable for the entrepreneurship element. However, in between the activities, teachers can apply any element of entrepreneurship by getting the views of pupils in relevant situations. The third method is the ‘application approach’ in which the teaching and learning activities are carried out as planned by the teacher. But after the teaching objectives have been achieved, teachers can apply the learning outcomes to any relevant entrepreneurial element. This application can be implemented by linking what has been learned that day with real entrepreneurial situations.

The application of entrepreneurship education should be done continuously. The MOE's plan is to instil the E-element until the students finish their schooling term at the end of Form 5. So it is a long-term plan and within this timeframe, changes in students’ attitudes can be seen. To assess that, the MOE developed indicators to test the changes in students. These indicators are based on the elements that teachers have instilled and can be used to evaluate the effectiveness of the elements taught.

2.6 Summary

This chapter provides a review of the relevant literature related to human capital theory, curriculum reform and entrepreneurship education and explains the theoretical concept of, and knowledge about all three of these issues. It also briefly examines the association between education and human capital theory and reviews the important issues related to reform, to its implementation and to teachers' education. Based on all the empirical evidence discussed in the literature, the research framework for the current study was developed.

As mentioned in the chapter, the Malaysian government reformed primary school education in 2011: a new curriculum was introduced and entrepreneurship education was promoted as a cross-curricular element as part of that reform. Due to its special features and the contribution that it can make to nation-building and economic growth, entrepreneurship education has now become widely accepted and is taught in many countries, including Malaysia. There is a consistent argument in the literature that entrepreneurship education can be taught and that the learning objectives should be varied to cater for different education target groups. In Malaysia's case, entrepreneurship education was introduced to develop pupils' entrepreneurial attitude and culture, and this target was manifested through curriculum reform.

As many previous studies have argued, curriculum reform involves many people in the education system – from the top to the lowest level. They are all involved directly or indirectly in ensuring the success of educational change, and teachers are regarded as playing an important role in this. Teachers are the executors of the curriculum and their understanding of the curriculum and of proposed changes to it are deemed to be vital. Thus, according to most scholars, it is important in any educational reform to give priority to the teachers and to provide them with the necessary exposure through training and professional development programmes. Failure to do this would impede the success of the reforms. Some previous researchers have reported that lack of understanding and lack of exposure were considered to be major contributing factors to unsuccessful reform. Scholars have also emphasised the importance of evaluating

reforms. Good curriculum evaluation would help in making wise decisions pertaining to education reform. As curriculum reform is the heart of educational change, it is therefore crucial to look at its implementation as this will not only identify problems, but will also suggest ways of addressing them.

Reviewing the literature reveals some helpful direction. From the work of the few scholars mentioned in this chapter who have studied issues pertaining to curriculum reform, especially in Malaysia (Mohd Isa, 2007; Mukherjee & Singh, 1983; Noor Azmi, 1988) and also based on the report from the MOE (1989), the overarching research question for this study had been developed. This research question looks at the respondents' perception of the implementation of entrepreneurship education in primary schools. As discussed earlier in this chapter, the MOE's (1989) report and Mukherjee and Singh's research in 1983 revealed that a few issues pertaining to the implementation have been identified (relating to teaching strategies, materials used and training). Therefore, this current research study is undertaken to explore and look at how the respondents perceive the entrepreneurship education implementation and what are the issues surrounding the implementation. This study would like to see what are the issues that could arise during the implementation and is hoped to enlighten issues on curriculum reform. It will also give opportunities to explore the possibility of supporting or denying earlier findings on curriculum reform in Malaysia. Thus, in order to understand thoroughly the implementation, three specific questions were developed. These questions are designed to look at how the respondents perceive the changes, their understanding of the entrepreneurship element, their views on the purpose of its implementation and the pedagogical and political issues faced during the implementation process.

CHAPTER 3

Methodology

3.1 Introduction

The aim of this research is to explore the perceptions of key respondents in one district on entrepreneurship education and its implementation in the Year 1 curriculum in primary school. This chapter will discuss in detail the methods and methodology employed in this research. I shall draw on Silverman's (2005) definition of methodology. Methodology is a process of researching phenomena that is structured impeccably along the progression of preparing and developing a framework of the study that involves choosing a related case, usage of proper tools for data collection, and an appropriate data analysis procedure. Research method on the other hand is the data collection technique (Bryman, 2008). Conducting data collection requires specific instruments to gather sufficient data for the research conducted. Throughout the research, I shall focus on both of these issues.

This chapter begins by describing the qualitative method and this is followed by a thorough examination of my chosen research design (a single case study with the embedded unit of analysis approach) as defined by Yin (2009). Next, the discussion will continue on the research questions and will later explain the pilot study and justify the research samples, data collection methods, research procedures as well as data analysis used. Ethical issues and researcher roles are also discussed here. Details of the methodology and the approach to how data were gathered is further elaborated in this chapter.

3.2 Research paradigms/ philosophy consideration

There are different criteria when choosing strategies by which to conduct research (Bryman, 2008; Creswell, 2009); these include the paradigm or philosophical consideration. This paradigm “may be viewed as a set of basic beliefs (or metaphysics) that deals with ultimate or first principles. It represents a worldview that defines, for its holder, the nature of the world, the individual’s place in it, and the range of possible relationships to that world and its parts” (Denzin & Lincoln, 1998, p.200).

Denzin and Lincoln (1998) stated that there are three elements of a paradigm in any research, which are; the *epistemology* that relates to the question of what we know; the *ontology* that refers to the nature of reality; and the *methodology*, which centres on the issues of obtaining it. Therefore, in producing this study, I followed closely the research consideration that was suggested by Creswell (2007). Table 3.1 below shows the five philosophical assumptions that were used in choosing the qualitative method together with the implication for practice in this research.

Table 3.1

The research consideration in choosing the qualitative method

Assumption	Question	Implication for practice in this research
Ontological	What is the nature of reality?	I used quotes and themes that reflect the views of all the respondents and offer evidence of different perspectives. My aim in gathering various perceptions from different groups is not to identify individuals making mistakes or their weaknesses, but to shed as much light as possible on the issues of implementation of the entrepreneurship element in school.

Assumption	Question	Implication for practice in this research
Epistemological	What is the relationship between the researcher and the subject being researched?	I attempt to minimise the distance between the respondents and myself because both influence each other (MacMath, 2011). I am part of the same education system and was a teacher before, so, I believe that I can understand things better when constructing the description and findings of this research.
Axiological	What is the role of values?	The researcher discusses all the valuable information gathered from the interviews.
Rhetorical	What is the language of research?	The researcher writes in the first-person and employs the language of qualitative research in her study.
Methodological	What is the process of research?	The researcher works informing the research process of all the findings before generalizing them.

Source: Creswell (2007)

Table 3.1 shows the stance of the philosophical assumption involved in this research. According to Creswell (2007), each stance that a researcher chooses from the philosophical assumption will help to plan and develop the research. In my work, I draw from the work of Creswell (2009), according to whom the choices of the philosophical ideas have an influence on the research and thus they need to be identified and discussed. There are three types of research strategy: the qualitative, quantitative and mixed methods. For this current research study, I opted for the qualitative method. According to Denzin and Lincoln (2008), “qualitative research studies things in their natural setting, attempting to make sense of, or interpret, phenomena in terms of meanings people bring to them” (p.3). The reason for choosing the qualitative approach is explained by the philosophical idea/paradigm that I used in this method (Creswell, 2009).

There are said to be four predominant philosophical paradigms or schools of thought that may influence an individual's belief system, which then leads to different methods of research (Bloomberg & Volpe, 2008; Creswell, 2009). Bloomberg and Volpe (2008) used the terms 'paradigm' and 'school of thought' when referring to the four options, while Creswell (2009) used the term 'worldview'. In explaining the paradigms chosen for this study, the term 'worldview' will be preferred. There are four worldviews, namely; first Post-positivism, second Social Constructivism, also known as Interpretivism or Naturalistic Inquiry (Bloomberg & Volpe, 2008), third Advocacy/ Participatory, and fourth Pragmatic (see Creswell, 2007, pp.19-23).

Considering the worldviews described above, and considering the fact that this is a qualitative study, I shall combine Creswell's (2009) second and fourth worldviews because the nature of this study appears to stand between these two views. In the academic literature, the second worldview, Social Constructivism, argues that people have varied views based on their understanding and experiences of the situation. It suggests to researchers using the latter approach to have more open-ended questions and to rely heavily on the answers given by the participants. Relative to my research, the key factor is the perception of the individuals involved in this study. This research examines the perceptions of different teachers, headteachers, trainers and officers of the implementation of the entrepreneurship element. Thus, it is important to rely on the answers that were given by the respondents as they are the main individuals related to the implementation.

It must be emphasised that in carrying out this research, I also used my experiences (as a teacher and part of the education system) to analyse and understand the participants' perspectives (Bloomberg & Volpe, 2008). As a researcher, I posed the research questions and inductively generated meaning from the data that I collected. Although this research does not aim to develop any particular theory (in the term suggested by Creswell (2007) for the second worldview), it does look at respondents' views, which, once analysed and interpreted, will help me to shape my theoretical framework and give meaning to my research by helping me answer the research questions.

In regard to the fourth worldview, the Pragmatic worldview, this study is focused on the research problem itself rather than the method used. This is in line with Bloomberg and Volpe (2008), who indicated that Pragmatic view is not devoted to any one worldview and that in this approach the problem is more primary than methodological issues. So, since I focus more on the *perception of my respondents*, my research falls into this view as well. The only difference is that as Creswell (2007) argued, researchers who use this view usually apply multiple methods for their data collection, but for this study I only applied the qualitative approach. This is because for answering my research questions (looking into people's perceptions), I need very detailed, rich and informative data, which I think is best obtained through the qualitative method research. Thus, as the primary education system in Malaysia is the same across the country, the respondents were in an advantageous position to share their views and opinions. Therefore, the qualitative method is the appropriate medium to explore and understand the problems that have occurred (Creswell, 2009) because the qualitative research process involves "the emerging of questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particular to general themes, and the researcher making interpretations of the meaning of the data (Creswell, 2009, p.4). This is the reason for taking the fourth worldview as my stance in choosing the qualitative approach.

Creswell's (2009) first and the third worldviews do not suit my research because as Bloomberg and Volpe (2008) indicated, the results in the first worldview studies tend to focus on accepting or rejecting the theory. This current study does not test any theory. The aim is to look at the perception of respondents who are involved with the implementation of the entrepreneurship element. The other reason why it did not fall under the third worldview was that the participants in this research did not have any involvement in the overall process of designing the questions, analysing, and interpreting the questions (Bloomberg & Volpe, 2008). They were only involved during the data collection period when they answered questions posed to them. For all the above reasons, this research advocates the second and fourth worldviews opting for qualitative study.

According to Silverman (2005), no research method is better than another because each piece of research depends on the subject of the study and the researcher's expectation. All research methods have their strengths and weaknesses, but the choices of research method really depend on the research problem of each study (Silverman, 2005). In this current study, the qualitative method seems to be most suitable because it depends on the appropriateness of the epistemological and ontological elements of the study. This study aims to look at the respondents' perceptions of the implementation of the entrepreneurship element in the curriculum in their schools. So, the best methodology is qualitative study.

There are two other reasons that made me opt for the qualitative research method for this study. First, this research is concerned with the perceptions of the respondents, which means that I had to try to see the issue through their eyes and describe everything from their point of view (Bryman, 2008, p.385). This is very different from other approaches that emphasize the point of view of the researcher (Bryman, 2008). I interviewed several groups of respondents, analysed the data and presented the findings according to the views and perceptions of my respondents. So, the qualitative research method was more appropriate. Second, as this study looks at perception, it would be more descriptive (emphasizing the contextual understanding of what being discussed by the respondents). I have to explain in detail the findings and everything that went on during the interviews, and such information is very important and significant (*ibid.*). Furthermore, Strauss and Corbin (1998) stated that qualitative data is not gathered using statistical procedures because qualitative research is a strategy that focuses “on words rather than quantification in data collection and analysis” (Bryman, 2008, p.22).

3.3 Research Design

This section provides details of how the research was conducted and analysed. According to Bryman (2008), research designs “provides a framework for the collection and analysis of data” (p.31). He explained that the research framework will

be a dependable structure that guides researchers while conducting research. Research designs are classified in many ways. Bryman (2008), for example, classified designs into five major categories: the *experimental design*, *cross-sectional design (survey design)*, *longitudinal design*, *case study*, and *comparative design*. Each of these can use either the qualitative or the quantitative method as appropriate. Creswell (2007) also offered five approaches: *narrative research*, *phenomenological research*, *grounded theory research*, *ethnographic research* and *case study research*, all under the umbrella of the qualitative method.

Misconception of qualitative data occurs when researchers believe that a particular research method is constrained to a specific research strategy (Yin, 2000). This is not necessarily right because numerous methods can be used while conducting research for three purposes: *exploratory*, *descriptive* and *explanatory (ibid.)*. Yin (2009) stated that it is not the hierarchy of the methods that differentiates it, but the conditions in the research. He listed conditions as precedents which needed to be considered prior to choosing a research method. These conditions are: “type of research questions posed; the extent of control an investigator has over actual behavioural events; and the degree of focus on *contemporary* as opposed to *historical* events” (*ibid.*, p.8).

Within this framework, I regard my study as exploratory research because it explores the perceptions of various groups of people of the implementation of the entrepreneurship element in the Year 1 curriculum in Malaysian primary schools. According to Thomas (2011), “an exploratory case study will be done where you are faced with a problem or an issue that perplexes you” (p.104). He indicated that when encountering such a situation where relevant information is needed, it will involve the questions of what is happening, and why. The word ‘explore’ itself has the meaning of to examine or investigate (Collins English Dictionary, 2000). As stated above, the main aim of this research is to identify key respondents’ perceptions and opinions of the implementation of the entrepreneurship element in the new Year 1 curriculum. As this element was previously taught as part of the Living Skills subject to upper-level students in primary schools, I considered it important to explore the reasons for these

changes. I also wanted to seek the opinions of the key respondents on the element and its implementation. Therefore, I believe that this is a good reason to classify my study as an exploratory study.

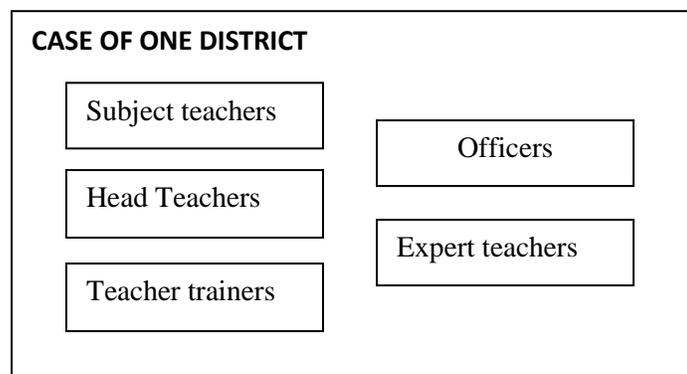
Since this study focuses on the perceptions of specific groups of people who live in the same district and are part of the same organization (the MOE), I consider my research to be a case study. This is in line with the view of Marshall and Rossman (2011) who saw the case study as an exemplary way to understand and analyse the process of research involving a specific group of people or a specific organization. A case study can be carried out using either a qualitative or a quantitative method, or a combination of the two (Gerring, 2007) because the cases and the research questions determine the method (Yin, 2003). As this is a qualitative approach, Creswell's definition of case study is appropriate. Creswell (2007) defined case study research as a

qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audio-visual material, and documents and reports), and reports a case description and case based-themes.(Creswell, p.73).

Various scholars (Creswell, 2007; Stake, 2000; Yin, 2003) have suggested different types of case study but I prefer to classify my research according to Yin's definition because I found that my work fits well with one of his styles. Yin (2003) distinguished the case study into four types: the single-case (holistic) design, the single-case (embedded) design, the multiple-case (holistic) design and the multiple-case (embedded) design. Holistic design has only one unit of analysis, whereas embedded design has more than one unit of analysis. To a degree, I considered my research as a single case study with embedded unit analysis because in this research, I study a single case in one district, but I have developed several units of analysis. This is in line with Yin's suggestion that if a single case study has more than one unit of analysis, the single case with embedded units of analysis is preferable (Yin, 2003). This approach suits my research well because I propose to study respondents' perceptions on the

implementation of the entrepreneurship element in the Year 1 curriculum in primary schools in one single district. There are five groups of respondents included in the unit analysis in this one case study (*see* Table 3.2) and during my research, I observed the different perceptions of five different groups of curriculum officers, headteachers, expert teachers, teachers' trainers and subject teachers.

Table 3.2
Single case study with embedded unit of analysis



Source: adapted from Yin (2008)

The reason for choosing this type of case is because the focus is on the perceptions of the key respondents in the same district. According to Yin (2003), a case study may have more than one unit of analysis when attention is given to the sub-unit or sub-units in a single case. As already stated, the focus of my research is only on the responses gathered from my respondents who in this study are the unit of analysis. This is why I think Yin's approach suits my research. Yin (2003) also indicated that when using the holistic case design, there is the possibility that the research might be conducted only on an abstract level because of the lack of clear measurable data (p.45). He suggested that if changes happen to the holistic study, such as a shift in the nature of the case study, the researcher has to restart the study by resetting the research design. This might create a problem but, by using *sub-unit analysis*, this problem can be overcome (Yin, 2003). I therefore argue that for my work, the embedded case study approach is better than the holistic case.

Regrettably, the embedded case also has its drawback. Problems in this case study approach tend to arise when the researcher focuses only on one unit of analysis and fails to relate it to the larger unit of analysis (Yin, 2003, p.45). In my work, I have several units of analysis and I realize the tendency to discuss and focus more on one unit of analysis, such as particularly focusing on the subject teachers. The subject teachers are the main implementers of the entrepreneurship element and they have the advantage of experience of implementing it in their classes. The teachers shared many comments with me, particularly on issues related to the implementation (all these issues are discussed thoroughly in the results chapter). However, I have taken the precaution of not over-discussing the opinions of only one group. My study focuses on the perceptions of various groups in the education system. Thus, I have to ensure that I have taken diverse opinions into account when analysing and discussing the findings in order to answer all the research questions.

Yin (2003) argued that the *multiple case design* is possibly favoured over the *single case design*. This is because the opportunity to have a good case increases when the researcher has two or more cases (Yin, 2003). Focusing on only one research aspect makes a case in condition more vulnerable to the risk of ‘putting all our eggs in one basket’ (Yin, 2003, p.53). Yin (2003) also argued that having the benefits of an analytical discussion of two cases is better than one.

I am aware of the risk that I have taken by selecting this particular research design but I believe that for my study, the single-case method was suitable because my respondents came from one district only. I randomly selected ten schools and recruited five groups of respondents from the same district. Therefore, this is a single case study of one district. I do not compare my research to other districts because my research questions focus mainly on respondents’ perceptions of the implementation of the entrepreneurship element in the schools in one given district. Although I studied only one district, I believe that it provided sufficient insight and information to help to answer my research questions. As to the analytical discussion, I still get the benefit because my respondents come from various levels in the same organisation.

3.4 The research questions and how they were addressed

The main research question in this study is ‘How does a sample of key respondents perceive entrepreneurship education and its implementation in the Year 1 curriculum in primary schools?’ My respondents come from various levels of the education system and their opinions were very important to me for answering the research questions.

In determining what to ask and how to conduct this research, I focused on the literature on entrepreneurship education. Some of the sources that I examined included Ab. Aziz (2009), Garavan and O’Cenneide (1994), Gibb (1993), Kuratko & Hodgets (2007) and Rasheed & Rasheed (2004). Concerning curriculum change, I focused on the work of authors such as Bercher and Maclure (1978), Doll (1996), Fullan (1982; 2007), Hynes (1996) and MacDonald (2003). Having studied these sources, I decided to group my ideas into three categories which I used when setting up the research questions.

1. ***The concept of entrepreneurship education*** – in order to look at how the respondents perceive and understand the concept.
2. ***The purpose of the implementation*** - In raising this issue, I wanted to know how the respondents see the purpose of the implementation of this element into the curriculum. This also had the aim of seeking their opinions on the changes made when this element was introduced into the Year 1 curriculum.
3. ***The issues in implementation*** –the respondents were asked to share their views and opinions regarding general aspects surrounding the implementation of the element.

Using these ideas, I developed my three specific research questions. From these questions and from theoretical analysis, I then developed seven research areas. These research areas were then used as guidance in developing my interview questions.

1. Respondents’ perceptions of the reform;

2. Respondents' perception and understanding of the concepts of entrepreneurship education and a cross-curricular element;
3. The training that teachers received;
4. Issue around the official syllabus;
5. Teachers' readiness;
6. The actual implementation;
7. The official support that teachers received.

However, as the interviews developed, new themes were identified when the respondents raised new issues which had much relevance.

3.5 Pilot Study

A pilot study is usually carried out in any study prior to the main data collection. Running a pilot study for me was important because it gave me an opportunity to observe my research instrument, to test the validity of the chosen instrument and to check whether the questions could be understood and implemented in the main study later.

Carrying out a pilot study is not only about testing the survey questions but also about making sure that the research instruments work well (Bryman, 2008). As well as giving an opportunity to adjust the research instruments, a pilot study allows familiarization with the data collection process and gives experience of conducting interviews. Yin (2009) explained that "A pilot study will help you to refine your data collection plans with respect to both the content of the data and the procedures to be followed" (p.92) and that a "pilot study can be so important that more resources may be devoted to this phase of the research than to the collection of data from any of the actual case" (p.92). Within this framework, it is crucial to make sure that all instruments are functioning well and can generate the data needed for the real study which means that, if we can fix the instrument and amend it prior to the main study, we can minimize errors and obtain data that are more accurate.

Conducting the pilot study built my confidence as I had an opportunity to meet and interact with the respondents. I enjoyed the interview sessions, which were carried out in an informal setting without any pressure of any kind – spontaneity being very important in a pilot scheme. Bryman (2008) stated that “piloting an interview schedule can provide interviewers with some experience of using it and can infuse them with a greater sense of confidence” (p.247). Gaining experience of using the instrument was important for my research because I knew that if I did make mistakes, or if the questions were not right, I still had time to amend them. This would give me the advantage of producing a good set of questions for my main study. At the personal level, it is important to observe that I was very satisfied with the pilot project because I forged an excellent rapport with the officers. As well as the formal interview, we exchanged ideas and discussed other issues pertaining to the new curriculum and the education system. All of this threw some light on the theoretical and empirical implications of my work.

In selecting a sample for the pilot study, I chose three schools from the same district in which my main study was to take place. By conducting the pilot study in the same district, I could have earlier exposure to and understanding of the local situation. Furthermore, the schools selected for the pilot study were managed by the same District Education Office administration. This gave me the advantage of being able to learn about the situation in the schools and the education departments when the cross-curricular element was at the early stage of implementation, bearing in mind Yin’s (2009) statement that “The work on the pilot cases can provide information about relevant field questions and about the logistics of the field inquiry” (p.94).

In ensuring an objective and neutral selection, I randomly selected the three schools from the remaining 86 schools which had not been selected as samples for the main study. By selecting these three schools using the random sampling technique from the remaining balance, I was able to avoid having a biased sample (Bryman, 2008, p.168). This was in line with Bryman’s (2008) advice to take a small scale of respondents as a sample for the pilot study from the same population where the sample for main study

will be taken because “the selecting out of a number of members of the population or sample may affect the representativeness of any subsequent sample” (p.248).

My pilot study was conducted in May 2011. I filled the university ethical form and received approval to conduct research in Malaysia. I interviewed 19 respondents using the semi-structured interview method: three curriculum officers, three headteachers, one expert teacher, nine teachers (teaching Malay Language, Arts and English) and three Living Skills teachers. The teachers and the headteachers were chosen from three randomly selected schools. All the questions were constructed based on the above-mentioned eight research areas and were guided by my reading and by the research questions.

Prior to the interviews, I had communication with all the respondents and set a date with them. Respondents agreed to the proposed date and requested a reminder a few days before the agreed date. During the interview sessions with the teachers and headteachers, I spent two days at each school. I managed to interview three teachers on the first day and one teacher together with the headteacher on the second day. The timing depended on their availability and I was requested to interview the teachers during their free period. Therefore, I needed to arrange the schedule at the first meeting on the first day with them. For the interviews with the officers, I managed to set an appropriate date after a few telephone calls and the interviews ran smoothly. The duration of all the interviews was about 30-40 minutes and all the interviews were conducted in the Malay Language (the respondents' mothers tongue).

During the first and second interviews, I was not very confident and felt nervous. I did ask all the main questions but I often missed a few important points. This may or may not be relevant, but I must acknowledge that the time constraint often made me feel under pressure. I soon overcome this feeling and managed to conduct the rest of the interviews smoothly (whether my sense of stress was sensed by the respondents affecting, thereby, their responses, I do not know). I also prepared some souvenirs for

all the participants as appreciation for their cooperation in enabling me to conduct a smooth and efficient study.

A total of 19 interviews were carried out for the pilot study within a time frame of five weeks. I transcribed and translated all the data that were collected. All the data were analysed based on the research questions and the seven research areas, as well as the new issues that arose during the interview. Yin (2009) advised that the researcher has to identify any necessary modifications for the post pilot study. I decided to make several changes to my work after the pilot study. I continued using the semi-structured interview as my method but made the following adjustments:

a. I removed some of the interview questions

Basically, there were not many changes needed to the research instruments. The interview questions were piloted and respondents commented that they could understand the questions, but they felt that some were redundant. I took notice of this comment and changed them. I changed a few words making them more interesting and shorter.

b. I minimized the interview time with the teachers and headteachers

The respondents are very busy people, especially the head-teachers and teachers, so it was very difficult to set a longer interview period with them. I could only interview the teachers during their free period, so the maximum length of interview that I could conduct was about 35 minutes on average. Even that caused some inconvenience to them. I therefore rearranged my questions and focused only on asking those questions that would help me to answer the research questions. I removed unwanted and redundant questions, piloted the revised version with my friends and reduced the duration of the interview.

- c. I decided to interview the Senior Assistant (second in charge after the headteacher) when the headteacher was not available in order to save me having to wait.

In one of my situations, I had no access to the headteacher due to her heavy schedule and I had to postpone the interview twice. Normally, headteachers are busy because they have to administer schools and had to multi-task handling meetings and briefings, and receiving guests from various levels of educational and governmental departments. As a researcher, I needed data and my only option was to interview the second person in authority, who was the Senior Assistant. I believe that I made the right decision to interview the senior assistant as a substitute not wanting to face the possibility of losing any data. As the Senior Assistant undertakes the responsibility for school administration in the absence of the headteacher, this decision was logical and effective.

- d. I removed the Living Skills teacher from my respondent list.

Based on the findings from the pilot study, I decided not to interview the living skills teachers because the data from them did not add much to my main study. The teachers who I interviewed in my pilot study were not well versed with the implementation of the entrepreneurship element because they were teaching students in Level 2 and the new curriculum was being introduced in Level 1. They did not share many ideas as they did not have enough information pertaining to the implementation.

- e. I interviewed everyone in the Malay language, including the English teacher.

During the pilot study, I found that this was the most effective strategy because the interviewees felt more comfortable talking to me in their native language rather than English, and were more open, sincere and spontaneous.

3.6 Research Sample

In this section, I shall first look at the population profile and then at the sample of the respondents. I shall explain the reason for choosing each group of respondents. How they were selected will be explained in the following section.

According to Bryman (2008), the population in a research study is “the universe of units from which the sample is to be selected” (p.168). In this study, the population comprises all the primary schools in the selected district. Primary schools were chosen because the E-element – the main object of this study – was first introduced in primary schools. Thus, all the primary schools in the district will be the population. The studied district is located in one of the states in East Peninsular Malaysia.

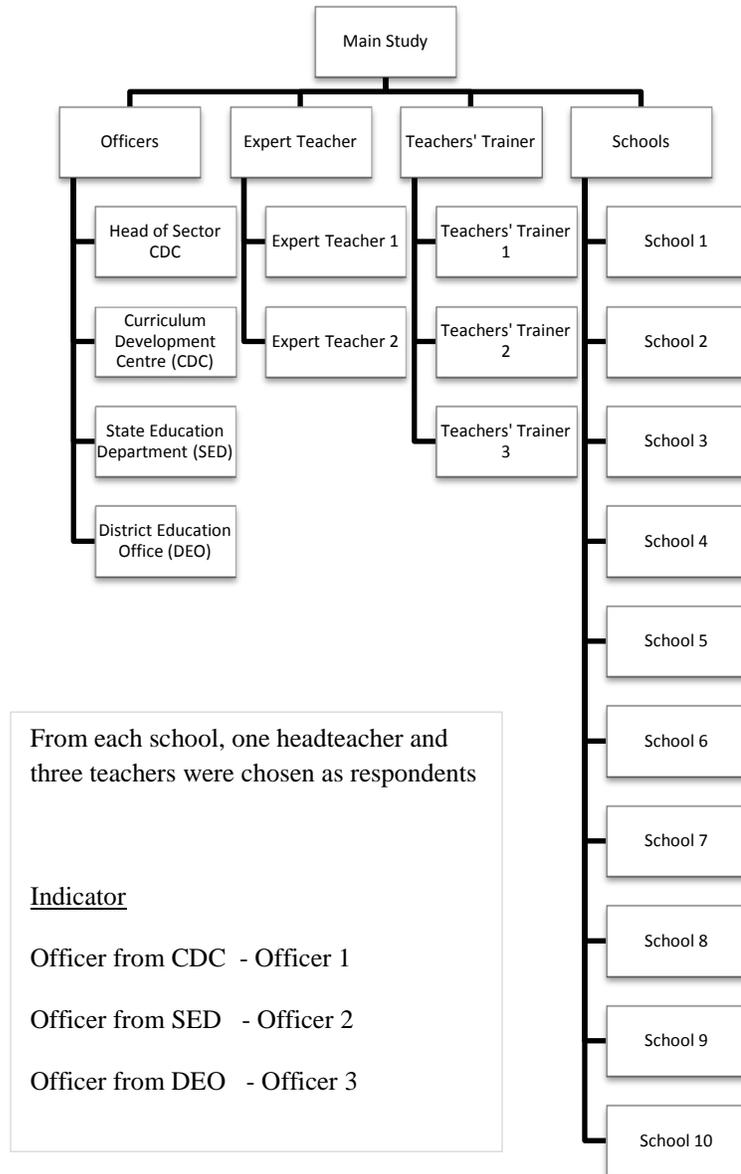
This particular state in East Peninsular Malaysia was chosen because, to my knowledge, not many research studies on curriculum matters have been conducted in this state. I reviewed the MOE library where all theses related to education (especially involving schools), are kept. Under the MOE, it is compulsory for researchers to submit a copy of their work to this library. The library was opened in 1983 and most of the theses written since then have been collected and kept. Therefore, I was able to look at the theses dating from 1983. When I browsed the library’s computer system, I found only 482 relevant studies conducted in this state, of which only 78 studies were related to the curriculum. This was the information collected in 2009. The lack of research in this state concerned me and made me decide to undertake my research there. I wanted to know the perception of the respondents in this state of the implementation of the new curriculum. As this is a very new curriculum, I believe that my findings could have theoretical and empirical implications on the topic of curriculum reform and entrepreneurship education. I also believe that my work could be beneficial to others working on the same topics, and in the same state.

In every one of the 13 states in Malaysia, there is only one State Education Department (SED) and several District Education Offices (DEO) depending on the number of districts in the state. The reason for choosing only one district for this study

was that I had limited time and financial sources. As a sponsored student, I was given only three years to complete the study, so I need to be realistic about my work. Bryman (2008) indicated that time and costs are important factors that need to be considered when choosing samples for study. With this in mind and with the three months duration for data collection given by my sponsor, I opted to conduct my research in only one district. If I had wanted to study a bigger population such as a state, or, indeed the whole nation, more resources and time would have been needed. However, I still think that this case study is representative because I had various groups of respondents selected from various departments and schools. This, I assumed, would be interesting to examine in detail. The particular district was also chosen because of my personal interest in examining the implementation in that particular district. The name of the state and the district in which this research was conducted has been kept anonymous, and to preserve anonymity and confidentiality, any mention by the respondents of the name of either the state or the district has not been reproduced.

For this research study, the samples were selected from various groups of respondents who are involved with the education system in Malaysia. These respondents are employed by the MOE as teachers and officers. There are five groups of respondents for this study and they were selected using different approaches. Figure 3.1 shows the composition of the groups.

Figure 3.1 Diagram showing the sample selection



The five groups of respondents shown in Figure 3.1 are the subject curriculum officers, headteachers, expert teachers, teachers’ trainers and subject teachers. All the respondents whom I classified as ‘key respondents’ were chosen because they are involved in the process of the implementation, except for the expert teachers. Using

the *logic concept* (Mason, 2002), these respondents were selected because they are all experts in their field. The more specific reasons for choosing them are explained below.

3.6.1 Subject teachers and headteachers

Subject teachers were selected as respondents because they are the implementers of the curriculum. Since this study focuses on the implementation of the E-element in the Year 1 curriculum, teachers' views are valuable and important. For the purpose of this research, three Year 1 subject teachers (teaching the Malay Language, Arts and English) were chosen as respondents from each school.

At the initial stage of this research, an officer in the CDC informed me that only two subject teachers were briefed on the implementation of the E-element as a cross-curricular element (Malay Language teachers and the Arts teachers). Therefore, I selected these two different subject teachers to examine their opinions about the element and its implementation. Both teachers had undergone the same module of training on the element. I decided to enlist another subject teacher who had not received any briefing or training. This was to establish any difference between teachers who had been briefed and those who had not. This comparison will help me to understand the situation better. I chose English teachers for this category because they had received no training and because I considered it important to know how the entrepreneurship element is being incorporated in English lessons. English is considered a foreign language in Malaysia and to introduce it to Year 1 students is a challenging task.

Surprisingly, when I travelled to do my pilot study in May 2011, I was informed that all subject teachers had been briefed on the E-element. This briefing was conducted at the end of 2010, a few months before the actual implementation of the new KSSR curriculum, introduced in January 2011. The SED officer informed me that almost all subject teachers had undergone training, including teachers of English, but the *modus*

operandi for the training had been selecting representatives from subject teachers of all the subjects in the school. These representatives would later conduct training sessions in their own schools for their colleagues. I realised that all teachers had been given training and that choosing any subject teachers as my respondents would not make any difference. Since I had selected the subject teachers earlier, I just continued with my options. Therefore, during the main data collection in February 2012, I only interviewed the Malay language teachers, Arts teachers and English teachers in each school.

Regarding the headteachers, all of them were selected as respondents because they run the entire establishment. They are responsible for the education of their pupils, the performance of the teachers and the management of all the staff. They are also responsible for ensuring that the new curriculum implementation in the school is carried out successfully. Therefore, their views and opinion would be very valuable. However, although headteachers were the main respondents, in their absence, the Senior Assistant⁵¹ was chosen as a replacement respondent, as had been the case in the pilot study.

3.6.2 Officers and expert teachers

Officers and expert teachers⁵² are relevant to my study as they are experts in their fields and could impart and share information relevant to my research. The selected officers worked at different levels in the MOE and they were directly involved with the change in the curriculum and the implementation of the E-element. Initially, I selected only three officers as respondents, from the CDC, the SED and the DEO.

⁵¹The Senior Assistant, known as the Deputy Head Teacher in the UK, is part of the school administration and is the second person in the school after the headteacher. A Senior Assistant implements and performs all the duties and responsibilities of the headteacher in the headteacher's absence from the school.

⁵² Expert Teachers are teachers who have been appointed by the MOE for their knowledge, skills and expertise in specific fields. They are the teachers who are expert in their field, dedicated and motivated in discharging their duties and responsibilities, particularly in the areas of teaching and learning. They are also teachers who are able to generate new ideas and implement these ideas to improve the quality of education.

During the main data collection, I managed to interview an additional respondent, the Head of the Sector who was in-charge of the E-element. That brought the total number of officers interviewed to four.

Expert teachers are well versed in the business and entrepreneurship component since they teach the component in the Living Skills syllabus. This component is currently being taught in Year 4 in primary school but was now being implemented as a cross-curricular element in Year 1. This was an innovation, which was why I needed the expert teachers' opinions. By interviewing them, I wanted to seek their perception of strategic issues such as the concept of entrepreneurship education, the suitability of teaching the element in Year 1, the cross-curricular approach and other related issues on entrepreneurship education and its implementation.

3.6.3 Teachers' trainers

The decision to include teachers' trainers as respondents was made when I was carrying out my main data collection. After a few interviews with subject teachers, I realised that I needed to include the trainers because they could provide useful information as they were involved with the dissemination of the curriculum. Conducting qualitative research gave me the flexibility to add additional samples during the data collection period (Mason, 2002). Trainers are considered key informants "who are particularly knowledgeable and articulate people whose insight can prove particularly useful in helping an observer understand what is happening" (Patton, 1980, p.182). Trainers give teachers the necessary tools to deal with the new curriculum (including the implementation of the entrepreneurship element), thus their views on the curriculum and the entire pedagogical process would be useful for my research, as I shall show later.

3.7 Selecting the samples

All the groups of respondents in this study were selected using different sampling methods. According to Marshall (1996), “an appropriate sample size for a qualitative study is one that adequately answers the research question” (p.523). Marshall also added that different techniques of sample size can be used if the research is more complex. As this current study involved five groups of respondents, different sampling techniques were used and the sample size varied for each group.

For selecting the subject teachers and headteachers, I first chose the school. I decided that once the school was selected, automatically the respective headteachers and the three subject teachers (Malay language, Arts and English) in that particular school would be selected as respondents. This meant that I would have one headteacher and three subject teachers from each school.

The schools in the district were selected using the systematic sampling method. This method is part of the *probability sampling method*. According to Bryman (2008), the latter can be used in qualitative research, but its use may depend on interview-based research. Since this study uses the interview method, I regard this sampling method as appropriate within the qualitative research strategy that I adopted.

Although convenience sampling might appear easier to many, I opted for the systematic sampling method to maintain the pureness of selecting the sample randomly and systematically at the same time. Furthermore, using this method will minimize the chances of sampling errors, but the researcher has to be cautious not to cause biases in the sample, as Bloomberg and Volpe (2008) warned that “random sampling controls for selection bias” (p.69). By using this method, I can also generalise the findings to the same population (that is, the District) of the research (*ibid.*). This strategy is supported by Bryman (2008), who indicated that inferences could be made from the findings acquired through the random sampling of a population. This means that the findings can be generalized to the population from which the random sample is taken. Therefore, for my case study, I would argue that

that using systematic sampling would allow me to generalize my findings to all the schools within the same District because every school had an equal chance of being chosen as a sample. Thus, this sample can be classified as a *representative sample* (Paton, 1980).

As already explained, this is a case study of one particular district in one of the states in East Malaysia that has 96 schools. The process of selecting the sample started with sourcing the school list from the State Education Department Annual Book for 2010.⁵³ The annual book only provides formal information about the schools' names, addresses and contact numbers without any special indication that could cause bias in the sampling frame. The population in this case study will comprise all the 96 primary schools in the selected district. Using Bryman's formula, I divided the schools according to the sampling fraction n/N where n is the sample size and N is the population size (Bryman, 2008, p.172). In this case study, the formula is $10/96$ and the ratio is therefore 1 school out of 9.6 schools, which I then rounded up to 10). I selected one school out of every ten and I randomly picked the number 2. This means that every second school in the sampling frame of 10 schools will be selected as a sample for this research, and the sequence will be 2, 12, 22, 32, 42, 52, 62, 72, 82 and 92. Then, I referred to the list of schools and chose according to the sequence number, using the sampling method described above. I named the schools accordingly as School 1, School 2, School 3 and so forth until School 10. These ten schools were my sample and from them I had ten headteachers and thirty subject teachers as my respondents. In order to maintain confidentiality, I changed the schools' names using pseudonyms⁵⁴ chosen from the names of the traditional fragrant flowers in Malaysia. Table 3.3 shows the pseudonym used.

⁵³The Year Book covered the state in which the study was carried out.

⁵⁴A fictitious name adopted by the researcher so as to conceal the schools' identity.

Table 3.3

Pseudonym for the schools

<i>School</i>	<i>Pseudonym</i>
School 1	Cempaka School
School 2	Melur School
School 3	Kenanga School
School 4	Melati School
School 5	Kesidang School
School 6	Selasih School
School 7	Tanjung School
School 8	Kemboja School
School 9	Kemuning School
School 10	Bakawali School

During the main study, I managed to interview all 30 subject teachers in all the schools, but unfortunately I only managed to interview nine headteachers. This was due to time constraints and busy agendas on one headteacher's part. I had visited the school and managed to interview the teachers but could not interview the management. So, I missed one headteacher. Bryman (2008) wrote that the response rate for social surveys had been decreasing in many countries. He then related this to the researcher's ability to increase the response rate. In my case, I had taken all actions within my power but the non-response issue was unavoidable and beyond my control.

In selecting the officers and the expert teachers, I used *purposive sampling*. Most qualitative research uses purposive sampling (Bryman, 2008; Creswell, 2009; Marshall & Rossman, 2011; Silverman, 2005). According to Bryman (2008), it is

chosen because it applies to the sampling of the case and is relevant to the research questions that are being posed. It is a non-probability sampling method and the respondents understand the issues being investigated (Bryman, 2008). In relation to this current study, officers and expert teachers were chosen for their expertise, and this was explained to them when discussing the research sample. I was aware of the risks of being biased in choosing the sample when using the non-probability sampling approach, but this was avoided by following the correct procedure.

The officers were selected through the proper channels and were nominated by their departmental Heads. Once I knew which department I needed to deal with, I secured all contact information by browsing the net. On contacting the Heads of Departments/Sectors I explained my intention and research requirements. I received positive feedback and was given the necessary contact information. I established communication by telephone and email with the recommended officers and described the core details of my research; they agreed to participate and become my respondents. While conducting the research, I added another officer who was the Head of Sector in charge of the E-element implementation. Thus four officers were interviewed.

In order to recruit the expert teachers, I phoned the Technology Section in SED and communicated with the Head of Section. The Head recommended four teachers from whom I selected two names randomly for my main data collection. I contacted the two expert teachers and explained my research objectives; they agreed to become respondents.

The trainers were selected using *convenience sampling* (Marshall, 1996) by which a sample is chosen because they are available to the researcher (Bryman, 2008). Three trainers' names were supplied to me by the SED together with their mobile numbers and the names of their schools. Since it was just a small numbers of trainers, I decided to interview them all. As mentioned earlier, the appropriate sample size for qualitative research depends on the need and adequacy to answer the research questions (Marshall, 1996). Thus, in my study, I took the view that three trainers could provide

adequate information to answer my research questions. The convenience sampling is simple and easy (Bryman, 2008; Marshall, 1996) but as I have already observed, I was aware that the opinions from the key informants could be biased (Patton, 1980). To avoid this, I ensured that I analysed the data from the teachers and the officers simultaneously. Not all the trainers in this study came from the same district as the other respondents because trainers are by definition scattered around the whole state. Two of the trainers I interviewed were not in the same district where my research was conducted.

3.8 Data Collection Method

There are several methods for gathering data in qualitative research. Yin (2003) identified the six most-commonly used methods in case studies: documentation, archival records, interviews, direct observations, participant observation and physical artefacts. In this study, only semi-structured interviews were used for data gathering and as a primary data resource. This is because interviews were considered the best way to obtain data since they can generate a wealth of information concerning the experience of key respondents, their opinions, aspirations, attitudes and feeling (May, 1997).

Generally, researchers use unstructured interviews for qualitative research, in which the interviewer has a limited list of topics and allows respondents freedom when answering questions (Bryman, 2008). However, for this study, semi-structured interviews were used. A semi-structured interview is “a context in which the interviewer has a series of questions that are in general form of an interview schedule but is able to vary the sequence of questions” (*ibid.*, p.196). This type of interview is more flexible compared with structured interview, as the interviewer is able to ask further questions for clarification or when more information is essential. According to Thomas (2011), by conducting semi-structured interviews, the researcher gets the best of both worlds. As a semi-structured interview is a combination of two techniques, the researcher has guidance on issues, unlike specific questions in a structured interview.

By using semi-structured interviews for this research, I already had a sequence of questions that I planned to ask. This list of questions is a reminder (Thomas, 2011) of *what* to ask in case of forgetting. The advantage of using the interview method is that the interviewer can always clarify issues or doubts with respondents (Bryman, 2008) using the appropriate probing or prompting techniques.

It is normal for researchers to have preferred research methods. The choice of method should suit the topic and enable the researcher to answer the research questions. Silverman (2005) argued that “there is no right or wrong method” (p.112) and pointed out that it is important to choose a method that fits the research topic and framework. In line with this, I took the view that the semi-structured interview was the best option for my research questions. In my research, it was crucial to understand what respondents thought of the entrepreneurship element implementation, their understanding of it, how the element was implemented in the classroom and all the issues surrounding the implementation. According to Fontana and Frey (2000), an interview is an interactive process. Thus, I believe that interview was the best option for my research. A face-to-face interaction with the respondents was an opportunity for me to communicate with them and solicit information immediately. When in doubt, I could clarify immediately, allowing me to seek appropriate answers. This was for me a very conducive approach.

There was another method of data collection method that I considered worthwhile for conducting this research, but unfortunately I was not able to use it: the *focus group*. I would have preferred this method because it would mean that I could meet respondents as a *group*. It would also have been cost- and time-effective for me as the need to interview teachers individually would not arise. Nevertheless, this technique can also be problematic because respondents tend to withhold personal opinions when discussing issues related to administration and policies. This could hamper the data collection. In addition, interviewing respondents during school hours would interfere with their classroom duties. As timetables varied, it was virtually impossible to gather together all respondents in a single focus group. Therefore, interviewing them

personally was a better option as I could guarantee privacy and anonymity to all respondents.

The interview questions (refers to Appendix B) were developed prior to the pilot study. They were based on the research questions and catered to all the different respondents. During the pilot project, I constructed seven different sets of questions for the

1. Officers,
2. Headteachers,
3. Expert teachers,
4. Subject teachers who had attended training sessions (Malay language and Arts),
5. Subject teachers who did not receive any training (English subject),
6. Subject teachers who did not have any idea at all about the implementation (anyone), and
7. Living Skills subject teachers.

Subsequent to the pilot study, the initial seven sets of interview questions were reduced to four: I withdrew three sets of questions developed for the Living Skills teachers, the teachers who had no exposure to the implementation, and the teachers who had not attended the training for implementation of the cross-curricular element. During the pilot study, I was informed that every teacher had been briefed about the elements at the state, district or at least school level. Therefore, during the pilot study, I only used four sets of questions. The same sets of questions were used for the main study but I had made the necessary changes to the questions described previously as the pilot study developed and I gained experience.

The set of questions for the teachers' trainers were developed during the main data collection period. As explained earlier, trainers were not part of my initial planned respondents' groups but I added them during the main study. Therefore, I developed a

new set of questions for them. I did not pilot it, but as I interviewed the first trainers, I improvised my questions. In addition, the questions were constructed based on the subject teachers' questions, except that I put the emphasis on the issue of training.

During all the interviews, I sought permission beforehand from the respondents to record the interview session (using digital audio recorder). This was to ensure that I paid full attention to the interviews and could devise follow-up questions, probing and prompting when necessary (Bryman, 2008). By recording the sessions, the risk of losing the data was reduced. I assumed that audio-recording was the best way of gathering data because, as Patton (1980) pointed out, recorders “do not tune out conversations, change what has been said because of interpretation (either conscious or unconscious), or record words more slowly than they are spoken” (p.247). This means that an audio-recorder catches everything. This would certainly help me with the transcript, whilst clarifying any potential issue in the interview. However, recording has its disadvantages; a recorder can break down or malfunction (*ibid.*). So checking the recorder prior to each interview session is very important. I also minimized the risk by taking necessary notes during the interviews and I wrote a short memo after each session. Prior to the interview sessions, the respondents were briefed about the nature and objective of the research and the confidentiality of the study. This is further explained later along with the ethical considerations of the project.

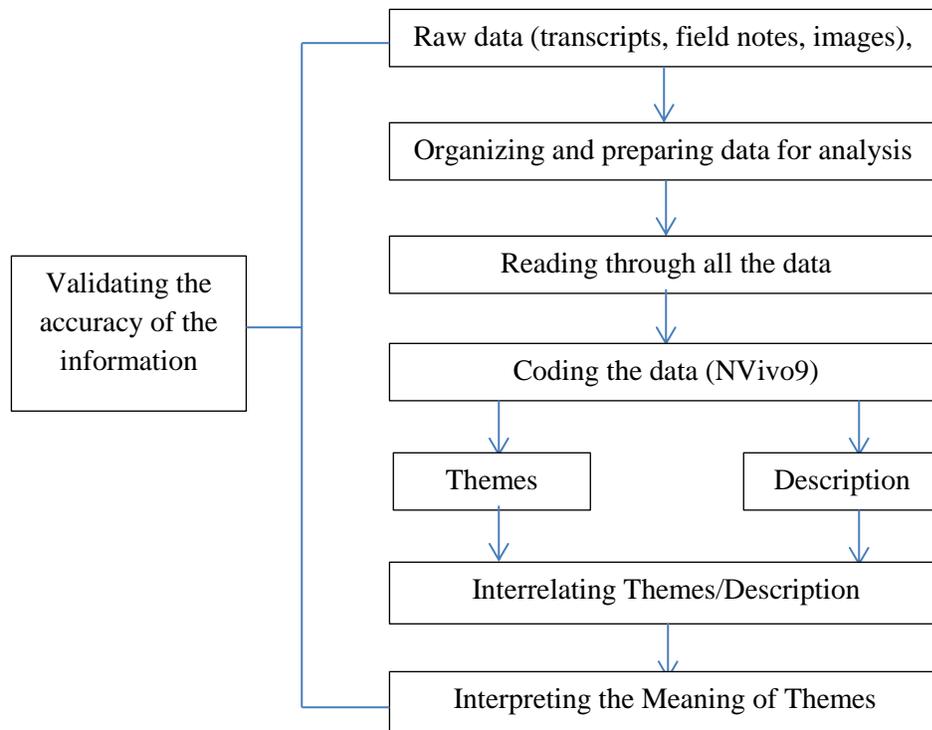
All the interviews were carried out successfully during the main data collection. The interview sessions with the subject teachers went as planned, but not all went well. The longest interview with them was about 45 minutes and the shortest was about 15 minutes. There were a few teachers who showed up late for the interview session; they had personal reasons and they only managed to allocate me very short time as they had to attend to their classes. I did not expect this to happen but when it happened, I had to act fast. I was very selective with my questions and asked basic questions that I thought would provide useful information. In two cases, the teachers did not know anything about the implementation; they were just being given the timetable to teach their subject and surprisingly they were not themselves majors in the subject. They

were asked to teach it because there were no other teachers available at the time to teach the subject, or they were simply teaching to fill teaching timetable hours. This made their interview sessions difficult but they still produced interesting findings.

3.9 Data analysis

Qualitative data analysis involves data being prepared and organised for analysis, coding the data, and summarising information to establish appropriate themes, and then finally presenting it (Creswell, 2007). Analysis is an on-going process that involves “continual reflection about the data, asking analytic questions, and writing memos throughout the study” (Creswell, 2009, p.184). Figure 3.2 based on Creswell’s (2009) work explains how the data analysis worked.

Figure 3.2 Data Analysis in Qualitative Study



Adapted from Creswell (2009, p.185)

I followed all the stages proposed by Creswell (2009); I transcribed and translated my interviews and coded them using NVivo9 software. I then looked for themes using the *thematic analysis approach* and finally wrote a preliminary report on my findings. Where necessary, I used figures and tables to help readers to understand the analysis. The overall process is described in four stages as follows:

Stage 1: Organising and preparing data analysis

In this section, I explain how data were prepared for analysis. As mentioned earlier, all the interviews were recorded using a digital audio recorder to ensure that no data were lost. All the recorded interviews were then transferred to my laptop and transcribed. The process of transcription is long, and I had 48 interviews. According to Patton (2002), on average, “a one hour interview will yield 10 to 15 single-spaced pages of text; 10 two-hour interviews will yield roughly 200 to 300 pages of transcripts” (Patton, 2002, p.440). Bryman (2008), on the other hand, suggested that transcribing is time consuming and can take about five to six hours for a one-hour interview.

The duration of the interviews varied, with some almost one hour and some as short as fifteen minutes. On average, each interview took about 30 minutes. During the data collection period, after the first day of interviews, I made the transcription for the first session, which lasted for almost one hour, as soon as it had finished while the conversation was still fresh in my memory. It took me more than five hours to transcribe one single transcript. This was probably because it was the first time I have transcribed, but my experience during the pilot study had taught me that the process became easier once I had made a few transcripts. In any event, the process is long and taxing and it really tests the researcher’s mind, patience and concentration. During my field work, I had to attend interviews almost every day because I spent at least two or three days in each school. To save time, I employed a few students to help me with the transcription. That was not difficult because the interviews were conducted in the Malay language. So I managed to recruit some university students to help me. They

were asked to fully transcribe all the interviews and I paid them for each transcription that they did.

Asking non-professionals to transcribe interviews has some disadvantages (Bryman, 2008). Words might be lost in the transcription process. I had experienced this myself. Some of the interviews were not properly transcribed and were not faithful to the recorded conversation. The students' transcription lost some words, but I went through all the transcripts myself while listening to all the interviews and when I found missing words, I made the necessary correction. This was to ensure that no data were left out, and that the transcriptions were as faithful as possible to the interviews. .

All the transcriptions were in the Malay languages and initially I did not translate them into English because not every part of the transcript would be used. Patton (1980) said that even though the full transcription contains useful data, not every part of the recording would be used to support the research. Therefore, I analysed my data in the Malay language and only translated those fragments that I used as quotations in my work. Mohd Zahari (2008) spent almost four months transcribing and translating 30 transcripts for analysis. I had 48 transcripts and transcribing all the interviews by myself would have taken over four months; this would surely have affected the rest of my work. However, by asking other people to make full transcriptions of my data, I managed to save time.

Stage 2: Coding the data

Coding is the process whereby the collected data are divided into different sections and given names (Bryman, 2008). It is a "system of classification" (Bloomberg & Volpe, 2008, p.102) by which a researcher classifies the data according to the "interest or significance, identifying different segments of data, and labelling them to organise the information contained in the data" (p.102). Codes on the other hand are used in quantitative research as "tags that are placed on data about people or other units of analysis" (Bryman, 2008, p.691). Coding can be done *manually* or by using *qualitative*

analysis software (Creswell, 2009). In this study, all the codes were generated using the QSR NVivo9 software. There are many softwares in the market but I chose to use this software because my university makes it available. It also helps to expedite my work as all the data can be more organised and easily retrieved (Edhlund, 2011). Furthermore, by using this software, much of the clerical work was spared (Bryman, 2008) because this software is efficient at keeping and retrieving data (Creswell, 2009).

I used this software to code every transcript and I found that it is much easier than coding it manually. I had experienced coding my transcripts manually when analysing the findings from the pilot study. It was time-consuming and I had constantly to refer back to my transcript. Using NVivo9 is a different experience. It was much faster and easier. Moreover, by using this software, a researcher can code and generate more themes. According to Mohd Zahari (2010), the coding process is more comprehensive when using the NVivo software. He found that more themes were generated using the software than by doing it manually. Mohd Zahari generated 36 themes using the NVivo software, more than the 27 themes which had emerged when he first manually coded them.

Attending a professional course on NVivo9/10 helped me to understand the software and use it efficiently for my research. It helped me to expedite my coding process. Even though I still had to read my transcripts line by line and code them myself (Creswell, 2009), the process was faster than coding manually. The software does speed the coding process but it is important to note, naturally, that it does not do the analysis for you (Bryman, 2008). As a researcher, I needed to interpret my codes and carry out the analysis myself.

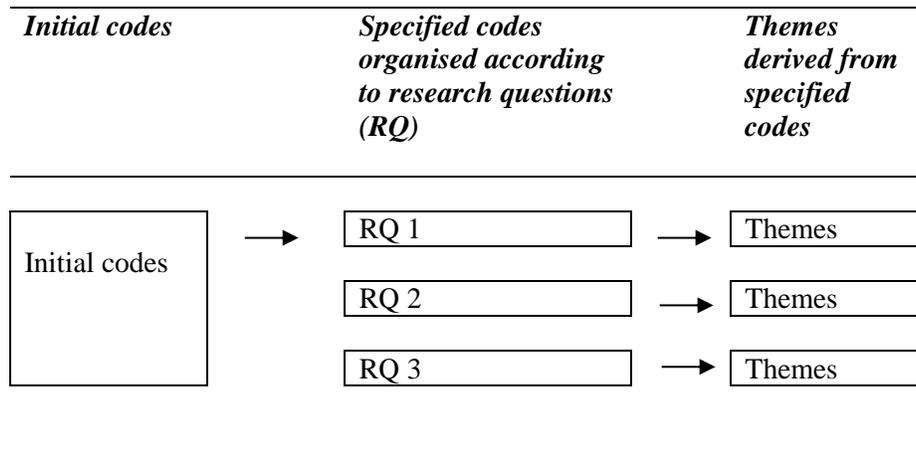
When doing the coding, I did not have predetermined themes in mind, as this would have introduced bias into the data (Bloomberg & Volpe, 2008). What I had was the seven research areas, my intuition, and the research questions. So I developed my coding which I set as the initial themes (Bryman, 2008, p.554). I read each of my

transcripts a few times to ensure that I had coded the necessary data before moving to another transcript. It has been said that there are no right or accurate ways to categorise and analyse data (Bloomberg & Volpe, 2008) and for that reason, I coded my work using my own judgement and intuition in determining which data fell into which coding. To ensure that I carried out the coding consistently, I asked a friend to help me to do some coding (*ibid.*). We each coded the same transcript and then discussed the similarities and the differences in our coding work. Doing this enabled me to interpret my data more precisely. The whole coding process took almost three months.

In the initial stage, I just coded everything that I considered related to my research questions. At the same time, I wrote notes and memos to remind myself of issues that crossed my mind when carrying out the coding. There were many *initial nodes*.⁵⁵ Specific themes were derived from these nodes at a very early stage. According to Braun and Clarke (2006), the themes generated from the codes can depend on whether they are “more data-driven or, theory-driven” (p.88). If the coding is data driven, this mean that the themes depend completely on what is hidden inside the data; but if it is theory-driven, then the researcher would usually have specific questions that he/she wants to study further while carrying out the coding. Although I had specific questions in mind, I let the data ‘speak for itself’ to avoid bias in the coding and to ensure that I was fair with my transcripts by coding all the important issues. The coding process is explained in Figure 3.3.

⁵⁵A node is a “collection of references about a specific theme, place, person or other area of interest” (Bryman, 2008, p.570)

Figure 3.3 The coding process



The coding process started by looking at all the possible codes in my transcripts and trying to categorise them under the seven research areas (*see* section 3.4) which had been previously constructed and I referred these as *initial nodes*. I started the process by preparing the nodes using Nvivo software and I named them perception of reform, concept of entrepreneurship education, training, syllabus, teachers’ readiness, actual implementation, and official support. I read my transcripts and selected those excerpts which I thought suited the initial nodes prepared earlier and I then created sub-nodes under each of the seven categories. For example, when the excerpt matched the nodes named ‘perception of reform’, I categorised it under these nodes. If some excerpts discussed the training received, then I categorised them under the ‘training’ nodes. The process was conducted in the same manner for all the transcripts, using different initial nodes. I tried to be thorough and consistent with my coding. Then I reread my work and recoded back to avoid redundancy. After the categorising process, I then grouped the initial nodes into three categories, which allowed me to analyse them according to my three research questions. For example, any nodes relating to my first research question (the concept of entrepreneurship education), I put together under folder entitled RQ1 (Research Question 1). The same was done with all the codes which I put into another two folders (RQ2 and RQ3). From each folder, I then analysed each code and thus identified a theme for each research question.

Stage 3: Developing Themes

The themes were developed based on thematic analysis (Braun & Clarke, 2006) and, as already stated, NVivo9 software was used to help to structure and manipulate the data. *Thematic analysis* is “a term used in connection with the analysis of qualitative data to refer to the extraction of key themes in one’s data” (Bryman, 2008, p.700). It is a method used to recognize, analyse and present the patterns or themes within the data (Braun & Clarke, 2006). This analysis does not have any specific rules or outline (Attride-Stirling, 2001; Bryman, 2008) but, with some guidance and propositions, the analysis can be performed (Bryman, 2008). Thematic analysis is flexible (Braun & Clarke, 2006) and it was this flexibility which made me opt for this method to analyse my data.

As already stated, I had 48 transcripts which I coded into nodes. Using the NVivo software really helped me in developing my themes. I coded my data based on Nodes in NVivo9. I coded my work thoroughly and I assumed the nodes as my preliminary themes. Some authors classify themes and codes as the same thing (Bryman, 2008). ‘Theme’ is a term used when researchers “capture something important about the data in relation to the research questions, and represent some level of patterned response or meaning within the data set” (Braun & Clarke, 2006, p.82). Determining themes does not depend only on the size (or space) of the issues in the data but rather depends on the *prevalence* of the issues raised across the data (Braun & Clarke, 2006). Furthermore, it does not depend solely on the quantifiable measures, but also depends on the researcher’s judgements in defining the themes’ relevance to the research questions (*ibid.*).

I coded the data and then developed more specific themes from it. According to Bloomberg and Volpe (2008) how data is selected, managed and analysed is a personal preference; but what important is that the whole process is conducted in the same manner and consistently throughout (Braun & Clarke, 2006). I tried being consistent throughout the process, starting from coding until analysing all the data.

There are several phases that need to be followed when carrying out a thematic analysis, and Braun and Clarke (2006) listed these as follows:

a. Familiarizing yourself with your data

This is the stage at which I familiarised myself with all my data (48 transcripts which I read several times while transcribing them). I read them again before carrying out the coding to ensure that I knew my data well.

b. Generating initial codes

By using NVivo9 software, all my data were coded.

c. Searching for themes

My initial coding became my general themes. These themes were chosen because they were the issues that my respondents shared. These were important and related to my research questions (Braun & Clarke, 2006, p.82).

d. Reviewing themes

In this stage, I reviewed the themes and refined them. Some of the redundant themes were merged and some were rejected as they did not really constitute proper themes.

e. Defining and naming themes

At this stage, what I really did was to define and narrow down the themes. For instance, from the 17 initial themes that I had coded earlier (related to research questions 1), I decided to keep one main theme. This theme was chosen because most respondents addressed specific issues around it but also because it was very interesting and helped me to answer the first research question.

f. Producing a report

The final stage is to write the report and review all the findings. This is further explained in stage 4 below.

Stage 4: Writing a report

In this stage, all the themes that were defined earlier were analysed and discussed. The findings from the research were examined and all the supporting materials and sources were introduced to support the arguments. The purpose of writing the report is to tell readers and convince them about the complex process that the researchers had gone through in order to prove that their work is worthy and valid (Braun & Clarke, 2006). I therefore developed my arguments after analysing the themes. I used the ‘Queries’ section in NVivo9 to assist me with the analysis. This stage helped me to find the intersections between nodes. Therefore, I could easily retrieve any data from any of my respondents and look at the intersection between them regarding specific issues. For example, in answering research question one, I realised that there were differences between the respondents on the issues of entrepreneurship education. So these differences became a theme. All the arguments were supported with quotations from the respondents. This is in line with the suggestion of Braun and Clarke (2006) who believed that the writing process “should provide sufficient evidence of the themes within the data” (p.93). All the related quotations were extracted from NVivo9 software into Word documents.

Thematic analysis is suitable in this kind of research because the aim of this analysis is to “explore the understanding of an issue or the signification of an idea rather than to reconcile conflicting definitions of a problem” (Attride-Stirling, 2001, p.387). In this case study, my intention was to try to understand how the entrepreneurship element was being incorporated into the Year 1 curriculum and its overall role in the education system. So thematic analysis was the best option to analyse my data regardless of its potential pitfalls. Braun and Clarke (2006, pp.94-95) listed six circumstances in which this approach can go wrong.

1. Failure to actually analyse the data at all

Braun and Clarke (2006) believed that thematic analysis is more than just presenting the extract of the data, rather it is about the analysis of the whole situation. The researcher’s analytical thinking is what makes the thematic

analysis work. I extracted data from the respondents to be used in an analytical framework and support (or indeed challenge) my arguments.

2. Using the data collection questions as the themes

I admit that in the early stages of my work, I had a tendency to use my questions as themes, but as my research developed and my data grew, this problem was overcome.

3. A weak or unconvincing analysis

This happens “where the themes do not appear to work, where there is too much overlap between themes, or where the themes are not internally coherent and consistent” (Braun & Clarke, 2006, p.94). To avoid weak analysis, I re-read the themes many times and related them to the research questions. My study had to answer the research questions, therefore, I looked for the themes most closely related to the research questions and analysed them thoroughly.

4. Mismatch between the data and the analytical claims

According to Braun and Clarke (2006), researchers should ensure that their analysis and quotations should be consistent and avoid any mismatch between the two.

5. Mismatch between the theory and analytical claim, or between the research questions and the thematic analysis

As explained earlier, this study focuses on the perceptions of officers, headteachers and educators on specific issues. Thus, thematic analysis was considered the best option to answer the research questions.

6. Failure to spell out its theoretical assumptions

The failure to exhibit and clarify the theoretical assumptions in the writing process would be considered weak analysis (Braun & Clarke, 2006). Thus I

needed to clarify any theoretical assumptions in my writing considered under Braun and Clarke's definition as crucial information.

3.10 Ethics

This section is concerned with the ethical issues which have to be taken into account when conducting qualitative research. Ethical considerations are essential in research and can help a researcher to avoid causing any harm to the researcher and the respondents by applying appropriate ethical procedures and principles (Orb *et al.*, 2001). There are two ethical dimensions in carrying out qualitative research: *procedural ethics* and *ethics in practice* (Guillemin & Gillam, 2004). The former are related to seeking approval from the relevant ethics committee and the latter are involved with the ethical issues that arise in the process of conducting the research (*ibid.*). According to Orb *et al.* (2001), in qualitative research, ethical responsibility is a continuing process.

In obtaining authorisation in terms of procedural ethics for this research study, several procedures needed to be adhered to. I had submitted all the required paperwork prior to the pilot study by May 2011. My first step was to obtain ethical consent from my university. According to Bloomberg and Volpe (2008), normally universities and institutions will have a review board which oversees the ethical issues of a research topic. Thus, to obtain permission, I fulfilled the Department of Education's requirements and submitted the necessary documents by April 2011. The next step was to obtain approval from the Economic Planning Unit (EPU) in Malaysia to conduct the research. It is the responsibility of the EPU to handle all matters related to research in Malaysia. All researchers, whether local or foreign, must liaise with this department. The application can be made online and takes a month to process. The EPU department's guidelines establish that any research involving schools in Malaysia needs the approval of the MOE. Therefore, the EPU forwarded my application to the MOE. After a few weeks, I received an e-mail from the EPU confirming the approval

(see Appendix C). I was requested to collect the necessary documents and research card that would allow me access to the schools.

The third stage was obtaining approval from the State Education Department (SED). This approval allows researchers to carry out research in the state and to access school premises. The Public Relations Unit in the SED is in charge of granting such approval and I was granted approval after I had applied. The approval indicated that I could conduct my research and interview all my respondents in the particular chosen district. Prior to my main data collection, telephone calls were made to the curriculum officers and all relevant head-teachers informing them about the research intentions and setting dates for interviews with them. Yin (2009) advised that when interviewing a respondent, the researcher has to adapt to the interviewee's schedule and availability. I therefore arranged interview dates to suit my respondents' schedules.

In qualitative research, Capron (as cited in Orb *et al.*, 2001) stated "that any kind of research should be guided by the principles of respect for people, beneficence, and justice" (p.95). This includes the participants' right to be informed about the research and their right either to participate or to withdraw at any time (Orb *et al.*, 2001). Thus, the use of a consent form is vital in this kind of research (Orb *et al.*, 2001; Shaw, 2003) as this protect the participants' from any harm or abuse as a consequence of their participation in the research conducted (Shaw, 2003). In relation to this current study, prior to each interview, all the respondents were given a consent form asking for their permission to allow me to use the gathered information for the purpose of my research. In this consent form, respondents were reassured that all data would be treated with the utmost confidentiality. I also explained the nature and objectives of my research to the respondents before I started interviewing them. This is in line with Orb *et al.*'s (2001) advice that respondents should be given detailed information about the research before they agree or disagree to be involved in the research.

In order to address the ethical issues in practice, I have taken steps which I considered important for ensuring the ethical integrity of this research study. Bloomberg and

Volpe (2008) stated that basically the issue of ethics revolves around the participants' confidentiality.

Confidentiality

As mentioned earlier, the names of the state and the district were not revealed in order to ensure the anonymity of the respondents. By mentioning the name of the state or the district, there was a risk that the respondents could be identified, especially those working in the SED and the DEO, since there are only a few officers in charge of the new curriculum, and these officers are very well-known in their state and district. Due to my commitment to maintain confidentiality, the names of all the schools and respondents involved in this study were kept anonymous, and pseudonyms were used as replacement names, as already described.

In addition, assuring the participants of the confidentiality of this research through verbal explanation and the consent form seemed to give them confidence to respond to the questions posed. However, the ethical dilemma⁵⁶ raised during the interviews could not be avoided and was difficult to predict (Orb *et al.*, 2001), so a researcher needs to be aware of delicate subjects and potential conflicts of interest (*ibid.*) because this situation requires experience-based situational judgment, clear perception and proper attention to the particularities of the situation and the respondents' condition (Brinkmann & Kvale, 2005). For this current study, all the measurements were taken and all the interview sessions were conducted successfully.

Respondents' rights

The respondents were given total freedom to express their views; they could choose whether to answer the questions or not. They were not forced and could withdraw

⁵⁶ An ethical dilemma is defined as situation in which a researcher has to decide whether "to continue with the interview and gain more insight about the topic under study or to stop the interview and give advice or refer the participant to an appropriate treatment or counseling service" (Orb *et al.*, 2001, p.94).

from the interview sessions at any time. Throughout all the sessions, no-one withdrew from an interview, but there were cases where the sessions were shortened because teachers needed to attend their classes.

Before each interview session, I asked for the respondent's permission to record the interviews and I explained my intentions. They all accepted my explanations and permission was invariably granted to proceed. However, two respondents asked me to keep the discussion off the record as it revealed very personal and confidential issues. Accordingly, I turned the recorder off.

The role of the researcher

In conducting this research, all the information provided by the respondents was treated and managed fairly. As a researcher, I had a moral commitment not to manipulate it. The data gathered were studied and analysed, and all relevant issues were – to the best of my ability – considered in an important way and from the point of view of the respondents. I did not elaborate the findings based on my understanding, but based it solely on what had been told to me by my respondents. All the findings were reported and written in an accessible manner.

3.11 Triangulation

Triangulation is “the use of more than one method or source of data in the study of a social phenomenon so that findings may be crossed-checked” (Bryman, 2008, p.700) and is one of the most frequently used strategies for validating qualitative research (Creswell, 2007). Opermann (2000) also stated that triangulation is a process to verify research findings and added that it is also a process by which a researcher can try to find and remove methodological defects and researcher bias. However, Sands and Roer-Strier (2006) rejected the idea of using triangulation as a way to validate a piece of research; instead they found it “a useful tool for understanding convergent, complementary, and divergent ways in which reality is constructed” (p.241). Flick

(2002) suggested that triangulation is more an approach to look in depth into the production of knowledge, stating that “triangulation is less a strategy for validating results and procedures than an alternative to validation which increases scope, depth and consistency” (p.227). As this current research study explores respondents’ perceptions on the implementation of the E-element, I would say that triangulation is not used here to validate any findings but more to find multiple perspectives on the researched phenomenon (Marshall & Rossmann, 2011).

This research study was designed to look at the perceptions of different groups of respondents of the issues pertaining to incorporating the entrepreneurship element in primary schools. So the data triangulation approach (Denzin, 1989) was employed because using different sources of information in research can give an enriched explanation of the work that had been carried out (Opermann, 2000). It also minimizes potential biases in the research (*ibid.*). As already described, this study used only one research method, the semi-structured interview. Nevertheless, this has not prevented me from using triangulation because I can triangulate using the data acquired from the different groups of respondents (officers, headteachers, expert teachers, trainers and subject teachers). These respondents represent different levels of the education system and the variety of answers which came from them not only enriches the findings but also provides complementary perspectives on the issue under investigation; a process of triangulation.

Opermann (2000) also indicated that when using triangulation, it is crucial to ensure that all the measures are correct and inter-related to the same research issue. In this current study, all the responses from the different groups of respondents were intended to answer the same research questions. Throughout this study, I gathered views from the different groups of respondents, analysed them, compared them and tried to find answers to the research questions. This crucial process validates my work. Furthermore, in addition to the data acquired from the respondents, I also kept fieldwork records and notes during the data collection and I have constantly referred to

them, and this too has provided an addition dimension to the important process of triangulation.

3.12 Validity and reliability

When discussing validity in qualitative research, Creswell (2009) describes it as “a means that the researcher checks for the accuracy of the findings by employing certain procedures” (p.190). To ensure the validity of any research, researchers have to observe, identify and measure what they say (Mason, 2002, p.39). In order to ensure the validity of this current research, I have used several sources. Flick (1992) suggested using *multiple sources of evidence*. In order to check the accuracy of the findings (Creswell, 2009), I used interviews transcripts from different key respondents, as well as the notes and memos that I scribbled during the data collection and the official syllabus (for the three subjects) as sources. I did not carry out a content analysis on the syllabuses but I referred to them as some of my respondents had to answer the questions relevant to it. I used the cross-checking system to cross-check between all the sources.

Recording each interviews also helped in ensuring the credibility of my research because it shows that I quantified the responses as much as possible rather than relying on my memory during the interview sessions. In addition, the triangulation process explained above also helped in ensuring the credibility of my research (Lincoln & Guba as cited in Riege, 2003). Each interview conducted was transcribed carefully and coded using NVivo9 software. All the codes were used for the data analysis and the same procedure was used when coding and carrying out the analysis to secure the transferability of this research (Yin, 1994). While analysing the data, I ensured that throughout the process, I kept the focus on learning and understanding the meaning that my respondents expressed about the raised issue (Creswell, 2009, p.175). I used my respondents’ views and opinions and provided appropriate quotations from them. During the analysis and writing process, I always referred back to the original transcripts. Although all the information could easily be extracted from the NVivo9

software, referring to the original transcript always helped me to better understand their responses.

Efforts were also made to maintain the internal validity of this research by ensuring that the instrument used (the semi-structured interview) accurately reflected the phenomenon and aim of this research. The questions for the interviews were carefully constructed so that they would be valid and relevant to the respondents and the research purpose. It was hoped and indeed assumed that all the information gathered from the interviews would be measurable and would answer the three research questions. A pilot study was carried out and interview questions were clarified with the respondents after the interview session. This was to ensure that the questions were understandable and able to gather enough data for the analysis and thus answers the research questions.

Reliability encompasses “the accuracy of your research methods and techniques” (Mason, 2002, p.39). According to Yin (2009), the reason for looking at the reliability of a study is to make sure that when other people replicate it, they should obtain the same findings and conclusions. Yin added that the goal of reliability is to “minimize the errors and biases in a study” (p.45). In order for this study to be reliable, I followed Yin’s advice suggesting that the best way to cope with the reliability problem is to ensure that each step of the research is recorded clearly. Mays and Pope (1995) suggested that to ensure reliability, researchers have to keep meticulous records of interviews and observations. In line with this suggestion, I kept all my interview recordings and transcriptions safely on my hardisk, as hard copy and on an additional USB. It can be referred at any time by anyone. In addition, reliability is also achieved by documenting all the analysis process in detail in this chapter (Mays & Pope, 1995). As stated earlier, the data were transcribed and coded using NVivo9 software and were analysed subsequently. All the themes tackled were discussed in detail to answer the research questions. However, not all the research would bear the same results if conducted again (Meriam, 1995). There are possibilities that this research would give different result due to errors in measurement, especially when dealing with human

beings (*ibid.*). This is because different people have different views and opinions on the issues asked of them.

3.13 Summary

This chapter has discussed the type of research design adopted for this research. All the rationale behind the choice of the exploratory research technique has been explained in detail and the issues surrounding the selection of sampling methods and procedures have been discussed. This research adopted the semi-structure interview approach and all the data obtained were transcribed translated, analysed and examined in depth. The details of this process have been explained thoroughly in this chapter. The measures taken to ensure the validity and reliability of this research have also been elaborated in detail.

This research study involved the participation of respondents from various levels of education system in Malaysia. The five groups of respondents were interviewed personally by the researcher. There were 48 interviews and there was only one case of non-response. The response rate for this research is considered high because all but one of the respondents agreed to be interviewed. All the data gathered were coded using the NVivo9 software and analysed using the thematic analysis approach.

CHAPTER 4

Perceptions of the concept of Entrepreneurship Education

4.1 Introduction

This chapter presents an analysis of the qualitative data collected through the interviews. The interviews were designed for the purpose of finding answers to the first research question that explores key respondents' perspectives and understanding regarding entrepreneurship education

This chapter tackles two main issues within one theme. The first is the fact that most respondents understood entrepreneurship education as a business-related activity. The second is the fact that the perception of entrepreneurship education was not homogenous amongst the difference sectors involved in the teaching profession. Indeed, respondents not only had conflicting views of the entrepreneurship education amongst themselves, but also in relation to the official definition and framework of the MOE.

Theme 1 – Entrepreneurship education: contrasting perception between the respondents and the MOE

“Teaching necessarily begins with a teacher’s understanding of what is to be learned and how it is to be taught” (Shulman, 1987, p.7). This statement emphasises that in teaching or delivering subject content, teachers first have to know and understand the subject matter. In the current case study, respondents were asked about their understanding of the concept of entrepreneurship education which they implemented in the new Year 1 curriculum.

Altogether, there were 28 teachers⁵⁷ who responded on the issue of the entrepreneurship concept. Quite a large number of these respondents seemed to regard the entrepreneurship concept as something similar to business and business-related activities. Thus, 20 of the 28 teachers interviewed (71%) and four headteachers out of the nine interviewed (44%) shared the idea that entrepreneurship education is related to business. A summary of the findings is given in Table 4.1.

Table 4.1

Number of subject teachers and headteachers responding to the entrepreneurship education concept as related to business

Number of respondents	Perceptions of entrepreneurship education (EE)
Eleven teachers and one headteacher	EE is about selling and buying activities
Four teachers and one headteacher	EE is about skills to generate income
Five teachers and two headteachers	EE is about teaching students about how to become successful businessmen and encouraging them to become one.

Of the 20 teachers, 11 stated that entrepreneurship education consists of selling and buying activities. Here are some comments gathered during the interviews:

The element, from what I can see, is about selling and buying. That is all. I cannot see other linkages. When you talk about entrepreneurship, the first thing that crosses my mind is selling and buying. (Arts teacher, Kesidang School)

⁵⁷Note that only 28 teachers out of 30 responded to this particular issue

Entrepreneurship education is involved with selling and buying things that we have made or produced. They can be marketed and could be sold. (Arts teacher, Cempaka School)

Entrepreneurship education is about business and this is how I see it. It involves activities such as buying and selling. (Malay language teacher, Bakawali School)

These three teachers associated entrepreneurship education with selling and buying activities. The rest of the teachers had also defined it almost the same way: all these 11 teachers used the words ‘selling’ and ‘buying’ in their explanations of entrepreneurship education. It is also interesting to mention the case of one headteacher, from Kenanga School, who shared a similar view to these 11 teachers. For him, “Entrepreneurship education is related to selling and buying activities”. In short, it is clear that these teachers and headteacher believed that entrepreneurship education is about teaching their students the concept of selling and buying.

There were another four teachers and one headteacher who claimed that entrepreneurship education is more about teaching students skills to generate an income. One teacher (Malay language, Kenanga School) said, “In my opinion, entrepreneurship education is about teaching out students skills to generate income. We have some products. So, we teach students how to market it and gain profit from that”. Another teacher said, “Entrepreneurship education is about teaching students on how to generate income. We teach students what we can do to get profit with products that we have”. These two excerpts show that respondents believed that entrepreneurship education is about teaching their students the necessary skills to generate an income.

The findings also showed that five teachers and two headteachers from different schools associated entrepreneurship education with training students to become businessmen and to encourage them to take up careers in business. They believed that entrepreneurship education involved guiding students to have the right attitude and

skills to become successful businessmen. The following extracts from two teachers further illustrate this point:

This means that we encourage the students to ... how should I say it ... it is like we encourage the students to try and make an effort. To have an interest in becoming self-employed. They probably have dreams and ambitions of becoming businessmen and businesswomen. I guess they would love to work on their own. This is like developing students' interest. That is what I think it is. (Arts teacher, Cempaka School)

Entrepreneurship education is where we want to educate the students to be more independent. To put it more simply, I would say that it is about learning how to run a business ... it is like that ... it is just that in the class, we do not use the cash flow system ... we emphasise the exchange of views between students or more on students' perception ... we teach them the concept ... (Arts teacher, Melati School)

From all the responses gathered from this group (20 teachers and four headteachers), entrepreneurship education was commonly perceived as business-related activities. From the literature that I reviewed, it can be confirmed that the concepts of business and entrepreneurship are different. They can be discussed under the same thematic umbrella and might have some similarities, but the literature suggests that they are not the same (Carland *et al.*, 1984; Gibb, 2007; Solomon *et al.*, 2002). According to Carland *et al.* (1984), entrepreneurship and small businesses are in fact very different. They said that there might be overlapping issues between them but they made the point that the concepts are different. They explained that not all business start-ups are considered as “entrepreneurial in nature” (p.357) and that small businesses might grow or remain the same in size. This is basically different from an entrepreneurial venture which usually grows over time (*ibid.*). Some published works also show that there are differences between the objectives of business education and those of entrepreneurship education. The former is more concerned with preparing people for professional achievement and emphasising future learning (Sexton & Kasarda, 1991). The latter is involved in developing enterprising people and instilling an attitude of independence into people through an appropriate learning process (Garavan & O’Cinneide, 1994). It

can therefore be argued that the concepts of business education and of entrepreneurship education are not the same.

The findings clearly show that most respondents, especially teachers and headteachers, had the idea that entrepreneurship education is directed towards business-related activities. However, Al-Sagheer and Al-Sagheer (2010) showed that business education has a different definition. They had asked their respondents about their perception of business education and found that those respondents (members of the College of Business Studies faculty) viewed business education as a way of allowing students to “think more innovatively and creatively about how to solve problems in the commercial context” (*ibid.*,p.8). In their respondents’ views, skills in business education were taught to “address any concerns that might arise in the commercial environment”.

In this current case study, when the respondents talked about selling and buying items and generating income, it appeared that these activities were more associated with business education than with entrepreneurship education. The discussion during the interviews revealed that the respondents primarily talked about and gave examples of activities related to business when they defined entrepreneurship education. It appears that none of them really defined entrepreneurship education in the same terms as are put forward in the literature.⁵⁸

Interestingly, the findings also revealed that there were a few respondents whose ideas and responses were different from those of the respondents mentioned above. However, the numbers were slightly smaller compared with the group of respondents who linked it to business-related activities. There were two teachers who thought that entrepreneurship education is about developing students' attitudes, one expert teacher (ET1) who claimed that entrepreneurship education is more than just about business,

⁵⁸The government’s official definition will be discussed later (p.172)

and two teachers' trainers (Trainers A and C) who claimed that it was not business education.

One of these two teachers said that "It is about learning the entrepreneurial attitudes and values possessed by an entrepreneur" (English teacher, Bakawali School). This teacher related entrepreneurship education to learning entrepreneurial attitudes. Another teacher (English teacher, Melati School) made an interesting statement when she explained that she had initially thought that entrepreneurship education is about business. However, she then realised that it is more than that and related it to developing entrepreneurial attitudes. She put it thus: "At first I thought it is about selling and buying. Like a business. But after the training, I understand that entrepreneurship education is wide. There are so many values to instil and it is also about developing entrepreneurial attitudes among students".

The trainers also emphasised that entrepreneurship education is not so much about teaching students how to carry on a business such as selling and buying, but more about teaching five elements and developing an entrepreneurial attitude in the students.

Entrepreneurship in the MOE context is not about selling and buying activities or business education. It is more involved with embedding five entrepreneurship elements into teaching and learning. For example, during the language arts class in English subject, we have the 'greeting' topics. So, students can create greeting cards, do it nicely and we can tell them that they can sell this card and gain profit from it. With this we have already instilled the entrepreneurial attitude and we give them awareness. We teach the pupils the importance of producing a good and quality card so that it can have value and that children can benefit by selling it. (Trainer A)

Entrepreneurship scope is not about teaching business but more about instilling the five entrepreneurship elements. For example, in the science subject, one of the learning activities is to ask pupils to arrange and tidy the science equipment properly. So what we can do is that when we ask them to arrange the equipment properly, we tell them the importance of

keeping things tidy and we relate that to the entrepreneurship attitude.
(Trainer C)

The findings also revealed that there were six teachers (out of 28) who claimed that they were not sure of the concept.

Clearly, the findings in this study are in line with what I argued during my pilot study. As said earlier, in this current research, 71% of the teachers (20 teachers) associated entrepreneurship with business-related activities. They said that it involved selling and buying activities, generating income and teaching students to become businessmen. In the pilot study, almost 80% of the subject teachers interviewed (seven out of nine teachers) said that entrepreneurship education was about teaching business skills. Only two teachers had vague ideas about what entrepreneurship education is and this was only so because they themselves had learned entrepreneurship in their undergraduate courses. It is important to remember that the pilot study was carried out in May 2011, five months after the element was introduced into the curriculum. The findings revealed that teachers' and headteachers' understanding of the entrepreneurship concept was not adequate at that time; in fact, they did not seem to understand the concept of entrepreneurship education very well at all. However, the main study was carried out over a two-month period (February and March 2012), and what was surprising was that, after a year of implementation (almost seven months after the pilot study), some of the teachers still assumed that entrepreneurship education was about business, and linked it to the formation of businessmen.

There are several possible reasons for this. One might be the lack of training and exposure. In fact, I was informed by the officer from the SED that there had been no further training given to the Year 1 teachers after the new curriculum was implemented. The officer explained:

So far there has been no further training given for the Year 1 teachers. This is because it involves a budget. We do not have the budget, so we could not call the teachers for further training. The budget for training

comes from the MOE. I mean from a certain department in the Ministry.
(Officer 2)

It appears that the only exposure that the teachers received was during the formal training prior to the implementation, and that not every teacher had received such training. So this could be a reason why so many teachers still assumed that entrepreneurship education was concerned with business education.

From the findings, it can also be inferred that there was not much change in attitude during the period between the pilot study and the main study. The findings showed that 28 of the respondents gave their definitions of entrepreneurship education and of those, 20 teachers related it to business, six did not have any ideas and were not sure of the concept, and only two believed that it is about educating people and developing entrepreneurial education. These results show that 93% of the teachers interviewed (26 out of 28) appeared to lack a clear concept of entrepreneurship education. This number could be alarming because it seems that the great majority of the respondents (from the teachers' group) had not grasped the entrepreneurship education concept, and if they do not understand it, how can they implement the element that they were asked to introduce?

It must be said that the success of the implementation relies heavily on the teachers because they are the people who deliver the curriculum. Teachers are assumed (in the context of this study) to be the executors of the curriculum vision that the MOE had introduced, and Year 1 teachers are expected to implement the entrepreneurship element. So their understanding of entrepreneurship education is crucial to ensuring the success of the element.

Nevertheless, the findings from the interviews suggest that many teachers did not really fully understand the concept of entrepreneurship education. It is also the case that curriculum change takes time before it can be successful (Fullan, 2007). Similarly, as I shall show in Chapter 6, it also takes time for teachers to really understand entrepreneurship education and its concept. However, Seikkula-leino (2011)

demonstrated in her research on curriculum reform, that after two years, there was development in teachers' understanding of and knowledge about entrepreneurship education. Thus, in relation to this study, there is some possibility that teachers' knowledge would increase in a few years' time and that the element would soon be incorporated into all the subjects in Year 1 and at other levels in primary schools.

According to Rabbior (1990), the effectiveness of entrepreneurship education depends on the educator and it seems that educators' understanding of the curriculum and its implementation are important in ensuring the success of the implementation. I shall argue that in this study, most teachers did not appear to be in line with the official definition of entrepreneurship education developed by the MOE nor in line with the literature reviewed in Chapter 2. The findings from this study are very similar to those of Lam, Alviar-Martin and Adler (2013) regarding curriculum integration in Singapore. In that study, teachers' concept of curriculum integration did not fit the curriculum integration as defined by the prevailing literature. They argued that the teachers' limited understanding was due to their limited exposure to the integration concept. As for this current study, it appears that the reason for the lack of understanding of the concept was due to poor training and poor exposure related to the implementation of the element, and this will be discussed in greater detail in Chapter 6.

Another important finding is the mismatch over the entrepreneurship education concept between some respondents and the MOE. It is a common belief that to ensure the success of entrepreneurship education, teachers and policy makers should have a thorough understanding of the aim and objectives of the programme or curriculum that they plan to introduce (Fagan, 2006; Hytti & Gorman, 2004). This would indicate that understanding the concept and objectives of a programme is crucial for curricular reform or educational change in general. In the current study, the interviews with the teachers showed that twenty of them responded that they had carried out the activity according to their own understanding of entrepreneurship education; this was more akin to business-related activities (especially buying and selling activities). As far as

they were concerned, once they had developed their teaching activities to the concept as they understood it, they considered that the task had been carried out.

I shall argue that one reason for this mismatch could be that teachers' ideas were different from the concept of entrepreneurship introduced by the MOE in the new curriculum. What the MOE emphasised was not business-type approaches but it focused on developing entrepreneurial characteristics, attitudes and cultures, and also on developing and forming students' minds and thinking skills. Thus, with the intention of developing human capital with entrepreneurial characteristics and attitudes, the MOE defined entrepreneurship education as

... a way of preparing students to develop personal characteristics that will be reflected in their behaviour in situations of self-directed wellbeing and toward the wellness of family and the nation. (CDC, 2012, p.3).

In 2011, the MOE emphasized the entrepreneurship element in the new Year 1 curriculum and, according to the MOE, this element was being implemented because the previous entrepreneurship component (in the previous primary school and secondary school curriculums) had emphasized only the process of setting up and running a business (CDC, 2012). The previous curriculum did not stress the aim of developing students as adults with entrepreneurial characteristics and attitudes. For this reason, the MOE claimed that students were unable to practise entrepreneurship as part of their culture in their daily lives (*ibid.*).

When the MOE introduced the element, the hope was that students would be able to practise the entrepreneurship element through their learning activities, and that it would later become part of their culture and their lives. The MOE expected that "entrepreneurship acculturation"⁵⁹ could be developed among students. Thus, teachers needed to understand and have a thorough knowledge of the concept (Hytii & Gormon, 2004) so that the implementation could be carried out successfully.

⁵⁹Acculturation is defined as "the act of adjusting oneself to a new environment" (Debyasuvam, 1970, p.82)

As explained above, the analysis of the data from the interviews showed that there were two teachers who believed that entrepreneurship was more than just about business. In their view, it involved developing students' entrepreneurial attitudes. It could be argued that the promotion of such entrepreneurial values⁶⁰ has potential for the development of the community as a whole, and this link (values and development) need to be studied. Furthermore, the case needs to be made that if students are steered in a positive direction this can in turn lead to a good culture in the community as well as in the nation. In this regard, the emerging school of relatively new social enterprise⁶¹ could have implications for both entrepreneurship education policy making and academic research on entrepreneurship education issues.

This is relevant to the work of Nelson (1977) who looked at entrepreneurship in a broader way. In his view, entrepreneurship is related to every aspect of life. He explained that even though it is commonly understood as a term of business, entrepreneurship has a more profound meaning than that and it can be used to create a better community, a better nation and indeed a better world. As discussed earlier in the literature review chapter, there is no universally-agreed definition of entrepreneurship education, but many scholars agree that it is about equipping people with entrepreneurship skills (Carl, 2007; Garavan & O'Cinneide, 1994; Gibb, 2007). Garavan *et al* (1995) argued that appropriate knowledge, skills and values are needed for venturing into the business world, and entrepreneurship education is about developing these components. Clearly, then, it seems that entrepreneurship education is less about managing a business and more about developing individuals' skills. These attributes could then be used at a later stage to find opportunities to help people to venture into a business and expand it.

As explained above, the interviews with a small group of four headteachers showed that all of them perceived entrepreneurship education as teaching students how to

⁶⁰ It is important to clarify that the MOE framework does not have clear-cut distinction between moral values and entrepreneurship values.

⁶¹On the issue of social entrepreneurship, see the work of Mair and Marti (2006), Peredo and McLean (2006) and Thompson *et al.* (2000).

conduct a business. Clearly the views of these headteachers were almost same as those of most of the teachers in relating entrepreneurship education to commercially-related activities, generating income and forming students as businessmen. However, the interviews with the officers produced different results. I could see that the officers seemed to have better understanding of entrepreneurship education. This could be due to the fact that these officers were directly involved in the implementation of the element. One officer from the SED claimed that he had been given a briefing about the elements introduced by the MOE in the Year 1 curriculum:

I had attended the KSSR training from the MOE and was informed about the elements. There are three elements for the Year 1 curriculum that need to be inculcated in the Year 1 curriculum. (Officer 2)

Another officer from the DEO reported that he had not attended any training but since he was in charge of the KSSR implementation, he had attended a series of meetings with the SED. This had given him more ideas about the elements and their implementation:

I did not attend training given to the officers. I was newly appointed as KSSR Desk Officer early this year [referring to 2011]. So I have lots to learn because I was never personally involved with Year 1. I make research and seek for information on KSSR on my own. Besides, we are always in touch with the SED. We always have lots of meetings on KSSR because this is a very important mission in education in Malaysia. Now, I know a lot about it. The meetings on KSSR and officers in SED had also helped me increase my knowledge on KSSR and the elements. (Officer 3)

As already explained, all the officers (four, including the CDC officer and Head of Sector) interviewed were involved in the implementation process which applies a top-down management and a top-down communication style. The instructions come from the top and have to be carried down the pyramid to where teachers are placed. Middle management is involved in the process of delivering the information and ensuring that the element is really being implemented. So in this case study, these officers acted as the middlemen in the management system thus carrying out the mandate to deliver the

reform to the bottom of the system. In the following extract, the DEO described his understanding of the EE concept:

Entrepreneurship education for me in the context of the primary school is a government initiative to foster the entrepreneurial spirit. Nowadays we can see that not all the high academic achievers will work in fixed income jobs and we can also see that normal academic achievers work on their own and become entrepreneurs. Probably the education received in university is not specifically directed towards entrepreneurship but with the government's initiatives and encouragement people can start to go for the entrepreneurship field.(Officer 3)

Clearly, in his view, entrepreneurship education is perceived as a government effort for the formation of young entrepreneurs. He suggested that many people today understand entrepreneurship as a career path and that the government's efforts had opened opportunities for them to do so. As a matter of fact, the Malaysian government has very positive initiatives for encouraging the growth of entrepreneurship throughout the country, especially by improving education and offering good opportunities for students to prosper in this area. In the Tenth Malaysian Plan, the government created many opportunities for people to become involved in entrepreneurship and it is expected that there will be a positive increase in the numbers of businesses created by students and graduate students by the end of the plan period in 2015.

From the responses of the small sample of two expert teachers, it became evident to me that these expert teachers were quite well versed in this concept. This is perhaps because they teach the Business and Entrepreneurship component which is actually part of the Living Skills subject. During the interviews with the expert teachers, fluent and well-elaborated answers were received when they were asked to define their understanding of entrepreneurship education. Both expert teachers had similar ideas, but they explored the issues differently. One (Expert 1) said that entrepreneurship focused basically on students' personal management abilities, such as financial management. He mentioned the example of students learning when they spend their allowance or pocket money. He explained that when students spend their own money,

they learn to prioritize their budget wisely, to divide the money according to the budget, and to be thrifty and economical in their spending. This expert teacher also added that teachers should teach students and help them to develop a career in the entrepreneurship field.

Entrepreneurship for me, as in the Living Skills subject, is involved with self-management. For example, we teach pupils to manage their personal allowance. Pupils have to learn to take care of their own money and to budget. This is a basic thing that they need to learn. They need to learn how to spend their money wisely. Entrepreneurship lessons teach them to be clever in their budget and be thrifty. Let's say they have RM1 to spend. Rightfully, they need to separate it, not spending it all at once. We teach students that they need to save and they can use the money for other things. Pupils learn to write their own ledger so that they can plan their money wisely and economically. For me, teachers are the ones responsible for introducing all the entrepreneurship basic skills to pupils and this should help to develop pupils' interest in entrepreneurship. (Expert 1)

The second expert teacher (Expert 2) openly linked entrepreneurship education to basic knowledge of selling, marketing, planning, self-management, financial management, and profit and loss. He made the argument that entrepreneurship is not just about making money and profit, but teaching students to invent using raw materials.

Entrepreneurship is more than related to giving pupils exposure to selling and buying activities. We teach them about promoting products, planning for selling products, management and self-management. We teach them about finance and business and basic things on profit and loss. Besides, we also teach our pupils that entrepreneurship is not only about selling or buying things. It is not only about making money. We teach them that they can produce things from raw materials. Take for example if we have bananas. We can make fried banana from them and sell them. As we can with eggs. We can make something from it and sell it. We teach students to generate ideas on what to do and how to develop their ideas so that it can become a business. (Expert 2)

Although the discussion of the concept of entrepreneurship was being argued within the context of the Living Skills subject, nonetheless, these ideas were basically

present. On the whole, it was about instilling entrepreneurial skills and characteristics in students.

From all the views gathered from the different group of respondents, two points can be inferred. First, there seemed to be slight differences in the perception of entrepreneurship education concept among the respondents. Most teachers and a few headteachers related it to business education and business activities such as selling and buying, and producing things and selling them to generate income. There were also a few teachers who had similar ideas to the MOE's that the element is about developing students' entrepreneurial characteristics and attitudes. Meanwhile, the officers, the teacher trainers and the expert teachers seem to have understood the concept slightly better: they spoke about developing students' entrepreneurial characteristics and attitudes in line with the MOE's concept, ideas and objectives of entrepreneurship education. The trainers, on the other hand, had received the training from the CDC themselves and I assume that they had received first-hand information from the curriculum developers which would have increased their understanding of the element.

This finding appears to be in line with the previous finding collected during the pilot study. The outcome from the pilot study showed that mostly teachers and headteachers related entrepreneurship education to the teaching of business. In contrast, the expert teachers and officers showed a better understanding by associating it with developing students' entrepreneurial characteristics and attitudes. However, comparing the main findings with those from the pilot study, there is evidence of an improvement in the teachers' understanding of the concept.

The pilot study revealed that 80% of the teachers linked entrepreneurship education to business, but in the main study, this figure had decreased to 70%. This 10% difference suggests, in my view, that there had been an increase in the number of teachers who properly recognised the government policy on entrepreneurship education. According to Cummins and Dallat (2004), the definitions of entrepreneurship education given in the theoretical literature are very diverse and indeed conflicting. This did not help in

finding a single coherent framework for schools. Cummins and Dallat (2004) argued that the right definition would help schools to make learning more meaningful. Thus, if enterprise education is to be taken seriously, teachers should be given more guidance with a precise definition of what enterprise and entrepreneurship is about (*ibid.*).

The second important point is that there were also differences between the MOE's and the respondents' perceptions (especially the teachers) of entrepreneurship education. This difference in perception, however, did not result in the teachers challenging the government, nor did they in any way dispute its policies, curriculum reforms or didactic materials.⁶² As already stated, most teachers associated entrepreneurship education with business and it seems that this was due to their lack of understanding of the aim and objectives of the implementation. The MOE did not expect the teachers to teach their students the knowledge and skills needed for setting up businesses and managing them. What the MOE expected was instilling an entrepreneurial spirit and culture into students in primary schools which was to be achieved by inculcating all the five entrepreneurship sub-elements described in the Entrepreneurship Element Guidebook for Year 1 teachers and administrators.

It should be remembered that some authors define the objectives of entrepreneurship education for primary education as mostly related to developing students' entrepreneurial qualities and also their communication ability (Hytii & Gorman, 2004; Rushing, 1990). This was confirmed by Hytii and Gorman (2004) who conducted research in four European countries (Austria, Finland, Ireland and the UK) exploring the objectives of enterprise education programmes there. They studied fifty

⁶²Throughout the long history of Malaysian education reforms, all the reforms seem to be accepted by the teachers. Even though there were some teachers who complained, this had never led to any strike or demonstration in Malaysia as happens in other countries, Mexico for instance. The current educational reform introduced by President Enrique Pena Nieto in Mexico had resulted in teachers demonstrated through strikes and road blocks, particularly in the Southern State where almost 73,000 teachers were there to demonstrate to show their stand. The news on this strike can be read from Teacher Solidarity website at <http://www.teachersolidarity.com/list/MX> or at any online newspaper. It could also be viewed in YouTube at <http://www.youtube.com/watch?v=nkTYWJk3lsY> or other related link.

programmes and they examined three levels of education (primary level, secondary level and higher education level) but excluding programmes specifically designed for the unemployed. Their findings suggest that basically the objectives of the programmes were concerned with increasing the numbers of business start-ups. However, for the primary schools, the objectives were focused on improving students' enterprise skills without any commercial emphasis, and building their understanding of the world of work

Hytii and Gorman (2004) found that teachers believed that in planning programmes, clear objectives are vital. So, to ensure the success of the implementation, the MOE must make sure that its objectives are well understood by everyone involved, especially the teachers, because, as Hytii and Gorman claimed, whilst the promoter of a new curriculum has specific aims and objectives for it, participants may well have a different understanding of the objectives. So, very clear objectives are vital for the successful implementation of new programmes, particularly those involving national schemes where a large number of participants from all levels of education are expected to be involved. In the current study, I could argue that the inconsistencies in the perception among the respondents were because of the delivery system that the MOE was practising. It was clear from the interviews with the respondents that information from the upper level did not really reach to the bottom level. The element was not well understood by everyone throughout all levels of education, as this Head of Sector explained:

... when we run a curriculum, we have to make sure that it works well. We have to ensure that it goes down to the lower level. We have to monitor to make sure whether it is happening or not. But the problem, as I said, is that our mainstream level has not been very detailed. That is why we are hoping for the State Education Department to help us. As for us, we have given the teachers and officers training. So we hope they will deliver because they are the implementers ... of course we are part of the implementers too, but they are supposed to go down to the schools. But they told us that they are currently short of officers. That is what is happening now. That is why I said that we have some problems with the delivery system. (Head of Sector)

This interviewee also explained that the MOE was using a delivery system in which the curriculum developers were in charge of training the National Level Trainers, who also happen to be teachers. These training processes had a multiplying effect as state-level trainers would in turn spread the training into the district level. These district level trainers will then train selected teachers from each school in the district. These trained teachers are then expected to go back to their schools and multiply the training among their colleagues. These respondents also reported that during this process, the information tends to become diluted and perhaps even missed by trainers and teachers. He added that the same problem happened during the implementation of the previous curriculum but that over time, the problems were overcome.

4.2 Summary

Since January 2011, the E-element has been implemented in the new Year 1 Curriculum with the purpose of forming students with an entrepreneurial attitude and a positive working culture. This is a new effort by the MOE and is being launched to acculturate entrepreneurship until it is assimilated by the students and becomes a lifestyle. It could be argued that a good understanding of the curriculum concept would help any curriculum implementation to be successful. From the current case study, it can be concluded that quite a large number of teachers associated the entrepreneurship education concept with business. In their view, the element was about teaching students to be successful businessmen in the future. However, as I have argued throughout my work, this concept does not seem to align with the official aims of the MOE in which the intention is to produce pupils with a good working culture, spirit of discipline and entrepreneurial attitude.

This study has shown that there were relative differences between the teachers' and the MOE's aims, but that this could be overcome with proper training and increased exposure for teachers. Interestingly, school administrators, who play the leading role in their schools, showed a mixed understanding of the concept. Some understood the official government policy but others did not. The officers and expert teachers, on the

other hand, seemed to better understand the concept, which could probably be due to their broader involvement with entrepreneurship education.

CHAPTER 5

Perceptions of the change and purpose of the implementation

5.1 Introduction

This chapter is organised around the respondents' answers to the second research question regarding their perception of the purpose of the implementation. The chapter is divided into two sections. The first explores the respondents' views and opinions on the reform (the introduction of the entrepreneurship element as a cross-curricular element in the primary school curriculum from 2011). Teachers and headteachers were given information about this new element and subject teachers have to incorporate it in their lessons. This is a new experience for teachers as this specific element was not part of the previous curriculum. Although the research question focused on the respondents' views of the implementation's aims, it would be appropriate to discuss first what they thought of the actual change.

In the second section, all the relevant data from the respondents pertaining to what they thought about the purpose of the implementation will be discussed in detail. Three main themes emerged from the analysis. These themes explained the teachers' and headteachers' views on the purpose of the implementation. There will be a short summary at the end of this chapter to summarise all the findings presented.

5.2 Section 1 - Positive attitude towards the change

During the interviews with 29 respondents (20 teachers, seven headteachers and two officers from the SED and DEO), I found that 27 of them agreed that the implementation into the Year 1 curriculum was good. This question was put only to the teachers, headteachers and officers because they were involved with the

implementation of this element at all levels, state, district and school. Due to the time constraints during the interview sessions with the subject teachers and headteachers, I was only able to put this question to all the officers, the 20 teachers and the seven headteachers.

In this extract from the interview with the SED officer, the implementation was assessed as positive as the new curriculum focused more on children's development whilst the objective was seen as providing students with skills for the future.

I think it is a good move because if we look at the previous curriculum, we learned by focusing more on the examination requirements. But now we learn and focus more on what we need and want to do in the future. We learn computer skills, we try to be creative and we need to have an entrepreneurial attitude. These three elements are enough for our students. (Officer 2)

He added that the implementation was an improvement on the previous curriculum. He also indicated that the whole SED had supported the curriculum changes and the implementation of the new curriculum. The DEO officer also stated that the change was positive, because it supported the government's transformation plans:

This change would complete part of the government transformation because in the education system, education transformation has to happen regularly and should be in line with the change in time. Previously, the cross-curricular element was introduced only in a few subjects. But now, in the new curriculum, the cross-curricular element is more structured and I think it is good for the students. (Officer 3)

Unsurprisingly, he added that he believed that the implementation had been well planned and that the MOE had certainly done extensive research concerning the current educational needs. He said that as an advocate of the policy, his job was to ensure the implementation of all government policies. It should be noted that in Malaysia's education system, the DEO is responsible for ensuring that all MOE policies and plans are carried out in all the schools of the district.

From the interviews with both officers (Officer 2 and Officer 3), it can be suggested that the content of the curriculum was transferred from top-level management to bottom-line level, which in this case is from the MOE to state-level education departments and then to district-level education officers and finally to school level. State and district officers are responsible for ensuring that the information is being properly delivered. They are not the decision-makers or the executors of the curriculum, but an intermediate channel which is responsible for ensuring that all information is being received at the bottom, and that the implementation is being carried out as expected by the MOE. The statements made by the staff in charge of the implementation suggested that both officers estimated that the change was good, beneficial and well-planned.

As stated in Chapter 1, the MOE introduced three cross-curricular elements: the entrepreneurship element; the creativity and innovation element; and the information and communication technology element. The intention was to strengthen and consolidate the overall education system. These elements were developed after a meeting between the MOE and the CDC, which was instructed to establish the three elements to be incorporated as cross-curricular elements. I asked the curriculum officer in the CDC about the reason for the change and the implementation of the E-element, and she responded that the idea came during a meeting with the Minister. She said:

Rumours about the implementation started in 2009 ... early 2009. We have it in the Living Skills subject, but what we have in that subject is merely about business. Now we want to develop human capital. In the Living Skills subject, it is not explicit. Now we are making it implicit. The early ideas came during the meeting with the Minister. If we think back to the previous Prime Minister's incumbency, so many graduates were unemployed and the government gave them some capital to start their own businesses. This was done in order to boost the economy but unfortunately the objective was not achieved due to there being so many of them who were not successful in their business. With that in mind, we searched for the reason and we found that even with the government's help and support, they themselves were not entrepreneurial in their heart and soul. They did not have the entrepreneurial characteristic. That is

why we are now trying to instil the entrepreneurial characteristic in our students. We taught it last time. But now we are doing it indirectly.(Officer 1)

In the interview with the Head of Sector in the CDC, he said that the implementation of the E-element was not just about teaching the students entrepreneurship, but more about conveying to them the basic knowledge and skills much needed by entrepreneurs, particularly traditional moral values associated with entrepreneurs. He said:

We were asked to look at any topics in the module of each subject and to try to find spaces in the syllabus where we can incorporate the element ... the five elements. I think it is good ... say, for example, that we want to incorporate entrepreneurial characteristics ... for instance, we look at how an entrepreneur takes a risk ... when there are any opportunities, the entrepreneur will look at it first ... and when he gets opportunities, he will definitely think of doing something ... that is why we want to instil the element in the earlier stage in primary school ... with this element, we hope that it can help us to build our students' characteristics and their values ... and a bit of management ... (Head of Sector, CDC)

Both Officer 1 and the CDC Head of Sector believed that the proposed change to incorporate the E-element into the Year 1 curriculum was a positive thing, and assumed that it is a starting point to develop students' entrepreneurial attitudes. It was hoped that this will create an entrepreneurial culture among students. Judging from the respondents' comments and the entrepreneurship education guidelines, there is no doubt that the reason for having this element taught is to adopt the element of entrepreneurship into the learning process until it becomes a solid part of the culture of students' and indeed daily life.

A further finding from the interviews was that 18 of the 20 teachers and all seven of the headteachers agreed that the change was good. One of the teachers said:

We did not have the element in the previous curriculum but I think it is good because we can develop the talent that is in our students ... for example, students are different and have different needs. They are not

the same. They are different from each other and because of that their interests and tendencies are different. So if we have this element introduced and permeated, we can probably identify talent in students who show their interest. (English teacher, Kenanga School)

This teacher was convinced that the element would benefit her students. In her opinion, since students have different abilities and different needs, perhaps introducing this element could help them discover and recognize their talent and interest in the entrepreneurship line. Another teacher also agreed that the change is good:

In a way, the change is very good. We can expose the students to the entrepreneurship values. When I was given the training on the element, the KSSR explained it to me like this. Let's say a student does or creates something, and assume that it is a drawing; if it is beautiful, we can show it to the class ... then after that the student can produce some more and sell them to his friends or family. That is the entrepreneurship value. (Art teacher, Melati School)

This teacher saw the change as an opportunity to develop entrepreneurship values in her students. For her, the change was welcome. From all the interviews carried out with teachers, it was found that 86% of the subject teachers (18 of the 20 teachers who talked about the change) showed positive support for the change. If teachers admit that the change is good, then this shows a positive reaction from the implementers themselves. According to Fullan (1982), changes in education involve changes in teachers' practices. When there is educational change, teachers might have to change their practices to adapt to it. Teachers are the curriculum implementers and they might be experienced enough to decide whether to adopt a change, alter it or discard it (Fullan, 1982). In this current research, many of the teachers accepted the change and were convinced that implementing the element into the curriculum was a good move. They could see the benefits of implementing the element. At the point when the interviews were carried out, these elements had already been implemented for about fourteen months (since January 2011). Despite the fact that some of the teachers interviewed were new and had only recently implemented the change, many said that they had already executed it, with 18 subject teachers confirming that they could see that the change was good.

As for the headteachers, all seven who responded to this issue agree that the change was good. Various positive comments were received throughout. The comments by this headteacher from Kemuning School are significant; he found the change so positive that he had no doubt that its implementation would have an impact on the country's development; his words are emphatic:

For me, it's a very good move. I am not simply praising the government but I think I can see the benefit. Global entrepreneurship can change Malaysia and bring development to our country. I personally think the change is so good. (Headteacher, Kemuning School)

Another headteacher also thought that the change was good and he fully agreed with the government's plan to implement the element. But he believed that the implementation would be better if it was introduced as a subject itself rather than as a cross-curricular element:

Whatever strategies our government plans are definitely good. The implementation of this element is also good. It is just that it was not enough because it was just being implemented as a cross-curricular element (Headteacher, Kenanga School)

Another headteacher, from Melati School, also believed that this change should indeed be implemented in the early stage as it would help students to learn and get more information about entrepreneurship. Essentially, in this case study, all seven headteachers agreed that the change was a positive move and beneficial for pupils, as well as for society and the country.

One could speculate about the reasons for such a generalised positive perception of the reform. In addition, the fact that the headteachers are only school administrators who only follows orders could be a reason for this wide acceptance. It is generally assumed that headteachers would always do everything and anything in their power to execute and implement plans from the government and the MOE. They seem to monitor the implementation and ensure that it has been carried out. In fact, two headteachers, from

Selasih School and Cempaka School, illustrated this point when they said, “We are only the implementer”, or “I am just following the order”.

In the Malaysian education system, the headteachers’ job specification is very clear. They are the administrator of the school and they are responsible for carrying out all the education plans in their school. An MOE circular in 1987 (Circular 3/1987) defined the main responsibility of the principal/headteacher in a school as “to ensure the success of the curriculum implementation in his/her school”. According to the circular, this should be done by systematic monitoring of the implementation by the principal/headteacher. So it can be assumed that since a headteacher is only a “reformer or reactor” (Fullan, 1982, p.140) of change, they simply carry out what they have been asked to do. According to Fullan (1982), in educational changes, headteachers usually would be expected to accept and support change even if they think that it is not in the best interest of education. So, in this case, headteachers probably just accepted the changes only because they were asked to implement them.

From the interviews, I learned that all the headteachers were given a briefing about the new curriculum and the implementation of the entrepreneurship element only during their meeting with SED representatives a few months prior to the implementation of the new curriculum in 2011. So it can be assumed that they only received orders to implement it and to ensure that it is carried out successfully. Of course, the fact that they received orders did not necessary mean that headteachers disapproved of the changes; they might have, in fact, believed that the government had thought it through before implementing it. So, they probably perceived it as a good change, accepted it and managed it. In reality, they led the implementation and made sure that it was carried out in their school. However, a headteacher from Tanjung School said that this was a long-term plan and that it was too early for any results: “This is a good change but we can only see the outcome in another ten to fifteen years. Nonetheless we still need to implement it now so that we can see the benefits of it later”.

The findings from all the interviews have shown that the majority of the respondents agreed that the change was good thing, but there were some who disagreed. I found that of the 20 subject teachers who talked about the change, two did not agree with the implementation in fact. They refused to incorporate the E-element into the curriculum and claimed that they could not see the benefit of the change. One of these teachers complained that the changes had not contributed anything to education; she seemed to be suggesting that, in fact, they were burden.

... actually, there are no differences ... not many changes ... but we have to do more now. We have to have the file and everything prepared in detail. Anything that the pupils do, we have to record it and then keep each piece of their work. We didn't have this last time. (English teacher, Kesidang School)

Another English teacher from a different school also complained about the burden imposed by the change, saying

I just want to compare it with my situation before. There was a lot of work for me previously. With that amount of work, I don't have enough time and feel like I couldn't finish all the work. Even finishing the syllabus felt so hard. And now we have all these elements to be instilled ... And we have to implement all this... Sometimes I forget that we have to instil the entrepreneurship element. This is because we're always busy training the kids with words and sentences and all the stuff ... for me, without all these elements, students are still ok ...(English teacher, Kemboja School)

From these comments, it is clear that these two teachers felt that the E-element did not have any impact on their teaching; instead it increased their workload and became a burden. Thus, introducing changes to the curriculum is not easy and might not have been accepted by all. This kind of disagreement over the implementation appears to be common. According to Fink and Stoll (2005), "resistance is a natural and predictable response" (p.19). McLaughlin (2005), discussing the work of Pressman and Wildavsky (1973) on the issue of implementation, said that the latter authors had reported that one problem with implementation is that implementers tend not to do

what they are asked and do not really try to achieve the objective set. This suggests that if the implementers did what they should, the objectives could be achieved.

Many scholars have argued that to ensure the success of educational change, teachers must have two important factors: moral purpose and “change agency” (Fullan, 1993, p.4). These have to stand together as a good foundation for successful change. Gitlin and Margonis (1995) carried out a case study in West Meadow Elementary School in the US to observe and assess the reform process in the school. In 1989, the Valley District in the US decided to try to implement site-based management which would give schools more authority whilst also introducing a more flexible management style. One school was selected and the researchers were granted permission to observe and assess the whole process. They interviewed all the people involved in the process, and used 75 questionnaires which were sent randomly to the teachers, administrators and parents. They also took notes during meetings related to the reform and observed classroom practice for almost four months. They then compared their findings with the existing academic literature on school change. The findings showed that the school principal had given teachers opportunities in faculty meetings to raise their concerns and that the teachers had suggested three reasons for their resistance to change. The reasons were primarily concerned with the need for significantly restructuring both authority relations and teacher workload.

Gitlin and Margonis (1995) argued that most of the literature on the theme of school change suggested that successful reform engaged teachers in the reform process. However, they also considered the positive aspect of teachers’ resistance and they said

If we are to move in the direction suggested by teachers’ resistant acts, ways must be found to build on the good sense embedded in such acts. Doing so means developing collective relations where teachers work together to examine and articulate the implicit insights embodied in resistant acts.(p.403).

So having teachers resisting change is not a bad thing after all. When teachers resist change, we can talk to them and try to understand the reasons for their resistance and

take action to improve the change. According to Dalin (1978), when personal values and new objectives are not compatible with a large change context, conflict cannot be avoided. In the current case study, there is the possibility that the teachers' personal values and objectives did not match with the overall reformation idea that the MOE had. The teachers, especially the language teachers, prioritised the teaching of basic skills such as reading, writing and speaking. Thus, it is not unlikely that conflicting interests between teaching skills and the implementation of the element were the cause of the teachers' resistance.

5.3 Section 2 - Respondents' perceptions of the purpose of entrepreneurship element implementation

A total of 19 teachers and six headteachers gave their opinions regarding the reason for having the E-element in the new curriculum. From the interviews, three main issues were identified:

Theme 1 - Developing students' interest in entrepreneurship

Seven teachers believed that the government had introduced this element because it wanted to encourage an interest in entrepreneurship in students. One teacher said:

... the element was introduced so that we can develop our students' interest from a younger age. I mean from the basic level, which is Year 1. If they enter secondary school or university, that would be different, the exposure is different. We need the element to be implemented early and this can help in developing their interest at an early stage. (English teacher, Kenanga School)

Another teacher commented:

They implemented this element because they want to develop students' interest. To teach them to be more open-minded, become more progressive, and all this starts in school. Unfortunately, students have different levels of intelligence. There are students who are good and

some who are not. For the good students, earlier exposure to this element is good, good for them. When they are aware of this, they will know what they want to do and where they can go. (Art teacher, Bakawali School)

Both of these comments suggest that the element was being implemented to develop students' interest in entrepreneurship. A further five teachers made simple comments confirming that the implementation was about developing entrepreneurship awareness. According to some scholars (Ab. Aziz, 2009; Blanchflower & Oswald, 1990; Drucker, 1999), this interest can be learned through formal or informal education. Therefore, it can be assumed that entrepreneurial skills can be taught to students. Some scholars have linked the issues of citizenship to the question of entrepreneurship. Banaszak (1998) explained that "democracy demands well-informed citizens" (p.165). In his view, creating well-informed society with knowledge and understanding of entrepreneurship and economics is crucial (*ibid.*). According to Banaszak, the understanding of both economics and entrepreneurship should be gained from a formal approach because these subjects are important and should be treated as part of universal education. Nor Aishah (2002) claimed that good entrepreneurship education in schools can develop and influence students who have the potential and entrepreneurial characteristics to become successful entrepreneurs. To achieve this, teachers play an important role (Ab. Aziz, 2009). They are responsible for developing their students' minds and attitudes, and conveying to them the message that entrepreneurship is a good source of income and of opportunities that could lead to wealth and security (*ibid.*).

Two of the headteachers understood the implementation as a means to motivate and develop students to become business-minded. The headteacher from Melur School stated: "Our government wants to develop an entrepreneurial society because we are moving towards becoming a developed nation. I think the government's aim is to produce people who are knowledgeable about business and well versed in it". He further explained his view with some examples of primary schools in which students are exposed to basic skills such as sewing and business through the Living Skills

subject. Through this, he said that students can be encouraged to produce creative work using the knowledge that they have learned from the sewing classes and sell the items that they produce to their friends or teachers. He added that this experience could give students an opportunity to become self-employed, not having to rely on a government job to generate an income. Likewise, the headteacher from Cempaka School said that “the exposure helps students to become more entrepreneurial not having to depend on a career as employees for getting a source of income”. Both of these headteachers could see the opportunities that could be gained from implementing the element to the students. According to Ab. Aziz (2009), an entrepreneur should possess entrepreneurial characteristics and attitudes and it seems to be that these characteristics and attitudes can be developed through formal and informal education. If the students in primary school can create and produce some simple products and then sell them, this can be considered as an achievement. This might represent an early exposure before they reach the stage when they have to choose a career. However, that is not the only requirement for becoming a successful entrepreneur, there are many other factors to be considered; but developing an entrepreneurial attitude and mind is certainly a good start. So it is hoped that with early exposure to entrepreneurship education in schools, students' interest in entrepreneurship can be developed. Walstad and Kourilsky (1999) claimed that entrepreneurship education helps to develop the entrepreneurs of the future.

The findings showed that five schools had organised a ‘canteen day’ or ‘entrepreneurship day’. These events were not academic and were organised by the schools’ administration and staff to give students experiences of entrepreneurship. Such an event involved all the teachers and students, especially those belonging to school’s association. For a canteen day, students are asked to bring items of food from home and sell them during the day. The money that they collect from the business transactions would go to their class or association funds. An entrepreneurship day is operated in a similar way, but the sold products would be more varied and not limited only to foods. Students are encouraged to bring anything that they think can be sold, including craft products, sweets or any other handmade products. They are given small

stalls and they have to run the store on their own. Teachers would be there to guide where necessary. These events, according to the teachers and headteachers, are intended to encourage an entrepreneurial culture among the students. Cassuto (1980) and Code (2006) examined similar experiences. Cassuto's (1980) study of the effectiveness of a Mini-society program⁶³ in elementary schools in Oakland and San Jose indicated that students who followed the program had shown an improvement in their economic knowledge; the program involved students in Grades 3-6 in the US, whose ages ranged from eight to eleven. Code (2006) studied 300 students from 13 elementary schools in Kentucky who had experienced the Entrepreneurs in Kentucky program,⁶⁴ and the findings confirmed an increase in students' knowledge of economic and entrepreneurial concepts. Both of these studies show that informal entrepreneurship programmes in elementary schools can increase students' understanding of the business world and develop their interest in entrepreneurship.

In the current study, it is suggested that teachers and headteachers are committed to developing students' interest in entrepreneurship because they can see what the government in Malaysia has been trying to do in recent years: the government had put in a great deal of effort, especially since 1970, to establish entrepreneurship in Malaysia. It could be argued that forming students with entrepreneurial minds and interests was not just the dream of a few officials in the MOE, but a true vision evoking the historical and economic mission of the government. This vision was manifested in the national education curriculum, the National Education Policy, Malaysian National Policies and the Malaysia Plans (*see* Chapter 2). Entrepreneurship education in Malaysia is important because it is part of the economic strategy to

⁶³ The Mini-society program was introduced in the USA by Marilyn Kourilsky and was designed for elementary schools. This program was developed to give basic economic skills to the students. In the program, students are given freedom to create their own society, print their own money, decide their own political system, select their own government officials and operate their own business. The teachers' roles are limited to being an active leader for only the first few weeks. After that, teachers become members of the society who need to abide by the rules and regulations that have been imposed on all members.

⁶⁴ Entrepreneurs in Kentucky is a program "that was developed in a collaborative tradition to develop and implement an effective entrepreneurial and economic education program" (Code, p.80).

reduce unemployment (Zaidatol, 2007). Thus, integrating the element into the Year 1 curriculum is just another new strategy to cultivate an entrepreneurial culture among students and the younger generation in schools, which can be understood in a context of global economics and neoliberalism.

The findings of the current study show that the teachers and headteachers believed, in accordance with the government's vision, that the E-element was introduced to disseminate interest in entrepreneurship in students. Norasmah and Salmah (2011) stated that students would be interested and inspired to choose entrepreneurial careers after they had been exposed to entrepreneurship. They studied the influence of attitudes in choosing a career in entrepreneurship among graduates in Malaysia. The study was conducted with 266 graduates in the Graduate Entrepreneurial Scheme between 2003 and 2006; it proved that the students who participated in this programme developed a high degree of aspiration and much interest in entrepreneurship due to the early exposure they had had at primary school level. The graduates' attitudes on a certain aspects, such as the internal locus of control, monetary values and autonomy, seem to have had a significant impact on their decision to choose a career related to entrepreneurship. The study also confirmed that students who were exposed to entrepreneurship education or programmes will have high levels of aspiration which could in turn lead to a career involving entrepreneurship. It can be said that attitudes and interests can be developed because, as argued earlier, entrepreneurship can be taught (Drucker, 1999). Entrepreneurship education can then increase the entrepreneurial literacy rate among students and can also improve their knowledge and acquisition of the concept (Kourilsky & Esfandiari, 1997).

It can be concluded, therefore, that if the right exposure were given to students and if all the teachers implemented the elements in their teaching process, students' interest in and attitude towards entrepreneurship could be developed. Peterman and Kennedy's (2003) findings support the notion that interest in becoming entrepreneurs can be developed through education. They conducted research among participants in the

Young Achievement Australia (YAA) enterprise programme by looking at the effect that the programme had on young people's interest in starting a business; the results showed that there was an increase in the feasibility and interest of the participants starting a business after attending the programme, which confirmed that through the entrepreneurship programme, interest in entrepreneurship and the desire to start a business can be increased.

Nevertheless, some studies have shown that students' attitudes towards and interests in an entrepreneurship career in Malaysia are in fact low. Zaidatol, Abd Rahim and Mohd Majid (2002) studied 1336 secondary school students in four states in Malaysia and found that these students did not have much interest in careers in entrepreneurship because their aspirations were still low. Although 66% of the respondents showed a positive attitude towards entrepreneurship and felt that this component was good and could help them to become entrepreneurs, only 59% said that they wanted to opt for entrepreneurship as a career, which could mean that the students had low aspirations for pursuing careers in entrepreneurship. This finding was corroborated by Ming, Wai and Amir (2009), who found that the entrepreneurship programmes conducted in four universities and one college in Malaysia were unsuccessful in encouraging students to start a business after graduation. Suhaili and Azlan (2006) studied Muslim students at the University of Malaya (UM) and found that the students preferred to work as employed workers in an organisation, rather than working independently as self-employed. Even though they had taken an entrepreneurship course in the university, this was not sufficient to encourage them to work on their own and to start their own businesses. In all three studies discussed above, it can be inferred that naturally not every student with exposure to entrepreneurship will opt for an entrepreneurial career.

Entrepreneurship education is often seen as an effort to teach students to become entrepreneurs but it should be realized that entrepreneurship education in school is not only about forming students to become entrepreneurs, but also about developing entrepreneurial characteristics and values in the young (Nor Aishah, 2002). Students who have entrepreneurial characteristics are also believed to be more creative and

brave in taking risks and seizing the opportunities that lie in front of them (Ab. Aziz, 2009). In the current study, the Head of Sector in CDC was asked about the reason for implementing the entrepreneurship element and he responded that the element was introduced in order to develop entrepreneurial attitudes in students. He said

The entrepreneurship element is not to teach students to do business but more on teaching them basic knowledge relating to an entrepreneur. Looking at what an entrepreneur has, it is not about being business-minded, but more on the attitude and values that we inculcate in entrepreneurship education. Once we have done that, then we could instil the business mind in them. A successful business-minded person usually would have the characteristic of an entrepreneur. (Head of Sector, CDC)

The official objective for implementing this element in primary schools is defined in the MOE's guidebook for entrepreneurship element (2012). It clearly states that the reason for introducing this element through a cross-curricular approach is for the students to practise entrepreneurship until it becomes embedded in their culture and becomes a substantial part of their personal attitude as well as a routine in their daily life. This can be achieved through the teaching and learning process in school. Having an effective entrepreneurship education helps to form youngsters who are more responsible and, as a consequence, they might contribute to developing a sustainable community (Ashmore, 1990). This is in line with the Malaysian National Education Philosophy which had defined the direction of the country's education system and which was developed in consistence with the needs and demands of a multiracial country, as follows:

Education in Malaysia is an on-going effort towards further developing the potential of individuals in a holistic and integrated manner, so as to produce individuals who are intellectually, spiritually, emotionally and physically balanced and harmonic, based on a firm belief in and devotion to God. Such an effort is designed to produce Malaysian citizens who are knowledgeable and competent, who possess high moral standards and who are responsible and capable of achieving high level of personal well-being as well as being able to contribute to the harmony and betterment of the family, the society and the nation at large (INTAN, 1991).

According to the European Commission (2006), the level of entrepreneurship in students can be increased through education. With adequate exposure, students' attitudes towards entrepreneurship can be increased, a view that can also fulfil the MOE's vision of entrepreneurship acculturation in schools. In order to support the entrepreneurial culture among Malaysian students, the government has committed to investing in special programmes to stimulate entrepreneurship. For university students, a Small/Medium Enterprise-University Internship Programme was introduced. In this programme, selected university students spend two to three months in an enterprise scheme to gain work experience and knowledge of business practices. For students in schools, the government sponsored the business plan competition and introduced the business-related curriculum. Furthermore, the National Institute of Entrepreneurship (INSKEN), which is a government agency, has organised the Young Entrepreneurship Programme for secondary school students and Junior Entrepreneurship Programmes for primary school students. All these programmes have been established specifically to increase interest in entrepreneurship among students in Malaysia.

Theme 2 – The Malay ethnic group development

When I was collecting the data for this study, there was something that really captured my attention during the interviews with the teachers: the question of ethnicity. From all the teachers interviewed, three spoke of the introduction of the entrepreneurship element as a singular way of helping the Malay people to progress in their lives and preserve their culture. The term 'Malay' refers to the major ethnic group in Malaysia. They populated the country long before independence and are among the indigenous people of the Malay world in the Malay Archipelago (Faaland, Parkinson & Saniman, 2005). According to the Malaysian constitution, the definition of a Malay is a purely cultural one, namely someone who is a Muslim, habitually speaks the Malay language, and follows Malay custom or *adat*⁶⁵ (*Laws of Malaysia*, 2012). Although there were

⁶⁵ The term *adat* has various meanings. It is sometimes understood to cover all aspects of Malay culture and social life, from styles of dress and housing to rules of etiquette and social interaction, but it is most commonly restricted to the very important ceremonies of birth, engagement, marriage, and death (Nagata, 1974, p.335).

not many teachers who raised this particular issue, I found this intriguing because helping Malays and the wider indigenous economy in Malaysia is *not* a hidden agenda; it is in fact mentioned in all the national plans and policies. Malays are often regarded as *Bumiputra* ('son of the soil') (Faaland *et al.*, 2005). Being the original population together with other indigenous people of the motherland, they were given special rights and privileges and these rights and privileges are referred to as a social contract.⁶⁶

According to Mohamed Dahlan, Mohd Rafi and Naila (2010), the Malays are still at a low-level position in the economy and the government's target to increase their equity in the country to 30% has not yet been achieved. Therefore, rectifying the economic imbalance between the different races in Malaysia has become one of the priorities of the government (Firdaus, 1997). So when the respondents in the current study raised this issue, I learnt that the teachers had related the change to the current situation of ethnic minorities in Malaysia – the Malay economy still failing to meet the target ("MEB," 2010).

During the interviews, one of the three teachers pointed out that the entrepreneurship element had been introduced because it was commonly believed that the Malays were not traditionally interested in business. The teacher explained her view as follows:

I think, in my opinion, the reason for implementing it is because Malay people do not show much interest in business ... when we talk about business, they are very close-minded as if there are no chances to be successful, but actually, as we see in Islamic teaching, it is said that 9/10 of wealth comes from business. And 1/10 is from other occupations. Look at the Chinese people. They do run businesses ... The Malays did not see the opportunities ... that is the weakness; I guess ... this is why it is being implemented, to help them see it.(Malay language teacher, Melati School)

⁶⁶ The 'social contract' is an agreement made by the rulers of three major ethnicities in Malaysia before Malaysia gained its independence. In this contract, it was agreed that Malays will grant the other ethnic groups (the Chinese and the Indians) citizenship rights and in return special privileges will be granted to Malays and the *Bumiputra*. The idea behind this was to protect the welfare and rights of the *Bumiputra*.

To understand why entrepreneurship education has had different degrees of acceptance in different ethnic groups, it is necessary to understand the historical background and the correlation of forces and complex relations between the diverse ethnic communities that make up the country. Thus the art teacher from Kesidang School had a clear opinion about the way in which Malaysia's economic wealth is overpowered by other ethnic groups because "the biggest slice of the economic cake is held by the Chinese", whilst the Malays keep falling back in terms of the distribution of the economy. So she believed that by introducing the element, the government could forge students' interest in entrepreneurship education and, hopefully, engage them with entrepreneurship and thus contributing to improving the Malays' economy.

A third teacher reported that she had learned about this process during her training and she realised that students in her region could develop entrepreneurial characteristics and at the same time help the Malay ethnic community to progress. She said:

We asked them why they want to instil the entrepreneurial characteristic and they told us that it was intended to help the Malays to progress ... and in whatever we do, we have to have the characteristic to become successful ... and we have to be hard working and show our effort. So the entrepreneurs usually start with nothing ... when they start their business, they work hard until they become successful ... they are persistent ... this persistence is what we want to show and follow but from the perspective of our students. To bring our students to the world of entrepreneurship is quite a problem for a teacher.(English teacher, Bakawali School)

These three teachers confirmed the perception that one of the reasons the government introduced the E-element was to create interest among students so that they would later become part of the entrepreneurial sector which is so important to the economy. By introducing this element in schools, the teachers seemed to believe that the government wanted to help this ethnic community and integrate it into the national economic programme, but this integration had to be done gradually and indirectly through the implementation of the entrepreneurship element into the curriculum.

Malaysia is a multi-racial country with three main ethnic groups, Malays, Indians and Chinese (Chiu, 2000). The teachers quoted above offered their views specifically on the Malays, and, as already suggested, these teachers specifically related the need for implementing the entrepreneurship element to the Malays' progress instead of the other ethnic communities. It seems that their experiences and understanding of the economy in Malaysia plays a big role in this perception.

Malaysia, it must be remembered, had been colonised for 446 years (Chamsuri & Surtahman, 1999) and the British colonization certainly changed the structure of the economics of Malaysia (*ibid.*) and its politics (Mohd Ridhuan, 2010). Under British rule, the nation was divided according to ethnicity and economy, with the predominant (and also stereotypical) belief that the Chinese were the major controllers of the economy (Nagata, 1974). At the time of independence in 1957, there was wealth but a large gap between the various states and races begin to show (Samuel, Abdul Halim & Ong, 2003). As in many other developing nations, the uneven distribution of income between the rural and urban populations as well as among the various ethnic groups became one of Malaysia's new challenges. To overcome this, the government introduced a series of plans to stimulate the economy and generate prosperity (Chamsuri & Surtahman, 1999). Efforts were made to increase incomes and at the same time close the GDP⁶⁷ gap between the different ethnic groups by introducing plans such as the NEP, the New Development Policy and Vision 2020, and the most recent plans including the New Economic Model which was discussed in Chapter 2.

Malays, especially in rural areas, have always been known for their lower income and poverty. Siti Masayu (2008) reported that rural Malay communities were living in serious poverty. However, that study was conducted in only one district involving 230 respondents, so it cannot be generalised to the Malays' situation and condition across the whole country. Nevertheless, if we look at the income distribution among the three major ethnic groups in the country, the Malays have always ranked the lowest, despite the fact that they represent the majority of the population. Table 5.1 showing the Mean

⁶⁷ GDP is a fundamental indicator to measure a country's economic growth.

Monthly Gross Household Income by Ethnicity, Strata and State in Malaysia between 1970 and 2012, published by the Economic Planning Unit,⁶⁸ shows that the highest income proportion was held by the Chinese, followed by the Indians; the Malays consistently ranking last. For the purpose of this study, Table 5.1 shows only extracted data from the table for the ten-year period.

Table 5.1

Mean, Monthly Gross Household Income by Ethnicity, Strata and State, Malaysia, 1970-2012

	1989	1992	1995	1997	1999	2002	2004	2007	2009	2012
Ethnicity										
<i>Bumiputra</i>	940	1,237	1,604	2,038	1,984	2,376	2,711	3,156	3,624	4,457
Chinese	1,631	2,196	2,890	3,738	3,456	4,279	4,437	4,853	5,011	6,366
Indians	1,209	1,597	2,140	2,896	2,702	3,044	3,456	3,799	3,999	5,233
Others	955	4,548	1,284	1,680	1,371	2,165	2,312	3,561	3,640	3,843

Source : the Economic Planning Unit (EPU)

So the income gap between the Malays and the Chinese is consistent and the government has made several attempts to close the gap. Many of these efforts seem to be concentrated in education policies. After independence, the government announced two important policies; the National Education Policy in 1961 for improving education, and a decade later, the New Economic Policy in 1971. The objective of these ambitious plans was to integrate all ethnic groups previously divided and to reduce the income disparities between them (Pong, 1993). Various new schemes followed but unfortunately, despite all efforts and economic development programmes, the Malays' economic situation still did not improve (Firdaus, 1997). More intriguingly, the Chinese still dominate the economy (Nagata, 1974) and in a recent report on Malaysia's 40 richest men (*Forbes Asia*, 2012) there were 27 Chinese,

⁶⁸This table is extracted from Economic Planning Unit website at <http://www.epu.gov.my/documents/10124/fec5c411-a97c-491b-b9a5-e28cd227ac95>

eight Malays and five Indian businessmen in the list. Of the top ten, eight were Chinese businessmen with only one Malay and one Indian businessman. The richest man in Malaysia was the Chinese Robert Kuok with a projected net worth of 12,400 million dollar. That report showed very clearly that the Chinese dominate Malaysia's economy and are the predominant race involved in the wholesale and retail trade sector.

In a comment quoted above, one teacher compared the Malays with the Chinese: "Look at the Chinese people. They do run businesses. The Malays did not see the opportunities, which is the weakness, I guess. This is why it [the E-element] is being implemented. To help them see it". Clearly, for this teacher, the Malay people did not see opportunities in the same way as the Chinese saw them and, to her, the implementation seemed to be about helping the Malays to learn about entrepreneurship. She might have been aware of the fact that the Malays had been the most disadvantaged group in both economic and educational terms (Chiu, 2000). Despite being the majority in terms of numbers, the Malay population is still backward economically speaking, and the Chinese have continued to be well-off (Firdaus, 1997). Malay-held equity has not achieved the 30% target despite forty years of independent government rule ("MEB," 2010). It is believed that the Malays' falling behind and the predominance of the Chinese has to be understood in a simple historical context: during the colonial period, the British system separated the three main races, with the Chinese populating the urban areas and having better incomes ever since (Selvaratnam, 1988). The quoted teacher might have been convinced that the Malays need to be helped through education and that this would create many Malay entrepreneurs, leading perhaps to equality and a fairer wealth distribution.

As already discussed, some studies have shown that the government's economic and education policies have failed to restructure the economy. In fact, they actually increased the inequality among the ethnic groups (Chiu, 2000; Lee, 1997; Pong, 1993; Selvaratnam, 1998; Tzannatos, 1991). So the policies exacerbated the situation for the

Malays because, although their incomes had increased, the overall gap between them and the other ethnic groups also deepened.

It has now been forty years since the NEP was first implemented and the outcome still remains unfavourable – the policy has failed in its intention. The Malay-held equity has not achieved the target and the Malays' incomes are still lower compared with the two other races. To address this situation, the government introduced a new policy, the New Economic Model, on 30 March 2010, as discussed in Chapter 2. That policy is expected to be a continuation of the government's aims to balance incomes and eradicate poverty ("MEB," 2010).

The three respondents quoted above related the implementation of the entrepreneurial element to the government's agenda to help the Malays, so there is little doubt that these teachers understood the current economic situation in Malaysia, as well as the country's history. Colonization, immigration, the social contract between the ethnic groups and the government's plan all contributed to the current situation. News published in the country's major newspaper (Utusan Malaysia) also gives an insight into the government's actions to support the establishment of entrepreneurs, especially Malay entrepreneurs, in the country. One example of such news rhetoric is this:

The government will remain committed to providing micro-credit facilities to help empower entrepreneurs and small businesses in the country. The Deputy Prime Minister, Tan Sri Muhyiddin Yassin, said that this was necessary to help entrepreneurs to get loans to develop and grow their businesses. He said that through such measures, the target to increase the Malay and Bumiputra traders to have 30 percent of the national economy can be achieved. ("Kerajaan",2013)

Since this subject is publicly debated, it is clear that the policy to transform Malays into entrepreneurs is no secret among the Malaysians. So, when these teachers said that the reason for introducing the entrepreneurship element was to help the Malays, they might have a point. The income disparity and government actions discussed

above are good reasons for these teachers to have faith in the implementation and the intention to generate successful Malays.

The other possible reason for believing in the intention is to help Malays may be that all these teachers were themselves Malays, and they were teaching in schools in which the majority of the students were Malays. According to the SED's enrolment statistics for 2013, about 97.5% of students (197,868 out of 206,670 students) are Malays. The rest are a combination of Chinese, Indians and other minority ethnicities (*see* Table 5.2), which confirms that the majority of the population is composed of Malays. So being Malays themselves and being surrounded by Malay students contributed to them linking the entrepreneurship element to Malays' progress and economic future.

Table 5.2

Student Enrolment in Primary Schools in the Case Study State for 2013

SCHOOL TYPE	Malay	Chinese	Indian	Others	Total
National School (SK- for all)	195,717	69	125	548	196,457
National School (Chinese)	1,535	4,384	72	448	6,439
National School (Tamil)	0	0	21	0	21
National School (Special education)	73	0	0	0	73
National School (Aborigine)	191	0	0	3,135	3,326
National School (Islamic religious)	354	0	0	0	354
TOTAL	197,868	4453	218	4,131	206,670

Source: State Education Office

Referring back to the objective of the new Year 1 curriculum, the E-element was introduced specifically to foster an entrepreneurial culture among all students regardless of their race. This was done by incorporating the entrepreneurship element into the curriculum through the cross-curricular approach.

There is no direct statement in the curriculum guidelines, nor was any made by the officers participating in this research, that explicitly defined the objectives of the implementation as being designed to help the Malays. According to the CDC officer, the government placed no emphasis at all on the entrepreneurship element being exclusively for the Malay students, rather it was an approach targeted to all the different ethnic communities in Malaysia's primary schools.

It has been argued by scholars and policy makers that basic education in primary and secondary schools in Malaysia should be available for every child in the country (Lee, 1999). This had been clearly highlighted in the National Education Policy which defined three important strategies: *i* improving the quality of education through an integrated, balanced and comprehensive system of education; *ii* providing basic education for nine years; and *iii* providing a democratic education system in terms of the opportunities and quality of education through a fairer distribution of the allocation and also to give special attention to the less fortunate groups and those who live in rural areas (*Malaysia Kita*, 2011). Through education reforms in the 1990s, free education was increased from nine to eleven years (Lee, 1999), which meant that every child could attend primary and secondary schools until they completed the major public examination at the end of their secondary school years.

In addition, the National Education Philosophy also emphasised the concept of education for all whilst at the same adopting the concept of education as a means to develop the potential of the individual. More importantly, a link was established between education and citizenship. In this new paradigm, education was understood as a tool for developing values and characteristics in citizens who would in turn contribute to the betterment of their families, of their societies and of the nation. With education defined as a right for all citizens, the government had to secure eleven years of free education (Tzannatos, 1991). When two decades later the MOE made the curriculum reform in 2011 and introduced the KSSR, it reiterated its commitment to the basic principles of the KSSR of providing equal education for all (CDC, 2011), reaffirming the link between education and citizenship.

However, not everyone has been enthusiastic about this approach, and some authors have questioned it because they believe that it could lead to positive discrimination⁶⁹ in the education system (Chiu, 2000; Pong, 1993; Selvaratnam, 1998; Tzannatos, 1991; Wang, 1983). Chiu (2000) claimed that the Malaysian government was in fact practising positive discrimination through education, giving advantages to the Malays only. Chiu added that the practice had actually left the minority groups in Malaysia behind and only benefited the majority population, the Malays. This consequently increased the socio-economic gap between the ethnic groups, especially the Malays and the Chinese (Chiu, 2000). The same issue was raised by Selvaratnam (1988) who claimed that the government's intervention and positive discrimination towards the *bumiputra* in higher education enrolment had made the competition intense, especially for the Chinese, because the entry requirement was set higher for non-*bumiputra*. Pong (1993) admitted that the positive discrimination had shown some positive effect by reducing the inequality for the Malays, but that it had had a reverse effect on the other ethnicities.

According to Selvaratnam (1988), the inequality among the ethnic groups in Malaysia goes back to colonial times when the Malays had the lowest education level compared with the Chinese and the Indians. As a result, over the past century, the Malay leaders developed strategies and policies to help boost the Malay economy, especially for those in the rural areas. This can only be done through education (*ibid.*) but, as already observed, this approach amounts to positive discrimination as ethnic groups not belonging to the Malay majority have not been directly benefited. But this is not a practice exclusive to Malaysia: according to Wang (1983), countries such as the United States, India and Sri Lanka also practise positive discrimination.

In this current study, although some teachers said that the implementation of the entrepreneurship element was intended to help the Malays to progress, the CDC officer stated that this element was implemented for the benefit of all, without

⁶⁹Positive discrimination is also called reverse discrimination, preferential treatment or affirmative action (Wang, 1983). For the purpose of this current study I refer to it as positive discrimination.

discriminating for any particular ethnic group. According to Spaulding and Shuib (1989), “the preferential treatment given to Bumiputera is seen as based on certain constitutional rights and also on the need to make a society less divided and therefore politically more stable” (p.106). On these grounds, therefore, there might be some truth in the teachers’ perception because due to this positive discrimination, the Malays did indeed achieve a better position and their enrolment to tertiary education did increase (Agadjanian & Liew, 2005; Tzannatos, 1991).

During the interviews with the officers, they stated that the implementation of the element would be a continuous effort; it would gradually be introduced at all levels on a permanent basis and it would also be implemented in secondary schools. The Head of Sector in the CDC said that the element is to be implemented by all the teachers in schools and this is in line with the government's aim to produce students who are balanced in all aspects, responsible, knowledgeable and able to be global players (CDC, 2011). According to KSSR guidelines, global-player students would be competitive, resilient and have strong self-esteem.

Theme 3 - Developing human capital and improving economic growth

The findings of this current study show that most of the teachers saw the benefits of entrepreneurship education in primary schools and that some of them believed that the introduction of the element was connected with the government's vision to become an industrialized country. In 1991, the fourth Prime Minister, Tun Mahathir Mohammad, announced a new policy, Vision 2020. By 2020, Malaysia is expected to have become an industrialized and developed country. Nine challenges were set to achieve this vision and education is the catalyst that will make the vision successful (Lee, 1999).

During the interviews, two teachers related the government’s introduction of the entrepreneurship element to the development of human capital. Two other teachers talked about improving the economy. Since human capital and the economy are related to one another, I decided to discuss them under one theme. There were only

two teachers who spoke about human capital but I shall still discuss it because it is a very important issue in Malaysia. It has become a main concern in the country and was given strong emphasis in the Ninth and Tenth Malaysian Plans.

The quality of the nation's human capital will be the most critical element in the achievement of the National Mission, and thus human capital development will be a key thrust in the Ninth Plan period. Human capital development will be holistic; encompassing the acquisition of knowledge and skills or intellectual capital including science and technology (S&T) and entrepreneurial capabilities as well as the internalisation of positive and progressive attitudes, values and ethics through education, training and lifelong learning. (Ninth Malaysian Plan, Malaysia, 2006, p.237)

For Malaysia, the development of a first-world talent base requires nothing less than a comprehensive, all-inclusive national effort from the public and private sectors as well as civil society, to lift the quality of the nation's human capital. The development of human capital in Malaysia requires the collaboration of multiple ministries and the private sector to address all population segments. It requires a holistic set of measures that supports the development needs of every Malaysian at every stage of their lives. (Tenth Malaysian Plan, Malaysia, 2010, p.193)

Education was highlighted in the Tenth Malaysian Plan and also in the Educational Development Master Plan 2006-2010, in which human capital development was one of the priorities:

This approach will nurture and develop Malaysians across their entire lifecycle, from early childhood education, basic education, tertiary education and all the way to their adult working lives, specifically by: revamping the education system to significantly raise student outcomes; raising the skills of Malaysians to increase employability; and reforming the labour market to transform Malaysia into a high-income nation. (Tenth Malaysian Plan, Malaysia, 2010, p.194)

MOE policy is to develop knowledgeable and skilful human capital which also appreciates the good values. (Educational Development Master Plan, MOE, 2006, p.53)

To ensure that Malaysia will have better human capital, the education system was revised and the entrepreneurship element was introduced as a cross-curricular element in primary schools, to be followed by secondary schools later (Tenth Malaysian Plan). In short, it is generally accepted that the development of human capital is vital for Malaysia and that it has an intimate link with education, which plays a role in improving people's social life (Becker, 1957). Indirectly, it also helps to boost economic growth (Galor & Tsiddon, 1997).

Two of the respondents in this current study believed that the main reason for the entrepreneurship element being introduced was to develop human capital. One of them, an English teacher from Melati School, thought that school is the best place to start this process. She said, "I think the implementation is focused more towards developing human capital. Since schools are the place where students receive their early education, schools are therefore the best place to introduce the element". The other teacher (the Malay language teacher from Bakawali School) had the same opinion and said that the motive for introducing the element in schools was related to developing human capital and the soft skills. She stated, "In my opinion, this element was introduced because we have been talking about the soft skills in education and I think it is related to human capital as well".

Undeniably, school is the place where students receive education, and education is an important investment in ensuring the success of human capital development (Becker, 1993; Kumar, 2006). So, when the teachers I interviewed said that school was the best place to start the implementation, and that it had been implemented in order to develop human capital, they might have a point. Ab. Aziz (2009) stated that students are our future human capital who will one day become successful managers or entrepreneurs who own multi-billion companies. The journey towards success might start in schools because the abilities of these students to become future managers and entrepreneurs depend heavily on the abilities of teachers to help them to open their minds to the opportunities which lie ahead (*ibid.*).

As stated above, two teachers said that the element was introduced with the purpose of improving the economic situation in Malaysia:

I think that the implementation is to expose the students to entrepreneurship because we know that entrepreneurship helps to increase the economy. (Malay language teacher, Melur School)

I think it was introduced due to the economic situation that we have now. Entrepreneurship helps to boost the economy (English teacher, Kemboja School)

Clearly both teachers associated the entrepreneurship element implementation to economic improvement. This could be due to their general knowledge and experience linking entrepreneurship to the economy. The English teacher from Kemboja School had experience of running her own small-scale business and because of her experience, she might have associated entrepreneurship with economic development. According to Yep Putih (1985), there is a relationship between entrepreneurship and the economy. He explained that entrepreneurs play an important role in the economic development of a country. Similarly, Nor Aishah (2002) stated that an entrepreneur is an economic leader and that entrepreneurs play an important role in the development of society and of the country. As discussed in Chapter 2 and in the sections above, there is a clear link between entrepreneurship, education, human capital and economic growth. Thus it is not surprising that these teachers related the implementation of the entrepreneurship element to the development of human capital and economic growth. Malaysia is undoubtedly moving towards becoming a developed nation and in all the government's national plans and education plans, entrepreneurship, human capital and economic growth are given top priority.

The officer from the CDC said during the interview that the implementation is an emphatic move towards developing human capital. According to her, human capital in MOE terms comprises students in pre-school, primary schools and secondary schools, colleges and tertiary education. Intriguingly, her notion of human capital seemed to encompass more elements than simply entrepreneurs. She said, "We want to develop

human and the student *jati diri*⁷⁰ so that they can see the opportunities that lie in front of them and if they become leaders in future, they can be problem-solvers for any problem that arises". The issue of developing human capital is in line with the MOE's aims because it is clearly written in the KSSR that the whole idea of the curriculum reform is to develop human beings who are intellectually, spiritually, emotionally and physically balanced (KSSR guideline). The introduction of the E-element is one way to achieve this. According to the district officer, the reform⁷¹ is needed because it completes all the transformations in the education system proposed by the government.

This change would complete part of the government transformation because in the education system, education transformation has to happen regularly and should be in line with the change in time. Previously, the cross-curricular element was introduced only in a few subjects. But now, in the new curriculum, the cross-curricular element is more structured and I think it is good for the students. (Officer 3)⁷²

This officer felt positive about the change because to him, transformation in education should keep up with current education development. Thus, it could be argued that the development of the education system in Malaysia should be given priority because, as Lee (1999) claimed, education plays a role in achieving goals towards becoming a developed country.

In order to achieve all these goals, education has to change and cater for today's (and tomorrow's) needs. In a globalised economy, the world is rapidly and constantly changing and people talk more and more about globalization and the advance of technology. To remain competitive, education has to adapt and students must be given more exposure to life skills. This is one of the many challenges for Malaysian society today, which is why the Minister for Higher Education declared that the transformation is important in ensuring the development of human capital to achieve

⁷⁰*Jati diri* is a Malay term for self-identity and self-personality that remains intact with custom values, culture, religion, race and nation.

⁷¹'Reform' here refers to the implementation of the entrepreneurship element into the Year 1 curriculum.

⁷²This quotation is repeated here because of its relevance to the issue being discussed.

the nation's goals.⁷³ According to Coleman (1988), "the human capital is created by changes in persons that bring about skills and capabilities that make them able to act in new ways" (p.100).

In the interviews, three teachers and two headteachers made remarks about the link between the entrepreneurship element and self-sufficiency. The implementation of the entrepreneurship element was, in their view, necessary to develop independent individuals. They suggested that learning the E-element could give students knowledge, skills and tools for survival. One of the teachers said

I think in the long term, the Malaysian population will increase and there will be more people in the country. And I also believe that there will be a shortage in the market of paid employment opportunities. Government employment also will not be available for everyone. There is no guarantee that students with a degree can work for the government. So I think that this is why the government had introduced the element. It wants students to be exposed to the entrepreneurial culture because this will help them to survive in the future as they have the necessary knowledge and skills. (English teacher, Tanjung School)

This teacher seemed to believe that in the future, offers of paid employment will be low and when students have been exposed to the entrepreneurship element, this would help them to survive. For her, students can be independent once they have the necessary knowledge and skills. Two other teachers from different schools made similar comments:

I think that it was introduced because the government wants students to be independent and survive on their own. For some, life is so hard. So, indirectly, we are teaching them to be entrepreneurial and this can help them to be independent and find sources of income. So with the exposure that they have received in school, they can help themselves and their families. (Art teacher, Melati School)

⁷³In a speech in a Local Higher Institution Academic Management Seminar in Langkawi in August 2008.

This was introduced so that students can be independent and use their knowledge and skills in future. (Art teacher, Kemboja School)

All three of these teachers believed that the element was introduced because the government wants students to be independent, self-sufficient and self-employed. The case could be made that independent people will lead to the development of an independent society.

One headteacher said that the unemployment rate can be reduced when students have knowledge of entrepreneurship. This is because he believed that students would be capable of being self-employed or involved in entrepreneurial-based work with the knowledge and skills that they possessed. He explained:

I think that the government is trying to reduce the unemployment rate. That is why they give students exposure. Nowadays, youngsters would not opt to find other work when they could not get a government job. They would rather spend their time with friends and riding their motorcycles here and there. Some parents give them financial support for living. It never occurs to them that they can save the money and use it to do something with it. They never think that with the money they can start a business. In the last few weeks, I talked to a chicken supplier. Not many people like to become chicken suppliers because it's a dirty job and it smells. He told me that he can make money by supplying and selling clean chickens. For me, it is difficult to see this kind of opportunity if we never learn it. This is why I think that the government is imposing it on the students. They want them to be knowledgeable. Being knowledgeable and entrepreneurial will help them to see opportunities. They can see the opportunities for employment. (Headteacher, Tanjung School)

In conclusion, students are the future human capital and they are the future workers and contributors to the economy of Malaysia. It has been the MOE's intention to produce global players who have all the positive values and characteristics to succeed. This intention is part of the effort to produce human capital with a "First Class Mind" (MOE, 2008).

5.4 Summary

The findings from the interviews show that most respondents had positive perceptions of changes made to the Year 1 curriculum in which the entrepreneurship element was introduced as a cross-curricular element. Under the new policy, all teachers have to include the E-element in their lessons. There are five subsidiaries of the E-element that must be incorporated. Even though the changes were introduced in 2011, some of the respondents had already managed to see potential of the implementation. They said that the change was good; likewise, many scholars believe that changes will be successful when the implementers can see the benefits. According to the Head of CDC, the implementation was planned and executed with the intention of instilling entrepreneurial characteristics and attitudes in students. It is clearly stated in the Standard Primary School Curriculum guidelines and also in the Entrepreneurship Element Guideline that the aim of the MOE is to develop students' entrepreneurial characteristics, attitudes and entrepreneurship acculturation.⁷⁴

The findings also showed that teachers and headteachers had different understandings of why this element was being implemented in the first place. From the interviews, especially those with the teachers and headteachers, three reasons were identified: *i* developing students' interest in entrepreneurship, *ii* helping Malays to progress, and *iii* developing human capital and improving economic growth. Varying opinions were gathered from teachers, headteachers and officers. Slight differences between the teachers' and headteachers' understanding of the reason for the implementation compared with the officers, especially the representative of the CDC, were also identified. Teachers and headteachers gave their views based on their personal opinions and experience. The officers from the SED and the DEO gave their professional opinions; these officers were intermediaries whose role is to ensure that the implementation is carried out effectively at the chalk/talk level. The Head of Sector and the officer from the CDC, on the other hand, seemed to be better versed in

⁷⁴Acculturation has been defined as "the act of adjusting oneself to a new cultural environment" (Debyasuvarn, 1970, p.82). So in this current study, entrepreneurship acculturation means adjusting to the entrepreneurship culture.

the aim and objective of the implementation because they were the designers of the element. They created and developed it and therefore understood it better. The importance of fully understanding the reasons behind the reform, particularly by those actively involved with curriculum change, cannot be underestimated. When the objectives of the change are understood, then implementation can be carried out successfully because teachers will internalise what needs to be done and what should be achieved. It is clear from the findings of this study that teachers did not clearly understand the objectives of the change.

CHAPTER 6

Issues relating to the implementation

6.1 Introduction

This chapter develops the analysis of the respondents' perceptions of the implementation of the entrepreneurship element (E-element) in schools. According to the MOE, all subject teachers have to implement the cross-curricular element in their lessons. This chapter will therefore focus on answering the third research question, tackling the issues surrounding the implementation of the E-element. This chapter will be divided into two sections; the first section will look at teachers' implementation in schools, and it will look whether the element has been implemented or not, then it will consider the teachers' readiness to implement the element. Finally, I shall look at the factors that cause unsuccessful implementation.

The second section will focus on the issues that surround the implementation itself. There are five themes derived from the discussion. These themes consider the issues that are related to respondents' understanding of a cross-curricular element, the teaching method, support from the school administrator, monitoring, and the training received by the teachers. Finally, a summary of all the findings will be presented.

6.2 Implementation of the E-element

This section will look in detail at the implementation of the E-element in schools. First, I shall explain the implementation and then I shall relate it to the subject teachers' readiness to implement it. Next, I shall examine the subject teachers' reasons for failing to implement it.

I should emphasize that during the interviews with the teachers, a few of them gave their views very openly. This was due to the fact that the interviews were conducted in private which allowed them to speak in confidence about, for example, conflicts with their headteachers. Thus teachers were free to say anything and share their thoughts openly without worrying that anyone would know what they had said. For better understanding of the implementation, I have divided this section into several subtopics.

Executing the element into the curriculum

More than half of the teachers interviewed affirmed that they had implemented the E-element. Even though it was still the early part of the year (the interviews were carried out during February and March 2012), almost 56% (14 out of a total of 25) teachers reported that they had built the element into their teaching activities. The majority of these teachers (11 out of the 14 teachers) said that they had incorporated the element when they thought that the topic of a lesson was suitable. Four of these teachers said that the E-element was incorporated when they could find suitable topic to implement it. They expressed their views as follows:

I implemented it where I thought that it was appropriate to implement the element. I mean according to a suitable topic such as my family, buying clothes ... something like that ... when there was an appropriate topic. (Malay language teacher, Cempaka School)

This teacher reported that she would implement the element when she thought that the topic was appropriate. Another teacher also said that she implemented the element a few times a week but that it depended on the suitability of the topic that she was teaching.

I will just see the topic and look at whether it is appropriate or not to implement the element. I implemented it two to three times a week. (Malay language teacher, Melati School)

The two teachers below also reported that they depended on the suitability of the topic before implementing the element in their lessons.

So far, I have implemented it occasionally in my class. I also look at the suitability of my topics before implementing it. (English teacher, Melur School)

I did implement it but not frequently and only periodically. I would look at the suitability. If I think that it can be included and the topic is appropriate, then I would implement it. The same goes for the ICT element. If I think that it can be included, then I would do so. (English teacher, Kemboja School)

It seems that these teachers had opted for the most mutually beneficial way to implement the element. These teachers only implemented the element when they thought that the topic which they were teaching was appropriate for the E-element. As discussed in previous chapters, teachers can opt to implement any element out of the three proposed in the curriculum. They need to use their discretion in selecting which cross-curricular element to be incorporated into their lessons. My findings also showed that there were some teachers who had implemented it and some who had not. One possible reason for this was that only some of them might have understood what was required of them. Those who did might have gained this awareness from the training session. It needs to be noted that my findings reveal that 80% of the teachers had received formal training relevant to the new curriculum. The curriculum officers also reported that training was given to these teachers prior to the implementation. Officer 1 (from the SED) said, “We gave training to teachers at the end of year 2010, around August, September and November”. Officer 2 (from the DEO) confirmed this: “Yes. We have given them training at district level. This training was conducted by the SED. We do it for all subjects in primary school. We called all subject teachers from each school and one teacher for each subject”. So, I would argue that the teachers could have understood what was expected of them from their training and from discussion with colleagues and friends.

Understanding the implementation

During the interviews, the subject teachers were also asked about their understanding of the implementation and 11 teachers (out of 17) disclosed that they knew what they were expected to do. They said that they understood the implementation and how to carry out the task given to them. Some of these teachers described their experiences as follows:

I think I understand it. I think I know what is needed from me. We are to implement the entrepreneurship element into our lessons. Previously I did not have any idea how to do this. I just did it according to my understanding, but when an officer from the District Education Office came and observed my teaching, she explained it to me. She said that I had actually implemented it but I did not realize it. She explained more about the element. I was surprised but now I understand it. The officer asked me to look at the MOE website and read more about the element. I did that and my understanding has improved. (Malay language teacher, Melati School)

This teacher explained that at first, she did not have any clue about the implementation and incorporated it into her lessons through her own understanding. However, after receiving a visit from education officer, the teacher became clearer on the implementation. Unlike this respondent, the next quotation shows how one teacher often relied more on texts books, or even on friends, for a clearer understanding:

At first I did I not understand it. I went to the training but I was still uncertain and vague. This might be because I have not taught the element yet. I discussed it with my friends and I also referred to the textbooks and the syllabus and I do have ideas about how to implement it. When I enter the class, I am able to implement it. The discussion helped because we guide each other. (English teacher, Cempaka School)

Another respondent referred to the support she found in the briefing. She reported that she has no ideas about the curriculum, however the training session and referring to the syllabus had enabled her to understand it better:

At first I was so vague about it. It is a new curriculum. I felt uncertain

but the briefing on the cross-curricular element helped and I understood it slightly more. But when I got home, I referred back to the syllabus and this has increased my understanding of the element. (English teacher, Bakawali School)

It seems that these teachers did not understand the implementation at first. However, the training sessions, along with the guidance from the officer and their own efforts, had enabled these teachers to better understand the implementation. This relates to the findings of Carless (1998) that teachers can successfully implement an innovation when they have some understanding about it, as well as a positive attitude towards teaching and a desire for improvement both individually and professionally. Even though they were asked to attend training by the DEO, their seriousness in attending the course showed their commitment to implementing the new curriculum. In addition, teachers also showed their commitment by finding information on their own, for example through discussions with their friends, and reading and surfing the internet; thus, many teachers made an effort to carry out the implementation successfully.

The rest of the teachers (another eight out of eleven) also said that they understood it and they knew what they had been asked to do. One of the teachers (an English teacher from Melati School) argued that she knew what to do because she was an experienced teacher. She put it thus:

I knew what I needed to do because of my experience. As teachers, we always implement all the entrepreneurial values in our lessons. It is just that now it is called specifically the entrepreneurship element. Actually it has been implemented long ago.

In a way, this teacher is right to suggest that what had changed was the name only. In fact, however, the government's new policy is much broader and, at the same time, more focused, so the change was not superficial, as I show elsewhere. This teacher had been in service for 22 years and it is understandable that such long experience in the profession made her feel that she knew what was being asked of her. Khalid *et al.* (2009) showed that teachers who have been teaching for more than seven years tend to have high confidence in dealing with students' participation in class, teaching methods

and classroom managements. Thus, it could be argued that experienced teachers usually know what to do and how to deal with changes in the curriculum.

However, Zamri and Magdeline's (2012) work on pedagogical content knowledge showed that teachers' experience is only a minor factor when it comes to selecting pedagogical thinking and actions in their lessons. They added that there are no differences between the experienced teacher and a new teacher. Their study covered different teaching experiences among subject teachers. Some had been teachers for over twenty years, and some had joined the service only recently. Thus, even though experience does have a role in determining teachers' understanding, other factors such as training, teachers' knowledge and their attitude seem to have a significant effect.

The findings of the current study also showed that some teachers commented that the implementation became easier after the second year of practising it. They explained that it was hard for them in the first year but, gradually, as time passed, they began to comprehend it. The three following teachers commented on this issue:

In the first year it was hard because I did not understand it. Honestly, because that was the first year of implementation and we were all new at it. KSSR itself is new. So I felt that there were so many things that needed to be done and we did not have much time. Too much to do and we did not quite understand how to do it. The first year was tough. Even until the end of first year, we were still unsure and lost. But this year it is better. I can see things now and know how to do it. After a year, now I can see it a bit more clearly. (Arts teacher, Kesidang School)

She had had a tough time in the first year of the implementation. She felt that there were so many things to do in the implementation of the new curriculum. With the time constraint and workload, she was lost. Eventually, when it came to the second year of the implementation, she had been able to understand it better. Unlike that respondent, the next teacher revealed that she was stressed by the implementation at first. However, gradually, she started to understand the element (although not fully) and implemented it in her lessons:

When we first implemented the new curriculum, we were all stressed. Everyone seemed to be so stressed. I felt so upset. I kept thinking about what KSSR is and what these elements are that I need to include. But once I had implemented it, I started to learn little by little. Once I understood it I did not feel the same stress as before. But I can't say that I am completely over it. Once I started to do it, I felt that I could handle it. I start to implement the element. But as you know, we just incorporate the element where necessary. So, once I knew this, I became less stressed. But still I need to think about the entrepreneurship element and how to instil it into my students so that they understand it. (Malay language teacher, Bakawali School)

The following quotation shows the experience of an art teacher. She said that she was full of questions during the first year of implementation. She also faced many difficulties just like the previous two respondents, and she also gained an understanding after a year of implementing the element.

At first, there were so many questions in my mind. How should I implement the element? What if someone comes and observes and I am not implementing the element? If the state and district education officers come, what should I do? The first year was a lot of trouble. But after a year of implementing it, things began to change. I began to understand it and to know how to implement the element. I started to implement it gradually. (Arts teacher, Kemuning School)

In short, these three respondents stated that they had faced difficulties with implementing the element during the first year. They seem to have experienced uncertainty and a great deal of pressure but, after applying the element into their teaching and learning activities, the situation had improved. This seems to show that the reform needs time before it can be successful and to confirm that educational change does not happen overnight. It might need time and support from all the people who are related to the change itself. Fullan (2007) stated that change “is the result of system initiatives that live or die based on the strategies and supports offered by the larger organization” (p.93), and in this current study, the organizations involved range from the MOE (top level) down to the SED, the DEO and the schools, where it involves headteachers and teachers.

Teachers' readiness

During the interviews, teachers were asked about their readiness to teach and integrate the element into their lessons. Eleven teachers responded to this topic. There were only four subject teachers who told me that they were ready to incorporate the element into their subject and the rest (seven teachers) said that they were not ready. One of those who were prepared to incorporate the element was the English teacher from Melati School whom I discussed earlier. She said that it had been quite hard for her to implement it at first but due to her experience, she said that she was ready and had implemented it in her lessons. The other three teachers simply said that they were ready and prepared to incorporate the element into their teaching and learning activities.

There were seven teachers who felt that they were not ready for the implementation and had different reasons for not feeling ready. For instance, one of them, an English teacher from Selasih School, said that she was not ready and that she found it difficult. She said that even writing a lesson plan would take her time because she was not sure what to include and what to teach. The other teachers said that they were not ready because they were not very clear about the implementation. One Malay language teacher from Kesidang School said, "I think I am not ready because of my lack of understanding. I am not clear about how to implement this element into the teaching". These teachers seemed to be saying that they were not clear because of their limited understanding of the element. Nevertheless, when I linked their answers to the training that they had attended, it seems that most of them had attended a formal training session, except for one teacher from Selasih School (an English teacher) who had had no formal exposure to the element. She had just learned about the element from her colleagues in her school.

This result appears to be slightly different from the earlier responses when teachers were asked about their understanding of the element. Teachers reported earlier that most of them understood what they needed to do but when they were asked about their readiness, they seemed to be less prepared. There are two possible reasons for this

slight discrepancy. The first is that not every teacher answered and gave opinions on both issues, and those who answered and responded might have been different teachers. The other possible reason is that whilst they might have understood what they needed to do, they were not ready to put it into practice because of issues such as time constraints, workloads and priorities in their teaching. One of the examples of this is the case of the Arts teacher from Melati School. This teacher reported that she understood what she needed to do for the implementation of the element but that she was not ready to incorporate it because of her workload. She said, “for the arts subject, I am not prepared yet to implement it because now I am so busy preparing the KSSR file. It is not ready. I know about the implementation and what to do but I have not implemented it yet. Most of my time is allocated to preparing and organizing the file. I still carry out my lesson but only focusing on the arts lesson”. This seems to be a good example indicating that even though teachers said that they understood it, they might have not yet been prepared to implement the element.

It is important to refer to the views of the other two teachers who said that the changes in education were not a problem. This caught me by surprise, as I was not expecting this kind of answer. I had always assumed that they would tell me that the implementation was hard but these teachers had very positive views and they said:

The change is not a problem. (Malay language teacher, Melati School)

No problem. For me it is not a big problem. (Malay language teacher, Selasih School)

Both of the respondents quoted above reported that the change was not a problem for them. However, the findings also showed that there were two teachers who said that any problem relating to the changes can be overcome. One of these two teachers (Selasih School) had some reservations; nevertheless, she seemed optimistic about the problem:

It can be overcome because what we need is just to introduce the element across the curriculum. (Arts teacher, Kesidang School)

I think it can be overcome although it seems a bit difficult. I know I can implement it. (Arts teacher, Selasih School)

Thus, some teachers seem to have accepted the change and could cope with it. For them, it appears that the changes were not a problem and even if they were, they could be overcome. The current findings also showed that some of the subject teachers had made an effort to overcome their problems. From the ten teachers who responded to this issue (teachers' efforts to prepare themselves), three said that they had browsed the internet to find information on the element, and the rest of them (seven teachers) stated that they had just asked their colleagues and friends about it. In addition, the SED officer said that all the information about the element can be downloaded from the official website: "We have uploaded all training materials in our website. Teachers can just download it". This makes browsing easier because teachers can refer to the SED website for more information.

Teachers' reasons for not implementing it

There were some teachers who had not yet implemented the E-element. The teachers were asked how many times they had implemented the element in their lessons in 2012 and 44% of the teachers (11 out of the 25) reported that they had not yet implemented the element into their lessons. Out of these 11 teachers, nine said that they had not implemented it because they had just started the class and that it was late due to the transition period for Year 1 students. Some of the teachers commented as follows:

It was only the second week since the students started learning. Previously they had a transition period for three weeks. (Malay language teacher, Kesidang School)

So far, I have just added the moral values component in my lessons. I have not done any other things yet. And it is just only one and half months of schooling period. (English teacher, Bakawali School)

These two teachers reported that they had not implemented it due to the transition

period for the Year 1 students. Reference to the calendars of all ten schools shows that the transition period had taken the whole month of January and there was also the Chinese New Year (CNY) holiday after that (in Malaysia, it is common to have a week's holiday for the CNY celebration). Thus, this particular teacher had raised the issue that she was late in teaching and implementing the element due to the long break. She reported:

It is only February and students have just finished their transition period. Then we had the Chinese New Year holiday and I have just started to teach after the holiday. So I have not installed the element yet and cannot see where to install it yet. It is still new for me and the first time I have implemented it. I have only just started everything and found the necessary information. I have not implemented it yet. (English teacher, Kemuning School)

Other extracts also illustrate how the transition period had delayed the teaching:

It has just been two weeks since the transition. I have not applied the entrepreneurship element into my teaching yet. I have just started to introduce the students to arts and, basically, I have just taken over this class two weeks ago. (Arts teacher, Melati School)

I have just entered the class after the transition period. So I have not installed any element yet and it is still early. (Arts teacher, Kemuning School)

As shown in these comments, the teachers appear to be saying that they had not implemented the element in their classroom due to the timing of the session. The transition period and the CNY holiday had been one of the reasons for not implementing it. Another possible reason is that it was still early February 2012 when I interviewed them. They might have just entered the class and started to teach the students because, as the Arts teacher from Melati School said, she had just started the class and had introduced her students to arts. Two teachers (of the eleven mentioned above) commented on other factors also related to time constraints that had prevented

them from implementing the element. More specifically, they pointed out the very demanding syllabus:

Sometimes I do not have time to implement it. I think this is best to be embedded in Year 2 because in Year 1 we should give them basic ideas and skills first. I heard from my friends that some of them do not want to implement it. There are so many things to teach in the syllabus. Take for example the English subject: I am teaching about six to seven periods a day and yet it is sometimes difficult to finish the syllabus by the end of the year. This is too much and we could not finish it in the time frame given, let alone incorporating the element. (English teacher, Selasih School)

I have not implemented it yet due to the time constraint. There are so many things to teach according to the syllabus and we need to finish it. Sometimes we do not have time to implement the element. It is not hard to implement but I need to concentrate because I am far behind in the syllabus compared with teachers from other schools. (English teacher, Tanjung School)

These two teachers claimed that they had many things to teach, so they could not incorporate the element into their lessons. In addition, some of these teachers who had not implemented it had also given other reasons for not implementing the element. Other than the time constraints factor, another teacher from a different school said that the reason for not implementing the element was that she could not find a suitable topic in which to implement it. She said,

Sometimes the topic is just not suitable to implement the element. Even though there was time in the class, the topic just did not suit. That is why I did not implement it. I will find a suitable topic to implement the element later. (Malay language teacher, Kenanga School)

This suggests that the suitability of the topic is important when teachers choose to embed the element. This might be the result of the training because teachers were informed during the training sessions that they could implement the element where appropriate and when the topic was suitable for them to do so which means that the decision was discretionary. The curriculum officer confirmed this instruction and said

that teachers could use any element considered suitable to the topic as long as the entrepreneurship element was being implemented in their lessons. Officer 2 from the SED added: “This element is compulsory to be implemented but teachers need to see the suitability of their lesson when incorporating the element”.

Another common argument for not implementing the element was that teachers did not understand the procedure. Indeed for some teachers, the subject was new. The arts teacher from Kemuning School told me that “I am not clear - seriously, I am not”. Likewise, another arts teacher from Tanjung School said:

I am not sure how to implement it because I am totally blank. Zero. I did ask the other Arts teacher and she did not implement it either. Year 1 and Year 2 students normally are not good in colouring and the syllabus seems to be high. The problem is that I had never learned anything about arts before. I never learned them during my teacher training college. This subject is very new to me.

Although not too many teachers complained about ignoring the issue, it is worth mentioning this lack of information that could suggest poor training and lack of exposure to the element. From the analysis, I also found that two teachers (English teachers from Melur and Kenanga Schools) who had implemented the element still said that they did not understand it very well. During the interviews, whether consciously or not, these teachers confirmed that they had implemented it, but later in the interview, they revealed that in fact, they did not quite understand it, even though they had reported that they had slightly implemented the element into their lessons. Problems like this do occur. Teachers might have implemented the element despite their poor understanding of it.

In this regard, the work of Jones and Carr (1992) is worth mentioning. They showed that even though teachers were consistent about technology education implementation in their schools, none of them had really had a broad understanding of technology education. This observation seems to apply to the current study. Some subject teachers implemented the element without fully understanding it.

To conclude, the findings in this research show that there were four obvious reasons expressed by the teachers for not implementing the element: that they had just started their classes after the transition period and holiday; the time constraint; the lack of a suitable topic in which to implement the element; and teachers' lack of understanding of the implementation. According to several authors, these constraints are very common and normal in the context of education reform (Carless, 1998; Hennessy *et al.*, 2005; Jones & Carr, 1992; Lee, 2000; Morris & Chan, 1997; Park, 2008; Rennie, 2001). For example, Rennie (2001) looked at the implementation of technology education in primary schools and identified that low commitment to curriculum change among the teachers was caused by time constraints. Hennessy *et al.* (2005) also highlighted the time constraint issue. In spite of teachers talking enthusiastically and giving examples of using ICT, they did highlight time constraints as a reason why the implementation of ICT had not had much effect. This is relevant in the current case study. Teachers said that there were too many things to implement in their classrooms and that they did not have much time to incorporate the entrepreneurship element into their teaching.

The CDC's report in 2009⁷⁵ on the pilot study that had been conducted showed that teachers had not integrated the element into their teaching activities because they had problems in integrating it. My pilot study, which, it must be remembered, was conducted six months after the implementation (June 2011), also showed that most teachers did not understand the implementation. They did not know how to integrate the element as a cross-curricular approach into their lessons. It could be assumed that during the earlier stage of the implementation, teachers did not understand the element and hence did not integrate it into their lessons. Nonetheless, as time went by, many teachers eventually understood it

However, it must be said that, in fact, even when they had implemented it, some were still not clear about the implementation. Even though the numbers are not large, this

⁷⁵The pilot study was conducted in a few selected schools. This was to test the reliability of the curriculum before it was fully introduced into all the schools throughout Malaysia in 2011.

may nevertheless have some impact on the overall success of the implementation. It must be remembered that the current study was conducted in only ten schools in one district, and that only three teachers in each school were interviewed. Naturally, the results might have been very different if all the teachers in all the schools in the entire state had been interviewed. Teachers' understanding is important because teachers serve as the medium which determines the success of any education policy (Brain *et al.*, 2006). Park's (2008) research on curriculum integration implementation suggests that teachers' limited understanding had impeded the implementation. Thus, it could be argued that in any educational reform, teachers' understanding is crucial because they are the implementers and the delivery agents who stand between the policy and students in schools.

Jones and Carr (1992) found that sometimes teachers had implemented changes into the curriculum, but due to their narrow view of the subject, they did not fully realize it. In line with their findings, it seems that in the current study sometimes teachers implemented the element without realizing it. This was reported by one of the respondents when she described how during her lesson, she had been observed by one of the district education officers. Remarkably, the officer told her that in fact she had already successfully implemented all the three elements without her knowing:

Previously I was not sure how to implement it, but during one of the visits from the district education officer, I was teaching and she was observing, and she told me that I had used all the elements [referring to all the three elements]. I told her that I did not realize that I had used them all, but the officer explained to me that I had. Then I understood it well. I had implemented the element without realizing it. (Malay language teacher, Melati School)⁷⁶

This could mean that perhaps several teachers might have implemented it without realizing it. The above case could be indicative of this tendency, but it would be a mistake to make a generalization. It could also be argued that this could happen to any of the teachers because, if we look back at the five sub-elements of the

⁷⁶This quotation has been used again here due to its relevance to the issue being discussed

entrepreneurship element contained in the guideline, these elements are related to building positive attitudes in students. For example, one of the sub-elements refers to good value practices and ethics in accordance with the entrepreneurship context. In this context, one of the values that should be promoted is ‘to respect the rights of others’. So, if the teacher had shown this value in her class by, for example, by asking her students not to interrupt while classmates were giving answers or sharing ideas with the whole class, the teacher had already transmitted to her students the value of respect of others’ opinions. This gesture showed that teacher had indeed implemented one of the elements. This illustrates that often this element was incorporated without teachers even realizing it.

6.3 Themes relating to the implementation

In this section, I shall discuss general issues related to all the groups of respondents. There are five themes associated with the respondents’ understanding of the cross-curricular element: common perceptions of the cross-curricular approach, the teaching method, support from the school administrator, monitoring, and the training received by the teachers.

Theme 1 - Common perceptions of the cross-curricular approach

This theme refers to the respondents’ understanding of the cross-curricular approach, but before going more deeply into the context, I would like first to look at the MOE’s reason for choosing a cross-curricular approach and the role that it has in education. During the interview with the curriculum officer in the CDC, the officer was asked about the reason for using the cross-curricular approach as a medium to inculcate entrepreneurship in students. This question is central to the current study. The officer responded that the main reason for choosing the cross-curricular approach was because the delivery is more effective for achieving the objective of entrepreneurship acculturation. She explained:

Previously, entrepreneurship was only introduced in the last few topics of the Living Skills subject known as the Business and Entrepreneurship component. Try to see the effect on students' percentage of acceptance when it was being introduced only as part of the subject compared to when every subject teacher speaks about the same thing when there is a suitable topic. And when teachers choose one element per day, assume that one teacher will talk about it five times a week ... so if ten teachers speak for five times a week, the pupils should have heard it about fifty times ... which way do you think is better in creating an entrepreneurship culture? (Officer 1)

She added:

Do you realize that there was one entrepreneurship subject in Form 4 that was replaced because it was just an elective subject? Only a small number of students took the paper and only they acquired the knowledge. Not all. If possible, we want to have many students that understand it. From all the pupils, not everyone would become an entrepreneur ... only a few would and that number will not be sufficient to cover the needs of the whole nation. That is why if we look at the new curriculum, the aim is to cultivate an entrepreneurial culture in students. (Officer 1)

So it seems that the cross-curricular approach was introduced because the element could be spread extensively across all the subjects in the schools. The officer argued that giving more exposure to the students could help them to develop an entrepreneurial mind and attitude. Taplin (2011) carried out research in two provinces in China related to silent sitting, which used the cross-curricular approach to promote resilience in pupils. That study involved 62 primary school teachers in China, a country that had been using the Sathya Sai Education in Human Values (SSEHV) programme promoting silent sitting three times a week for a year. These teachers had regularly interviewed and had collected responses from their students throughout the year to assess the way in which this silent sitting had affected them. Silent sitting was incorporated into the lessons in many ways and the teachers were given clear guidance on how to practise it. The activity did not disrupt the lesson but took a few minutes of the teaching time to initiate sitting in silence for a while. After a year of implementation, teachers reported that the activity had a positive impact on their students. The comments from the interviews collected by the teachers showed that

students gave a great deal of positive feedback on the activity. Teachers also reported that since the silent sitting had been introduced, the level of disruptive behaviour had been reduced. The study showed that students had benefited from this practice that had been incorporated three times a week and which only took a few minutes. What happened in these two provinces of China can be a good indication that any element or attitude given on a regular basis could have a positive impact. In that particular case it had improved the pupils' attitude. So it can be assumed that if students are exposed to the entrepreneurship element every day, they can better understand the concept and can better develop their thinking and attitudes. As the CDC officer argued, this might help to achieve entrepreneurship 'acculturation'. In addition, cross-curricular themes enrich the school curriculum through making learning experiences more relevant to the pupils' everyday life (Tillbury, 2004).

In another interview, the state education officer (Officer 2) referred to the role that the cross-curricular approach to the E-element had in the curriculum. He claimed that the main role of the cross-curricular element is to build the students' attitude:

Actually if we look at the Commerce Subject, it already has the entrepreneurship values in it. Since this implementation is just for Level 1,⁷⁷ we do not call it commerce but entrepreneurship because we want to incorporate the values and attitudes first. When these kids go to the higher level, all the subjects are there, Commerce, Economics and Accounting. It is there but the earlier role is building the foundation of attitudes. In the new curriculum, the cross-curricular element is compulsory.

It is worth noting that the officer emphasised that the main aim was to develop an entrepreneurial attitude in students by implementing the element through all the subjects. This approach was also supported by the CDC officer (Officer 1) who said that the main role of the E-element as a cross-curricular element was to develop a sense of self-discovery in students so that they can see the opportunities in the future. The officer added that infusing the element will help the students to do well in their life and, if they were to become leaders and prominent figures one day, they could be

⁷⁷ Level 1 refers to Year 1, Year 2 and Year 3 students.

better equipped for solving all the problems that they might encounter. It seems that the cross-curricular approach is argued to be the most effective way to integrate the element into the curriculum.

In addition, this is a matter of a government policy and, according to the CDC officer, it is obligatory for teachers to integrate the element into their teaching and learning activities. The officer quoted above said, “The cross-curricular approach is a policy and it is compulsory to implement it. We did not simply create this element but it is a requirement from the top. It must be carried out”. Reading the comments by this respondent, it is clear that the element is crucial as it is compulsory, but what concerned me and concerns this research throughout, is whether teachers really understand the cross-curricular aspect of the element.

From the findings, it is clear that the understanding of the cross-curricular element by all the respondents who addressed this question varied from a vague general awareness to a thorough understanding of the concept. Respondents were asked about their understanding of the concept of a cross-curricular element and the subject teachers in particular seemed to have diverse ideas for defining it. Most subject teachers declared that they understood the concept, which involves the integration of one element into the subject that they teach. Talking about the new curriculum, they seemed to understand well that there are three elements introduced that have to be integrated into all their subject contents. Of the 19 teachers who responded to the question ‘What is your understanding of the concept of the cross-curricular element?’, 16 teachers asserted that they understood well the concept, two teachers said that they did not remember the concept well, and one said that she was not familiar with the element at all. For those who understood the concept, they did so in different ways.

Here is an example: “The concept means that when we teach our subject, we just include the cross-curricular element into our lesson” (Malay language teacher, Kesidang School). Another subject teacher from a different school (the English teacher from Selasih School) expressed it thus: “Cross-curricular elements mean that

when we teach our subject, we can integrate all appropriate things into the topic that we are teaching”. Both of these teachers seem to have understood the cross-curricular element as some kind of factor that they had to integrate into their teaching and learning process. The rest of the teachers (14 out of the remaining 16) showed very similar views when they talked about the cross-curricular element as a way of integrating other elements into their teaching. This modest understanding indicates that the teachers seemed to perceive the cross-curricular element as a matter of incorporating other elements into their lessons. In academic terms, ‘cross-curricular’ is defined simply as curriculum integration (Hayes, 2010) and in many ways this definition is consistent with the subject teachers’ understanding of the concept of a cross-curricular element.

Interestingly, during the interviews there were three teachers who commented on the cross-curricular element by sharing their experiences of what the concept is about. The first teacher gave examples of how one subject (the Malay language) could be used crossed with all other subjects, such as religious and mathematics subject. She said:

With the cross-curricular element, we can instil moral values ... for instance, even though we teach the Malay language, we can still incorporate religious⁷⁸ subjects where necessary by teaching our pupils things like greeting their parents and respecting them. Other than that, we can use the same concept in mathematics. Let's say we hold a competition and ask our pupils to count the marks. When we do the counting together, we are integrating the Malay language into our mathematics subject. This shows that there is an element imbued in it. You can also do counting activity during the physical education period. I am the physical education teacher as well. When I ask students to jump, they can count - one, two, three ... or we can ask them to form a group by finding another two of their friends. So when they go and count two, this is mathematics. (Malay language teacher, Melati School)

The other two teachers were simpler in explaining their understanding of a cross-curricular element by relating it to the integration of subjects.

⁷⁸ Islamic religious education is taught to all Muslim students in primary and secondary school in Malaysia. However, non-Muslim students take instead a moral values subject.

A cross-curricular element is like when we teach the Malay language, we integrate the arts education into it. (Arts teacher, Kemboja School)

A cross-curricular element is when I integrate into the curriculum other elements from outside the subject that I teach. (Arts teacher, Kemuning School)

From these responses, teachers appear to have understood the very basic concept of a cross-curricular element and knew what is expected of them. However, the question remains whether these teachers' understandings are aligned with the MOE's ideas about the curriculum policies. During the interview session with the curriculum officers, a more clear understanding of what was being asked in the curriculum was shown by the officers. According to the district curriculum officer (Officer 3), the cross-curricular element concept which the MOE defined happens when the E-element is incorporated into the teaching and learning of other subjects. He added that it should be integrated indirectly to the subject and not taught as a core subject. He elaborated further: "Let's say that through discipline-specific knowledge such as the Malay language, teachers can use the entrepreneurship element in their teaching".

In another interview, the officer from the CDC (Officer 1) explained that the cross-curricular element had to cross all subjects. She explained how the cross-curricular element might work by giving an example of when the Malay language is the subject taught; "For instance, take the Malay language as the cross-curricular element, it has to be used for all the subjects except for English, and it has to be fully used as a single language and not a mixed language". In this view, anything considered as a cross-curricular element has to be taught or integrated across the entire curriculum. Thus, in the new curriculum, it is the entrepreneurship element which would be learnt by all the Year 1 students in all their subjects. The officer also emphasised, "Actually, the element has to be taught explicitly. Clearly and distinctly. Teachers should understand and realize that the element which has to be implemented is the entrepreneurship element". It seems then, that these officers indicated that the element is to be integrated into the teachers' lessons indirectly but explicitly.

During the interviews, five headteachers agreed that when employing the cross-curricular approach, the element has to be taught across all the subjects. Two of them explained:

... the cross-curricular element means that it has to be executed indirectly ... it is there in the management and the teachers' lessons ... teachers should insert the elements such as entrepreneurship, innovation and ICT ... we are not teaching them specifically ... this mean that when we teach, we integrate the elements into our topics. (Headteacher, Kenanga School)

... it's like this ... the cross-curricular element means that as well as teaching our own subject, we integrate the entrepreneurship element in it, in our teaching and learning processes. And the other thing is that since it is stated in the syllabus, it has to be carried out. (Headteacher, Kesidang School)

Both of these headteachers and a further group of three more believed that this element is an integrated element and as such should be incorporated while teaching the core subjects. In general, it can be seen that the ideas that these headteachers had were aligned with those of the MOE.

Headteachers' understanding of the concept is important because they are the leaders in school (Ramaiah, 2009) and successful implementation of all policies in school depends on them (Azizi, Halimah, Nordin & Lim, 2011). They play a role in determining the direction and success of their schools (Salleh *et al.*, 2011). It is therefore crucial for them to understand the concept so that they can in turn give good guidance to their teachers. Kamarul, Ab. Halim & Mohd Izham (2010) also addressed the role that administrators and school principals have; they can have a positive effect on teachers' excellence as we shall see later.

In the interviews with the expert teachers, they were also asked their opinion regarding the concept of a cross-curricular element, and they made the following comments.

In the cross-curricular approach, it does not revolve around entrepreneurship alone. For me it is more than that. They want to ask the students to think beyond the topic taught on that day. They want our students to think in more than one direction, to have divergent thinking; it is about asking them to think divergently not in an orthodox way. For example, in the Living Skills subject, we have one topic pertaining to fish. Students have to think big. When they see the fish, it is not only about the fish; it is more than that ... it has the science element in it as well ... an element such as how oxygen is supplied to the fish so that the fish can breathe. Why oxygen is necessary so that fish can live. Besides, it not only about preserving the fish, but how we can make a business with the fish. When the fish breed, we can get lots more fish ... we can make a business from there. This is what is being taught in the Living Skills subject. Actually, there are so many more aspects rather than just breeding the fish. It is a responsibility. When the students breed fish, they have to have the responsibility for giving the fish food. Elements such as discipline, civic awareness, language, are there. The cross-curricular element is wide, actually. (Expert Teacher 1)

The cross curricular element for me is something that we want to teach but we do it across all the subjects. (Expert Teacher 2)

The first extract is very significant; the respondent reflects about the potentials of the cross-curricular element and the need to teach students to think outside the box. This teacher highlighted the need to teach students to associate and link apparently unrelated issues (fish breeding, fish business and so on) and to encourage students to think creatively and divergently. The other respondent said that it is an element that is taught across all subjects. According to the Entrepreneurship Element Guidebook, it should be noted that a cross-curricular element is an element of added value applied to the teaching and learning process other than those specified in the content standards. These elements are implemented with the aim of strengthening the expertise and human capital of the students and are intended to equip them to address or handle current and future challenges (CDC, 2012).

In addition, the officer from the CDC explained that this element is compulsory and when the officer was asked about how and when to infuse this in a lesson, this response was given:

Actually, the cross-curricular element is compulsory to be taught but teachers have to look at the suitability of incorporating the element. Sometimes, a teacher might think that there is no space to include the element into the lesson. But actually there is always something we can do. For example, in learning Islamic education, pupils have to learn about the Prophet Sirah.⁷⁹ The Prophet is a great leader and a great leader makes right decisions. So that is the attitude ... the entrepreneurship attitude. We then look at how he herded the sheep. That is also entrepreneurship. These are the values that we want to instil in our pupils. There are some topics that we could not incorporate the element into and some that we can. But it is compulsory to include it and they have to have it in the lessons throughout the year. The teachers have to be creative. (Officer 1)

Finding ways to incorporate the E-element into teachers' lessons is, according to this officer, a very important mission for the teaching profession. The officer also explained the possibilities for incorporating the element into lessons. In addition, this quotation illustrates of the role of Islam in education and the close connection between religion and entrepreneurship. According to Hayes (2010), "the integration of the knowledge process emphasizes a fusion of ideas and concepts within and across subject areas and broader life experiences in an attempt to make education more relevant and meaningful for children" (p.383). This indicates that in making the curriculum relevant to everyday life, teachers need to find ways to deliver the curriculum within the range of their subject. It seems then a good idea to ask teachers to be creative and to come up with their own ideas. Nevertheless, too much freedom might bring some undesirable effects to the implementation.

Teachers might use their own interpretation of the element and incorporate it any way they like but the outcomes may vary. Unless all the teachers have the same understanding of the concept and the implementation, this will definitely have an impact on the quality of the curriculum. Park's (2008) work on the implementation of

⁷⁹ The Prophet Sirah is the life story of Allah's messenger that was transmitted by story-tellers and then compiled in a book called Sirah. The book contains information about the life of the Prophet and the story of the early period of Islam.

curriculum integration by elementary schools teachers in Korea supports the idea that teachers should first understand the concept before they are free to use their creativity in teaching. Park argued that the participating teachers in his study did not entirely understand the concept of the integration. He reported that they used their own intuition without a proper theoretical basis to implement the curriculum; this affected the quality of the integrated curriculum in the schools studied. As a consequence of the lack of the appropriate understanding of the theoretical framework, teachers became reluctant to implement the curriculum. So, it can be concluded that in implementing any curricular element, the understanding of the concept is crucial.

Based on the findings of the current study and the findings discussed above (Park, 2008), it can be inferred that most respondents had a fair understanding of the cross-curricular concept. They basically shared the view that a cross-curricular element is an element that has to be incorporated into a subject using a cross-curricular approach. They realized that it is not a subject on its own, but simply an element included within the lesson.

According to the state education officer (Officer 2), there was a slot given during the training to explain the cross-curricular element but it was a very short slot. He said, "We just inserted one slot introducing the element on the first day of training. Not much. It was only one hour". This means nevertheless that teachers were given some introduction to the cross-curricular element, and that even though it was just a one-hour slot, the teachers were exposed to the concept. Of the respondents, 24 teachers had attended formal training given on the new curriculum by the SED, two subject teachers had attended in-house training in their school and were given a briefing by a colleague (who had himself received training), and four subject teachers had not received any form of training. It seems that most of the teachers had attended some sort of training and had been exposed to the cross-curricular approach. Thus, in general, it can be presumed that these teachers might have understood the concept and were therefore able to show their knowledge during the interview. It is worth noting

that the new curriculum guidelines could have further supported the teachers' ability to understand the concept.

I have already mentioned that there was one teacher who did not understand the cross-curricular element at all. This teacher said, "I am not sure. I have heard about it but I do not remember it. In fact, I have no ideas because I am blank" (Arts teacher, Tanjung School). This teacher seemed lost when she tried to talk about and explain the cross-curricular element. I assume that this was because, at the time of the interview, she had only just begun to teach the arts subject for the first time. She had never had any experience of it and her background was in religious study, so she had never had any exposure or training for introducing any cross-curricular element into the arts subject. When I interviewed her in February 2012, she said that she had not done anything relevant to the cross-curricular element. This was the only teacher I met who reported that she had no knowledge at all of the concept. The rest of the teachers appeared to have a degree of knowledge and different ideas about the concept.

Any curriculum reform begins with the teachers' understanding of the subject and of how to implement it (Shulman, 1987). In relation to this current study, most of the teachers appeared to have understood what a cross-curricular element is and how it should be implemented. In addition, the headteachers also seemed to share the same ideas about how it should be incorporated. The respondents' understanding appeared to be consistent with the official guideline on the cross-curricular element. This could be a positive sign that the element in question was indeed understood and embedded in all teachers' lessons.

Theme 2 - Discussion as the most-used teaching technique

A teaching technique can be defined as teachers' skills and efficiency in organizing and implementing a method of teaching in their teaching and learning activities (Mok, 2010). In order to make the teaching interesting and able to attract students' attention, various teaching techniques can be used (*ibid.*). In the current study, 17 subject

teachers unanimously reported that they used discussion as a teaching technique when implementing the entrepreneurship element in their lessons. Here are some illustrative comments on this technique showing the strong emphasis already put on business and profit discussions.⁸⁰

I use discussion. Let's assume that today I will be teaching one of the given topics in the syllabus which is 'fruits'. What I do is first explain to them about fruits ... the local fruits. We explain this to our pupils. Then we ask them to join in a conversation. We can ask them what to do with the extra fruits if we have more than we need for eating. The students usually will respond by saying that the fruits can be sold and we can get money from that. This money they said can be used to support oneself and their family. This is how I do a discussion. (Malay language teacher, Kenanga School)

With these Year 1 students, I used discussion. I usually asked them the 'why' and 'how' questions. For instance, if a student's father is a farmer and he plants tomatoes, I would ask my student what does his father grow? How does he grow it? What does he do with the tomatoes? Where does he sell them? What does he get when he sells the tomatoes? And other questions as well. The students will answer and I will explain. This is how I do it with Year 1 students. (Malay language teacher, Kemboja School)

I always talk to my students. I ask them questions and discuss with them. They are active when we ask them questions and normally they would be very eager to answer. (Arts teacher, Cempaka School)

It would definitely be a discussion. In Arts, students will usually produce their work first. I will explain to them how to do it. Then they would produce their work. After that, we will discuss their work and relates it to entrepreneurship. (Arts teacher, Kemboja School)

All these subject teachers agreed that they used discussion as a teaching technique. I acknowledge that these answers are not sufficient and I would have liked to explore further the reasons why they opted for the discussion techniques. Unfortunately, I

⁸⁰Focusing on the question of profit is not necessary a positive thing, it is debatable, and it seems shocking that no thought is given to the issue of environmental sustainability.

could not prolong the discussion and stopped due to the time limitations.⁸¹ However, it can be assumed that most of the teachers opted for discussion as a pedagogical means because they understood what they needed to do when implementing the element and, as pointed out earlier, most of them had attended the training sessions and in-house training prior to the implementation of the new curriculum. Thus they knew that the element needed to be incorporated through the discussion method. Of all these teachers, only two had not had any training at all but they nevertheless opted for discussion techniques as well. One possible reason for these two teachers' understanding is perhaps that they might have had informal conversations with their colleagues and friends.

There exist several teaching techniques but it seems crucial that any class discussion should be relevant to the social context in which the given subjects are being taught. In the specific case of entrepreneurship education, some scholars (Cheung, 2008; Jones, 2007; Mwasalwiba, 2010) have conducted studies that concluded that the teaching techniques used in delivering entrepreneurship education depend largely on the context of the subject itself (Mwasalwiba, 2010).

Cheung (2008) conducted a study on entrepreneurship education in Hong Kong's secondary schools and he found that teachers there used wide-ranging approaches when delivering entrepreneurship education. He showed that they did not opt for one strategy only but instead used a variety of techniques, including the 'project learning', the 'didactic approach', 'mentoring', 'case study', 'competition' and 'workshop'. Mwasalwiba (2010) identified twenty-six teaching methods from twenty-one articles which he analysed in a semi-systematic literature review on the objectives of entrepreneurship education, teaching methods and impact indicators. He found that the most commonly-used technique was lecturing (thirteen articles), followed by case studies (twelve articles) and group discussion (ten articles). Although Mwasalwiba

⁸¹I know that I should have asked more but instead I continued with other questions because of concern about time. I realise that this omission restricted my findings but at a later stage I intend to conduct follow-up interviews as I plan to continue with this topic for Post-Doctorate research purposes.

(2010) did not specify the level of education of all the chosen articles, it is clear that lecturing was still the preferred choice when it comes to delivering a subject. However, Cheung (2008) found a different result in secondary schools in Hong Kong, where project learning was preferred, and the didactic approach was the second-highest approach used in Hong Kong. Cheung (2008) and Mwasalwiba (2010) had different contexts and methods but it can be concluded that the didactic approach is still favoured by some educators.

In relation to this current study, it has already been stated that the implementation of the E-element takes place in Year 1 in primary schools in Malaysia and that it should be implemented as a cross-curricular element. The officer from the CDC made the following comment when asked about how teachers should implement the element.

It has to be implemented explicitly. Teachers have to know and realize that they are implementing the entrepreneurship element in their lesson. Teachers do not have to bring or prepare any teaching materials when instilling this element. They just need to discuss. For instance, let's say a teacher is teaching arts and asks his/her students to draw. When they monitor the students, they can say, "You have to do it quickly and you should not work slowly". That is already implementing the entrepreneurship element because an entrepreneur has to work fast, industriously and diligently. Then the business will be profitable. Let's say that the students have not managed to finish their work; the teacher should motivate them and implement the element by saying, "You have to finish your work. If anyone wants to buy your work, they would not do so because it is not ready. So you have to finish it". Those are among the attitudes that need to be instilled in students. Teachers play important roles. (Officer 1)

She added

Teachers have to do discussion with students. They should ask students questions and elicit ideas from their students. They need to do this a lot. For instance, when teachers are teaching some topic related to a canteen, they can do a role play. They can ask students to act as buyers and sellers. They can learn to communicate on selling and buying things.

It seems that teachers were expected to use their discretion when choosing the teaching techniques related to their topic. I say this because the officer did not specifically state what technique teachers should use when delivering the element. She suggested discussion and she said that teachers had to use that widely in their lessons. From the interviews, it appears that teachers were not expected to use any teaching materials; in fact the officer stated that, if they wanted to do any extra activities, it was up to the teachers. Thus, there was one teacher who used her own activities in her lesson when promoting the E-element. She was an English teacher and she explained how she had been able to do the activities in her English Language Art class.⁸²

I still do discussion but what is interesting is that I have activities as well. For example, students would produce bookmarks in my class during the English arts period. They do it nicely and colourfully. Then they can sell the bookmarks. The money that they receive would be kept in the class savings. I assume that teaches them selling and buying activities. (English teacher, Kemboja School)

This teacher had used activity in her class and managed to link this to entrepreneurship education. She gave her students some entrepreneurship experience by allowing them to sell their own products. In so doing, the teacher was indirectly exposing her students to the E-element. Although there is no specific guideline from the CDC, or an entrepreneurship guideline book on the subject, the teacher had used her own initiative to do this activity and give personal experiences to her students.

According to Hytti and O’Gorman (2004), when any programmes “adopt the objective of developing enterprising skill, which is where they adopt a broad definition of enterprise education, the ability to integrate learning across the

⁸²Language Arts is part of the English subject taught in primary school. There are four basic skills that need to be taught: listening, reading, speaking and writing, and Language Arts is another component that was added into the new curriculum. The Language Arts module emphasizes the edutainment approach and the appreciation of language, and uses interesting and effective language through activities such as singing, music, drama, choral speaking, jazz chants, and other related teaching materials.

educational experience appears to be the critical success factor” (p.18). They added that the ways of implementing this objective are

- putting greater emphasis on integrating enterprise education into various other subjects in the curriculum; and
- introducing the enterprise programme as an opportunity to integrate skills and knowledge acquired in the other courses and subjects studied by the students (p.18).

From the explanation above, it seems that to develop enterprising skills in students, the integration approach is decisive. In relation to the implementation of the E-element in primary school in Malaysia, the element was supposed to be integrated through the cross-curricular approach, thus the State Education Officer (Officer 2) explained that, “there are three approaches that we can use when we want to integrate the E-element into the lesson. We can use the mixed approach, the integration approach and the application approach”. He also added that teachers are free to choose any of these methods for implementing the element. This is also clearly outlined in the Entrepreneurship Element Guidebook (2012). However, nothing was mentioned about teaching techniques in that book.

Fiet (1998, as cited in Jack & Anderson, 1999) argued that integrating the entrepreneurship element is not easy. He explained that students need to be exposed to the theoretical and conceptual background in order to support their learning experiences. However, integrating the element in primary school is very different from higher education, especially when it is just a cross-curricular element. Several authors have examined the cross-curricular element (Harris & Grenfell, 2004; Hayes, 2010; Morris & Chan, 1997; Meijer, 2007; Trent, 2010; Unwin & Wellington, 1997; Whitty *et al.*, 1994) but most did not relate their work to the teaching techniques used in delivering across-curricular element. Some, however, did talk about the different approaches including Morrison (1994) and Morris and Chan (1997). Morrison (1994) identified five cross-curricular approaches that had been used in the national

curriculum of England and Wales: permeating the whole curriculum, whole curriculum planning leading to block activities, separately timetabled themes, teaching through separately timetabled PSE, and long block timetabling. Morrison (1994) indicated that the permeation approach is the most powerful approach in ensuring the success of cross-curricular themes, but it requires “considerable planning, auditing and coordination” (p.80). Nevertheless, there was no specific mention of the teaching techniques necessary for the cross-curricular element.

However, some studies have suggested delivery techniques to be used in implementing the cross-curricular approach. It appears that these techniques and skills are not different from those used in conventional teaching, but they are applied differently (Kerry, 2011). Ager (2009) used a compilation of many teaching techniques that involved cross-curricular approaches. She gathered her students in a project called ‘Tudor exploration’ which involved other subjects as well. Some of the activities that Ager used were student workshops, concept maps, timelines and maps, poetry, and hot-seating. The project was carried out successfully. Temple and MacGregor (2009) developed a project intended to widen their students’ understanding and knowledge of cultural and religious diversity. This, they claimed, would “help the children understand something of what it means to be a member of a religion they were not familiar with” (p.91). There were a few cross-curricular skills that were incorporated and they used activities such as sleepover, discussion and life experience as strategies. It seems that the teaching strategies used in both the projects described above varied according to the needs of the project. There are no specific teaching techniques used in implementing a cross-curricular approach, but one thing that was clear was that in both projects the cross-curricular approach involved students’ participation.

The findings in the current study showed that all 17 teachers had used discussion as their delivery method. Most of them only opted for one technique but they had involved their students by asking them questions and eliciting ideas from them. Although there was only one teacher who had prepared activities, this did not hamper

the implementation. The CDC officers agreed that teachers could engage in discussions with their students and that there was no need to prepare teaching materials to support the implementation of the element. Thus, with this didactic approach, teachers could also generate students' involvement. According to Morrison (1994), normally, schools would opt to use a combination of approaches rather than sticking to one method because these approaches are flexible and are not incompatible. In Malaysia's case, teachers are allowed to use any techniques and approaches to incorporate the element into their lessons. There are no specific rules on how to implement the element although some guidelines were given to them as references. Teachers seem to be expected to use their discretion to implement the Element as long as they do implement it, because as noted earlier, it is compulsory to do so.

It could be generally observed that there are many teaching techniques that teachers can use. According to the literature discussed above, the didactic approach is among the favourite delivery methods for teaching entrepreneurship. Thus, it can be safely argued that there would be no harm in teachers just sticking to the discussion technique for implementing the element. Furthermore, they are only dealing with Year 1 primary school students who are still young and have only just entered the schooling system. Developing the pedagogical approach to implement cross-curricular element can be challenging for teachers, but this would help to develop students' critical understanding and also their learning interest (Kerry, 2011). In selecting a pedagogical method, a teacher should determine first what are the behaviour, attitudes and skills that need to be instilled into the students, and then create the learning environment that could provide prospects and opportunities for students to practise and develop them (Gibb, 2002). Good pedagogical approaches might help to achieve and develop the expected behaviour, attitudes and skills (Gibb, 2002). However, despite the abundance of teaching methods developed by scholars, there is no single approach that can be said to be universally valid and no master pedagogical approach to teach entrepreneurship (Fayolle, 2008).

Theme 3 - Positive support and agreement by the school administrator

“The role of the school principal has long been acknowledged as an important factor in the management of change at the school level” (Carless, 1998, p.363). If teachers can be regarded as the middle person between changes and their implementation, the school principal, on the other hand, is seen as the middleperson in between everything - the teachers, the changes and also the people (Fullan, 2007). It is their actions and approaches that determine the success of the implementation in their schools. In this current study, subject teachers conveyed their views on the support that they received from their school administrator. A total of 21 teachers responded, of whom 13 (62%), stated that their headteachers/school administrators had been very supportive. Here are some extracts from the interviews which also illustrate a general sense of gratitude:

Our administrators have been very supportive. They trusted the teachers and gave 100% freedom to the teachers to carry out the lesson. It totally depends on us how to teach and deal with students. As long as it is appropriate. They are very good. Very good indeed. (Malay language teacher, Cempaka School)

Yes, they have been very supportive. We can discuss anything with them. They always seem ready to discuss; they listen and are willing to sit together with us and find solutions. (Malay language teacher, Bakawali School)

We always discuss with our administrators. They are so helpful. They help us. (Art teacher, Kemboja School)

These comments suggest that headteachers had allowed much freedom for teachers to conduct lessons, and were generous with their time so that teachers could meet with them to discuss their problems. The rest of the teachers (10 out of the 21) also seemed to feel that their headteachers had on the whole been very supportive towards the implementation of the curriculum. This is consistent with the responses from some of the headteachers themselves who claimed that they tended to support their teachers. These extracts show that six headteachers claimed that they gave positive active support to their teachers and one reported:

As school administrators, we always support our teachers and encourage them to be creative in teaching. I mean besides what is written in the guideline and modules, they can bring their students and allow them to experience real things. I mean they can bring their students out from the class into the school compound. For instance, they can go to the canteen and let the students experience it on their own. (Headteacher, Tanjung School)

This headteacher said that he supported his teachers and give them freedom to take pupils anywhere within the school compound in order to give them exposure. Another headteacher explained that his teachers were allowed freedom to carry out the pedagogy and he supported them. The teachers were also given consent to ask for appropriate materials needed for their lessons:

Teachers are free to teach and carry out activities as they wish as long it is appropriate for their students. We support them. Through their Subject Committee, teachers can ask for materials for their teaching aids and they can make photocopies of their teaching materials. (Headteacher, Kemboja School)

This same headteacher was emphatic:

I will help them. If they do not understand, I would help them.

Headteachers are responsible for their schools (Wan Mohd Zahid, 1993). Whilst my field research and the small sample of interviews that I conducted cannot be used to make generalisations about the sense of responsibility that headteachers have in the district I studied; it can be suggested that there is a considerable degree of support given to teachers. Teachers agreed that their headteachers were supportive and it could be argued that the headteachers' support is crucial in determining the success of their teachers.

Kamarul *et al.* (2010) showed that particular qualities in headteachers would help in achieving teachers' excellence. They carried out fieldwork in eight schools in Malaysia and interviewed expert teachers, subject teachers, students, principals and

senior assistants in the schools. They reported that the principals had played a very important role in the success of the teachers and the students, and in maintaining academic excellence and standards in their schools. They also found that when the principals offered support to their teachers, this translated into success and motivation for the teachers.

Headteachers are also responsible for the curriculum implementation in their schools. This is clearly stated in the government circular 3/1987 dated 11 November 1987. Al.Ramaiah (2009) wrote that the role of a principal/headteacher is to supervise the curriculum implementation in the school consistent with the National Education Philosophy. Furthermore, the headteachers might also have supported the implementation because they can see the benefits that the element has for the students. As discussed in Chapter 5, some of the headteachers (seven in total) reported that the implementation of the element was good and some even said that they could see the benefits that the element will bring to students in the future, and as a consequence of this, they might have taken positive approaches towards the implementation. This supports the findings of Cheung (2010) on school heads' perceptions of the implementation of the Moral and Civic Education (MCE) curriculum in Hong Kong; he realised that the school heads had shown a very positive attitude towards the implementation. This was due to the fact that these school heads could see the benefits to students of their MCE curriculum. Cheung's work also showed that the benefits of the element included giving students a meaningful learning experience by helping the students' personal growth whilst also enabling them to become good citizens. From the findings of the current study, it could be argued that the interviewed headteachers had supported the implementation for the same reason, because they could see the educational benefits of the entrepreneurship element.

A further finding was that teachers in one school shared the view that in addition to being supportive and welcoming, their headteacher was very creative and supportive of the E-element. All three subject teachers from Kemuning School had the common perception that although their headteacher was a newcomer to the school, she had been

very helpful and had actively encouraged entrepreneurship development in their school for Year 1. The following extracts are significant in pointing out the headteachers' supportiveness:

We do not have any problems with the school administrators. They have been helpful. They encourage us to use all the teaching aids and they support the entrepreneurship element. The headteacher is so interested in the element herself. (English teacher, Kemuning School)

She just came this year but she had been so supportive. It feels good. She has been so creative compared to the rest of us and I feel ashamed. I am not comparing, but last year with the previous headteacher, I did not get any comments on the element when I had been observed, but this year, with the new headteacher, it seems different. (Malay language teacher, Kemuning School)

The headteacher has been very supportive and she had informed us about the entrepreneurship element. She asked us to establish a corner for entrepreneurship in our class. The Senior Assistant has also told us the same thing. (Arts teacher, Kemuning School)

In short, these teachers were happy with the support received from their headteacher. It also seems that all the teachers in Year 1 in Kemuning School had been able to establish an entrepreneurship corner⁸³ in their classrooms. I was taken to some of the Year 1 classes during the interviews, so I could see for myself a corner that teachers has set up as an entrepreneurship corner. It looked fabulous: a few tables were arranged together and the teachers put out all their students' work (anything that they had produced during each lesson), some packaging and items boxed up with price tags, and dummy paper money and coins. The teachers informed me that the pupils were very interested in the corner and were very proud when their work was displayed on the table. They sometimes simply did role-play activities, selling and buying with all the displayed items on the table. The teachers also informed me that they routinely changed the items on the tables every month so that they always had something new

⁸³ The entrepreneurship corner is where in every Year 1 class is given; there are a few tables put together in the corner where teachers display items related to entrepreneurship activities such as information cards, dummies made from manila card, erasers and pencils with prices. This is to familiarize students with entrepreneurship activities.

displayed. They claimed that this was one of the best ways of developing their students' interest in entrepreneurship.

These teachers enjoyed sharing stories about their entrepreneurship corner and they considered that their headteacher was the mastermind behind the idea. They said that their headteacher was very supportive, which, as remarked earlier, was consistent with the response from their headteacher, who commented:

I am free and can spend my time anytime for them. I am very transparent and I would like my teachers to follow the right track. And I would like to try something before asking my teachers to do it. For example, sometimes I created some decoration and show it to them and motivated my teachers to do it with their students especially in the arts class. For me, students have to learn to do something. They need to see it, produce it and they need to know that they can also sell it. This can become entrepreneurship education actually. I also created the entrepreneurship corner to develop entrepreneurship interest to give experience to my students.

She added,

Anyway, I am happy if my teachers come to see me. I would like to discuss their issues. I believe that I have to work together with them and not allow them to do it alone. I do not mind working together because I think it is better as this can ensure the success of the curriculum implementation. (Headteacher, Kemuning School)

The impression from all these interviews is that all three teachers and the headteacher in this school were truly committed to supporting each other. The teachers seemed to be happy to carry out the implementation and incorporate the element because they felt confident that they had their headteacher's support. Likewise, the headteacher was very supportive and willing to work as a team with the teachers to ensure the success of the curriculum. This confirms previous research findings that principals have a large effect on teachers' professional commitment (Singh & Billingsley, 1998).

Carless (1998) found that a principal's support and willingness to give teachers some autonomy to carry out their work makes them become more effective because they tend to feel empowered. Thus, when teachers feel supported by the principal, they have the incentive to deliver all the expected tasks (Kennedy & Kennedy, 1996) which in the current case is the implementation of the new element. On the other hand, if they think the opposite and believe that they are not being supported, they might develop a negative intention which is not to carry out with the implementation (*ibid.*).

It was stated earlier that 21 teachers responded on this issue. I found that of these teachers, a small group (four teachers) sensed a lack of support from the headteachers. Interestingly, three of these teachers came from the same school.

All three teachers from Selasih School displayed a degree of disapproval of their headteacher and claimed they found no support in him. They said that it was very difficult to discuss anything with him, especially when it came to the allocation of money. They also said that the headteacher did not seem to care much about their work, let alone the new element. They speculated that he might not understand the element himself.

I think he did not understand it himself. He is a new headteacher. He looks like he is not concerned about us. He did not meet us. So, we did not go and meet him. If I were to ask him, I am sure he would say ok for everything... (English teacher)

The headteacher did not care much. I said this because when I asked him, he seems not to understand. Maybe he did not know it either. (Arts teacher)

Frankly, the headteacher never said anything about the element. He never did. He seems not to care much about this. (Malay language teacher)

The latter teacher also added that

...it is also quite difficult to ask for money allocation for teaching materials.

In this case, there was a common perception that the headteacher did not support the implementation of the element and the curriculum as a whole. However, the headteacher from Selasih School had a different view and challenged these criticisms. He told me that the school had tried to fulfil all the teachers' needs within its capacity and capability. He also said that the school had always tried to provide the materials that the teachers needed. When asked about the support, he said, "When teachers face any problems, they should meet the administrator. So far, there have been some discussions with the teachers but it seems that the teachers can handle themselves well. They can think of solutions". The headteacher's comment clearly contradicts those of the teachers; this is likely to be a common case of clash of personalities. Conflict between teachers and headteachers does happen: Mohammed *et al.* (2007) questioned 39 headteachers in primary schools and 624 teachers under their administration and found that conflict between teachers and the headteacher in schools is common. The authors pointed out the shared view that conflict is a natural thing that happens between people; conflicts over personal values, people's behaviour and the emotions between them. By and large, it can be assumed that conflict can happen for any reason. However, Mohammed *et al.* (2007) found that the conflicts between their respondents were still at a low level. Nevertheless, even at a low level, conflict can have a big impact on a school's organisation and performance. The three teachers from Selasih School felt unsupported, which might impede the implementation of the element, and as commented earlier, if teachers think that they are not being supported, they might not implement a new policy (Kennedy & Kennedy, 1996).

Theme 4 - Lack of Monitoring

Monitoring plays a crucial part in the implementation of any curriculum, including the implementation of the E-element. It might be easy to develop a new curriculum or

programme, but the most critical issue is to execute the implementation. This was agreed by Watkins (1983), who was principal at Alhambra high school in California. His experience showed that the difficult part in implementing a curriculum is to find an appropriate system that is effective for the teachers implementing the established curriculum. To achieve this, Watkins proposed a framework of four monitoring guidelines: monitoring through teacher objectives, monitoring through lesson plans, monitoring through testing, and monitoring through the selection of instructional materials. In this view, monitoring tools for tracking the progress of an implementation are very important (Earley, 2000). However, little evidence of this approach was found in the current study, and monitoring and strategies were neither a leading theme in the interviews nor a significant part of the reform. Notwithstanding, this is itself a research object that cannot be underestimated. Furthermore, in the interviews, when teachers and headteachers were asked about monitoring, they perceived it as classroom observation. This suggests that teachers and headteachers tended to see classroom observation as a form of monitoring to ensure that the new KSSR curriculum is being carried out. So, in this study, the term 'monitoring' is used to refer to classroom observation by the school administrator. Four out of twelve teachers reported that their headteachers had monitored their lessons in 2013. However, of these four teachers, two admitted that their headteachers had only monitored them while they were teaching and did not touch on the element. These two teachers commented

They just observed our teaching. They did not observe the element and did not say anything about the element. I think he did not know about the element either. (English teacher, Selasih School)

When they came to our class, they just monitored our teaching as a whole. They watched us teaching and made some comments but they did not talk or touch on anything about the element. (Malay language teacher, Selasih School)

Both of these teachers belonged to the same school which might indicate that the headteacher (Selasih School) monitored the teachers' progress in implementing the new KSSR curriculum. The teachers stated that they had just been monitored and

given feedback on their teaching but without any further observations regarding the entrepreneurship implementation. There are two possible reasons for this. First, the headteacher might have not seen the element because he realised that the teachers were not using it (because teachers can opt to include the element at any time they consider appropriate), so, since the teachers did not implement it in their lesson, perhaps the headteacher did not see any need to comment on it. The second possibility is that the headteachers might have used the E-cakna form.⁸⁴ This is a form used by every school administrator to monitor teachers' lessons but, unfortunately, there is no section on the form designed to evaluate the implementation of a cross-curricular element. Five headteachers pointed out that there is no space on the form to comment on the element but two of them said that they had just made a short note on the form to confirm the use of the cross-curricular element in teachers' lessons. However, the district education officer explained that the E-cakna form is just an academic form to evaluate teachers' performance in class, and it is not a specific instrument designed to evaluate the new KSSR curriculum implementation. Therefore, he dismissed it as inadequate for E-element assessment.

It is apparent from the findings that not all the headteachers had monitored and observed their teachers. Eight teachers (of the twelve) said that there had been no observation by their headteachers up to the day that the interview was carried out. It was still early in the year when the interviews were carried out and perhaps the headteachers still had a great deal of administrative work to do. So it might have been the case that these headteachers might start observing at a later stage; I was informed that there would be four observations throughout the year, so one could be carried out at any time once in any quarter of the year.

Monitoring would help the schools and those involved in the curriculum implementation to achieve their goal (Mojkowski, 2000). Thus this could be a very useful instrument for ensuring that the element is implemented by teachers in their

⁸⁴This is a form used by all school administrators to evaluate and monitor teachers' performance in class.

lessons. Both teachers and headteachers used classroom observation as a form of monitoring. It might be a good monitoring instrument if it is only used to evaluate a discrete single subject. However, it must be remembered that the entrepreneurship element is a cross-curricular element which I think would be difficult to evaluate by observation only given its very nature. Furthermore, it would also be difficult to monitor because teachers are given freedom and flexibility to incorporate it. There might be a possibility that teachers had not used the element when they were observed in their classrooms. They might have also used other elements (creativity and innovation or ICT). So it would be difficult to observe it. Although there are some guidelines given in the Entrepreneurship Element Guidebook, it seems that none of the teachers or headteachers that I interviewed used it to evaluate the implementation.

Nevertheless, there might be a better instrument for monitoring the implementation, and Mojkowski's (2000) approach, using data based on conversations between a principal, teachers and the curriculum committee, could present us with good result. To assure curriculum implementation, Mojkowski used a checklist for teachers to report their perception of specific elements of the implemented curriculum. This checklist could be used to find out “*what’s* not working, not *who’s* not working” (p.80), and this gave teachers more confidence and space to express their feelings about the implementation. From the list, the principal and the curriculum committee could identify problems and find solutions for them. It seems that Mojkowski (*ibid.*) had introduced this curriculum implementation monitoring system using a more communicative approach among the stakeholders. However, in any curriculum implementation, it is important for the teachers and headteacher to be transparent and honest with one another, and not hide or keep anything back from the inspectorate and the curriculum committee (Earley, 2000). Earley (2000) argued that it might be more effective if implementation problems are made known to the appropriate department so that necessary improvements can be made to the existing approach.

On the same issue of monitoring, there was an apparent lack of monitoring either by the headteachers, or from the top management in the CDC, SED and DEO. Some of

the subject teachers stated that they had received visitors from the state and district education offices, but that they had not specifically come to monitor or observe the E-element. Instead, they came to monitor the Year 1 transition period, the LINUS programme and the School-Based Exam Programme. However, there were two teachers who said that the officers had come to observe their lessons (KSSR curriculum observation) and had also commented on the E-element. One of the respondents was the Malay language teacher from Melati School whom I quoted earlier (when discussing the understanding of the element). The other respondent was a Malay language teacher from Kesidang School, who said that, “The officer had entered my class and she did ask me about the element”. The findings also showed that three headteachers had similar perceptions:

Yes. They came but not frequently. Yesterday, there were representatives from the State Education Department. They came to observe LINUS. (Headteacher, Kesidang School)

Yes. They came for observing and monitoring the new curriculum for the Malay language subject. And they came for LINUS as well. So far I have not heard anything about the entrepreneurship element. They came a lot for LINUS to see who can read and who cannot. They just observe. (Headteacher, Kemuning School)

These two headteachers said that representatives from the education department came mostly to observe the LINUS program, whilst another headteacher claimed that there were official representatives who came to observe the curriculum but teachers took that opportunity to discuss on other issues related to examination:

There were representatives who came to monitor the new curriculum. Teachers were free to meet them and anyone could come during their free period. There were three representatives from the State Education Department. Teachers talked to them but basically about the School-Based Examination because they do not understand that. (Headteacher, Kemboja School)

Judging from these responses, it was members of staff representing the SED and the DEO who had visited the schools, although in fact, most of these officers came for

other programmes. It seems that no-one came specifically to observe or explain the cross-curricular element, let alone the E-element. Asked about this, the officers commented:

There is neither a special monitoring instrument for the entrepreneurship element nor a special officer for it. There are officers that are involved with the KSSR monitoring who would look at the new curriculum implementation in schools. For your information, when we go to a school we check the teachers' record book because in there, they are supposed to write a summary of what they have taught, the objectives and the cross-curricular element. Teachers can chose any element that they want to instil and which they think is suitable with the topic. For ICT and creativity, we do have some allocation but not for entrepreneurship. There is no allocation. It just that officers like me [referring also to other academic officers] go to ensure that the element had been implemented. However, if the teachers did not instil it, we could not say anything because they were given the option to instil any element that suits their topic that they teach on that day. (Officer 2)

This officer explained that there is no special officer appointed to manage and supervise the entrepreneurship element. He explained that the KSSR academic officer for each subject would be responsible for also monitoring the element. However, if the teachers did not implement the E-element during the observation, the officer could not say anything as the teachers has another two elements to be implemented as well. On the other hand, the officer from the CDC highlighted the issue of budget as the limitation for not being able to go to all schools and monitor them:

We do get the school list from the State Education Department which they divide according to district. They do give us some school names that we can go to and observe, but we cannot go to all the schools due to the limited budget that we have. Even conducting the five days training also had used a lot of the budget. (Officer 1)

The officer from district level (officer 3) explained that workloads and other responsibilities had restricted his and other academic officers' time to go to schools and observe the element:

I have been to some schools but not to all the schools in my district because I have so much work to do besides going to all these schools. I have a lot of other work to do that is related to my position as academic officer. Sometimes, I have to help other departments as well. I have to attend meetings. I would go to a school when I am free. Sometimes there is no time and this month I have not been to any school due to my work constraints. And if I do go to a school, I would discuss with the teachers. The teachers seem to understand the element. It is just that they need some guidance. Teachers have to use their own creativity in implementing the element. There is a report on the implementation but I could not reveal it yet. But what I have to say is that we do not focus only on one element; we have three elements that we need to focus on. (Officer 3)

The officer also reported the lack of officers in the department which could hamper the ability to go and observe the implementation. However, he stated that officers should also look at classroom observation:

I admit that we do not have many officers and we have so much to do. Not just the new KSSR curriculum. I know that it is our duty as academic officers to monitor as many schools as possible, but sometimes our workload comes continuously. There are so many programmes to handle and observe as well. Furthermore, during the KSSR monitoring, we also look at the files. It does not have to be classroom observation only. We also look at the management as well. But supposedly the officers should be looking at the classroom as well but maybe due to the time constraints, they did not enter the class for observation. (Officer 3)

These responses show three main issues linked to the lack of monitoring. The first is that no specific officers were appointed or trained to observe and monitor the entrepreneurship element. The academic officers' responsibility was to look at the subject along with all three elements. The officers also have the task of looking at the overall implementation of the new curriculum; classroom observation was only part of their job requirement. They also needed to keep track of the files and manage the entire curriculum implementation. The second issue was the budget constraint. It seems that officers from all three departments could not afford to visit all the schools due to financial constraints and high cost. The last issue was the workload. This appears to be one of the most common factors preventing officers from visiting

schools regularly. It is a generally accepted fact that officers in administration have more than one element in their job specification. Indeed, officers have to deal with very many tasks and they also have to attend meetings and observe schools on a routine basis. All these factors might have affected the quality and efficiency of the monitoring.

However, the importance of monitoring curriculum implementation cannot be underestimated. According to Hord and Huling-Austin (1986), by practising monitoring, we can “learn about the teachers’ feelings and concerns related to the new curriculum, how curriculum use is progressing in their classrooms, and the parts of the new program with which they are working” (p.108). Monitoring helps to identify implementation problems, thus in one of the schools where Hord and Huling-Austin (*ibid.*) undertook their research, it was proved that monitoring is paramount. The school administrator and her facilitators in the studied school had identified that teachers were not using the materials that they were supposed to use, and they realized that the teachers had issues with the materials. Because they identified this problem, they were able to find solutions and the problem was dealt with successfully. Monitoring is important in curriculum implementation and it should be an ongoing process in every school (Earley, 2000). One Malay language teacher from Melati School said that she had really grasped the element after she had been observed by one officer during an inspection visit to her school. This was an instance of the role of monitoring for better understanding the curriculum implementation.

Further findings showed problems concerning the knowledge of the CDC. The Head of Sector made the following remark:

Normally, those who monitor the entrepreneurship element are the subject people. We hope that they would also observe the element when they observe their subjects. We need their help to ensure that all five sub-elements have been implemented. The observation is done by another department and unfortunately those who went for the monitoring just reported about the content only. So we are not sure about the entrepreneurship element implementation and we do not have many

ideas about it. I can say that actually the weak point in the implementation is the delivery system and also the monitoring. However, I acted on my own initiative and asked my officer to go to schools and observe. I can share the information that one of the reports had indicated that the implementation had been carried out in Sabah. So we assumed that teachers had implemented it. (Head of Sector)

It appears that the Head of Sector realised the problem and recognised the need for monitoring the delivery of the implementation. Implementation was not always without success. The Head of Sector explained that there was some evidence of the implementation in the Sabah region. The CDC officer (Officer 1) also made some remarks about the success of implementation. Even though it was not a big success, there was some evidence that it had been carried out. She said that she visited one of the schools in a big city where the entrepreneurship element was implemented. However, she warned that when the implementation failed, teachers should not be blamed entirely. She considered that teachers might have not implemented it due to their lack of understanding and the fact that this implementation process was still new to them.

Theme 5 - Lack of training and exposure

From this discussion so far, it is clear that some teachers understood the implementation and a few of them said that they had understood it better during the second year. Time might have given them the experience that they needed to carry on implementing the element. However, when talking about their readiness to implement it, most of the subject teachers felt that they were not ready to do so. Even though they understood the element, they felt insecure and hesitant about implementing it. Some teachers pointed out the lack of training and guidance as to how to incorporate the element as part of their problem. The interviews confirmed that teachers' lack of understanding of the E-element was mostly due to poor training or limited exposure.

Paradoxically, however, during the interviews, 24 teachers (out of 30) stated that they had attended formal training prior to the implementation in 2010. Another two

teachers said that they had just attended in-house training, and the remaining four had not attended any training at all. So 87% of the respondents had been exposed to a degree of training in the new curriculum along with the entrepreneurship element. As already discussed, according to the state education officer, there was one slot dedicated to introducing the cross-curricular element in the training sessions for all the representative subject teachers and it had lasted only for one hour. There were three elements that had to be introduced within that session and these were presented by the subject trainers. This means that if the training was aimed at the English subject, the cross-curricular element would be explained by the English subject trainer.

Of the 20 subject teachers who talked about the adequacy of the training, 19 said that it was poor. Some said that the time allocated for the element was too short and that nothing much was explained about the E-element, so the teachers felt that they did not understand much about it. Here are two examples illustrating their disappointment and frustration:

It was not enough. We need more information. There were so many slots during the training but there was only one slot on the cross-curricular element and it was a very quick talk on entrepreneurship. If they give about 10% during the training, I think I only got 1%. (Malay language teacher, Kemuning School)

No, I do not think it was enough. What I do now is according to my own understanding. There was not enough during the training session. They only had one slot to explain all three cross-curricular elements. During that slot was where we knew about it and we had to understand it. Two hours only and I do not understand it. However, I just do what I think is right according to my own understanding. (Arts teacher, Cempaka School)

In contrast, another teacher (an Arts teacher from Melur School) claimed that she understood the element well but she pointed out that she would be happy to attend the training again to enhance her understanding. She said, "I think the exposure given is enough so far. However, if they would like to give more training, I would like to go. I can learnt more and bring some new materials".

As for the content of the E-element during the training, 14 teachers unanimously agreed that it was very shallow, general and only touched on the subject briefly. Some teachers said that they were just given an explanation without any details on how to implement it. An English teacher from Kemuning School said, “The trainers only explained and did not give any practice on the element. It was just the theory part. But when we are with our students, we need to practise it. It is not easy to apply. They can just say it, but we need to apply it and it is not clear”. The same issue was raised by another teacher (a Malay language teacher from Selasih School) who said, “It was so brief and was only a partial explanation. There was no workshop or activities”.

From this analysis concerning the quality of training, it may be safe to conclude that teachers’ lack of satisfaction stemmed from the fact that training was limited and poor and was not enough for them to understand the element, never mind how to implement it. They expected more visible and practical guidance that they could use when they implement the E-element in their classroom. This concurs with Rennie’s (2001) finding that the respondents in her study (teachers who had helped other teachers to understand how to implement technology education) shared the view that teachers preferred the hands-on and show-and-tell approach to learn the technology education. With support from the respondents in Rennie’s study, the pedagogical techniques were understood by the teachers and implemented in the schools. In the current study, a few subject teachers claimed that they needed practical exposure to help them to see and understand the implementation. Perhaps more hands-on training or visible teaching aids during the training would help these teachers to better understand the implementation.

According to Shulman and Shulman (2004), “an accomplished teacher must understand what must be taught, as well as how to teach it” (p.3). Teachers’ understanding of the subject matter and the implementation is important. In this current study, some teachers did not understand the entrepreneurship element and how to implement it. However, what they did understand was the fact that this element had to be incorporated as a cross-curricular element.

Zhong (2006) identified three obstacles to the curriculum reform that had been introduced in China: lack of a national-level college entrance examination system, lack of education legislation, and lack of research on teachers. Together with other problems such as the ineffective assessment system, poor accountability and superintendent system, these factors had impeded the curriculum reform. The author suggested that a quick action to bridge the gap was teacher training. Zhong (2006) also claimed that teachers' professional development is part of the curriculum development and thus teacher training should be given priority. Thus, learning from the Chinese experiences, to ensure that the entrepreneurship element in Malaysian primary schools is successfully implemented, training should be given priority, because once teachers fully understand what they need to do, the curriculum reform and the implementation objectives can be achieved.

Park (2008) also argued for training to support teachers' and headteachers' understanding of curriculum integration and practical experience of it. Van der Sijde (1989), however, was less enthusiastic about the impact of training. He identified some differences in the role of training, and went as far as stating that teacher training did not have any significant impact on students' achievement in tests. He did nevertheless focus on the significance impact of training on teachers' behaviour.

I shall now turn to the perceptions of the teachers' trainers themselves. One of the teachers' trainers said the element is not hard to learn and implement. She said:

Actually the element is not hard to understand. It is just about developing students' attitudes. The cross-curricular element is just an additional element in our lesson and that is why it is called an additional value. It is not something very big to be implemented in our lessons. It is just some standard values that we need to implement to our students. It is not hard to learn and to understand. It is not also hard to implement in the classroom. (Trainer B)

It is interesting to observe that trainer B placed much emphasis on attitudes. In addition, it appears that the CDC and the other officers interviewed had similar feelings. This is probably because the trainers were trained by National Trainers under

the supervision of the CDC. So they might have been influenced by the management team approach. According to the CDC (Officer 1), the element was not difficult to implement because it is about developing students' entrepreneurial characteristics and teachers just needed to put it into practice in their lessons using the discussion method. Officer 1 also said that "Teachers do not need to prepare any teaching materials to instil this element". This view was also shared by officers in the state and district education departments.

Easy as this might appear to the trainers and officers, the fact nevertheless remains that almost 77% (17 out of 22) of subject teachers had no prior knowledge of entrepreneurship or anything related to it. Indeed, two of them said that they were not interested in entrepreneurship whatsoever. It must be noted that there were only five teachers who said that they had learned some subject (such as economics and commerce) during their schooling years which might have given them some background information about the entrepreneurship element, but as previously noted, most of the respondents from the teacher groups did not have any prior knowledge about entrepreneurship, which would have made the implementation more difficult because experience of the subject matter could have helped teachers to carry out teaching activities related to the element.

Training could be the solution for the understanding the element and one of the expert teachers (expert teacher 2) commented; "I can see the goodness and the benefit of the element but the teachers' understanding is what is important. This I believe could be enhanced through training and in-service training. I think it would be difficult to implement if the teachers have minimal understanding of the implementation". Mukherjee and Singh (1983) studied the implementation of the previous curriculum (KBSR, which was introduced in 1982) in primary schools in Malaysia and they examined difference aspects of implementation. One of the problems uncovered was that the training on the KBSR curriculum was delivered too hastily which naturally resulted in many teachers failing to understand it. This was mostly due to the teachers' inability to apprehend the fundamental concept of the curriculum. It seems that almost

three decades on, history had repeated itself: the majority of the teachers in the current study complained that the training was too cursory and they found that it was not adequate.

During the interview with the representative from the CDC, she acknowledged that this was a problem, and she did not deny the weaknesses of the first round of training:

I admit that there was a problem during the first dissemination of the element. It was not so effective due to some problems such as budget and the inadequacy of the officer. So there is some training for the National Trainers which was given by someone who was not in the field and not well versed with the element. This might have caused the lack of understanding among the teachers. (Officer 1)

As discussed earlier, budget constraints along with limited staff also played a part in impeding the training for all the Year 1 subject teachers in 2010. The Head of Sector also commented on the delivery system when he said that it was also part of the problem in the dissemination of the element. He said

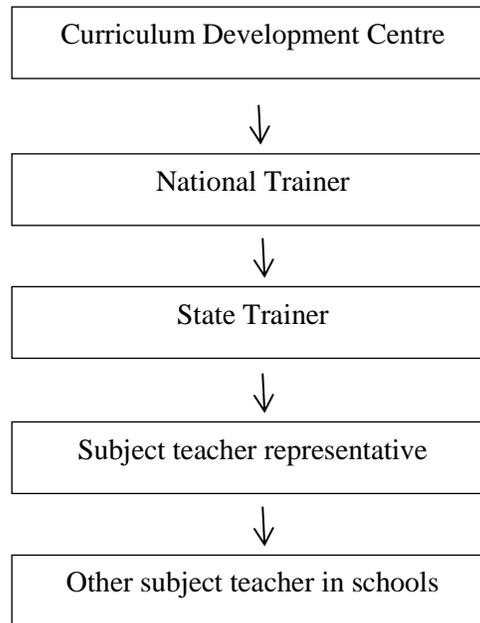
Actually, all these elements had been embedded before and it is just that the teachers did not realize it. They might have not noticed it. If they did realize it, they should have emphasised it easily in their lessons. However, from the responses that we get, the actual problem in the dissemination of the curriculum might lie in the delivery system. When we go to schools and monitor them, teachers seem not to understand their subject well and, what's more, the element too. That is why they could not emphasize it. (Head of Sector)

As can be seen, the Head of Sector highlighted the delivery system as the main problem and it seems that he was referring to the top-down dissemination of the curriculum.

As shown in Figure 6.1, the curriculum model starts from the Curriculum Development Centre (CDC) where national trainers are trained on the new curriculum. These national trainers then train state trainers who then deliver the curriculum to representative teachers from each school in every district. These teachers then share

their knowledge and understanding with their colleagues in their schools through in-house training. There are therefore several layers before teachers receive their training, which might create chances for mistakes to occur.

Figure 6.1 The Malaysian curriculum delivery model



Source: Ministry of Education Malaysia, 2012

Both the Head of Sector and officer 1 appeared to accept that the first training sessions for teachers were not a total success. However, it seems that the second training sessions (to Year 2 teachers) were perceived as better. Some teachers said that they understood more about the element after they had attended the second training. As one of them (an English teacher from Tanjung School) said, “I received more information on the implementation when I went for the training for the Year 2 implementation”. In another interview, one teacher shared her Year 2 colleague’s experiences with the training and said:

Those who went for the second year reported that the training was better. There were improvements and the delivery was more refined. So we went to meet them and discussed it with them. Frankly, when they

started this new curriculum, I could not see much point in it. I did not fully understand it. (Malay language teacher, Melati School)

So some teachers claimed that the second round of training for the Year 2 teachers was better than they had experienced in the first round. Perhaps this could be due to the fact that all staff involved with the dissemination of the curriculum might have made an evaluation of the programme, revised it and improved it, making it more effective than the first round. Another possibility could be that the teachers who attended the training for the second time had already had some prior experience. They had conducted the element in the classroom and they knew all the problems that they faced while implementing it. Thus, attending the second round of training had given them the advantage of clarifying the information and being able to understand the curriculum better. This is in line with Van der Sijde's (1989) findings that teachers understood better when they were given training after they had carried out their lessons. Van der Sijde (1989) compared the conditions of teachers who were given training before they carried out their teaching practices with others who were given it after. He showed that teachers who had undergone training after their teaching sessions were better equipped. In this current study, if all the Year 1 teachers had had additional training (or in-service training pertaining to the element), it is likely that they might have understood it better, which would then have implications for the success of the entrepreneurship element implementation.

A further interesting finding was that nine teachers claimed that the trainers were not well versed during the training. Some of these teachers commented as follows:

I think during the training session, the trainer was not expert in the entrepreneurship topic. Thus, they just delivered it briefly. (Malay language teacher, Kesidang School)

The trainers were not very well versed on the element. They sometimes just left it to the teachers to solve the problem. When we asked them questions, they seemed to say that they themselves were still new and still learning. (English teacher, Bakawali School)

The trainers were not well versed. (Malay language teacher, Selasih School)

These teachers claimed that the trainers were not competent or prepared. So to explore this issue further, the trainers were asked about these comments. They explained that in the first year of the implementation some of them might have not been clear on the implementation. It was the first time and the first year of training, so they said it could have been difficult for some of the trainers as well. However, they also said that there were other factors that influenced their understanding. They commented thus:

I think during the first year so many of us were not clear about the implementation. However, during the second year, it became clearer. (Trainer B)

Trainer B said that by the second year of the training, her understanding had grown and become clearer. On the other hand, another trainer explained the reasons that had caused differences in perception and understanding among the trainers.

I think the understanding among us, the trainers, is different. We are trained differently. There are differences in subject approach and it also depends on where and by whom the trainers were trained. The trainers' acceptance should also be taken into consideration. If they think it is hard, then it would be hard. (Trainer C)

Something else which emerged from the interviews was that the trainers understood that the element and its implementation depended on where and how they themselves had received their training, but it also depended on the subject that they taught. However, they accepted that it was crucial for all trainers to understand the implementation itself because they had the responsibility of training other people. One of the trainers said:

I received the training directly from the CDC. So that is why I understand it well. I understand the importance of the element and the reason for the implementation. I am a subject trainer so with my understanding, I would then explain it to my subject teachers. There are three elements to instil during the training and one of these is

entrepreneurship. Maybe there are some trainers who are not well versed because, as for me, I got it directly from the CDC for my subject. That is why I am clear. But others might have been trained by someone else because our subjects are different. So they would have been given training by someone else. Furthermore, it also depends on the CDC people. I mean who gives the training. (Trainer C)

The trainers had their own individual styles of teaching; this would also have an impact on subject teachers' understanding. Another trainer described her teaching style and personal techniques:

If I give training, I will give them notes on the element. For other trainers, I am not sure. But I would give it to my trainees. Then I would explain each one of the elements. I also give them examples on how they can implement it in their lessons. I would explain all the five elements, but if they do not pay attention, they would not get it. (Trainer B)

So each trainer had his or her own understanding of the element and the implementation. They also appeared to have developed different teaching styles, since I was often informed that the way in which they delivered the element was totally up to them. So these differences might explain why all three subject teachers had experienced different kinds of training. Furthermore, the elements were taught by subject trainers who were trained for their own subject and who were introduced to the element only because they needed to teach teachers the cross-curricular element. There were no specific trainers for the entrepreneurship element, which the CDC officer reported:

We choose trainers to implement this element from the subject trainers. In 2010, we called a few subject trainers, about four or five trainers from each state. If we add up the total, there are not many of them. About 100 trainers and these trainers are trained in their subject content and they were also trained on how to implement the entrepreneurship element into their subject. There were not many of them. (Officer 1)

From this statement, it can be seen that there were not many trainers who were well versed in the element. Furthermore, these trainers had to go back to their state and

communities in order to train the state trainers. During this delivery process, there might have been leakage and the receivers would get less than 100% knowledge of the element. The different perspectives and understandings of the element might also have affected the trainers' understanding which could probably create differences between the trainers.

Analysis of half of the teachers suggests that they needed more training for understanding the element and for implementing it more effectively. Clearly, these teachers also need more accurate materials and examples directly relevant to their teaching in class.

6.4 Summary

The findings of this study have shown that most of the teachers had implemented the element into their teaching. They looked at the suitability of their topic and if they thought that it could be implemented, then they would incorporate it into their lessons. The findings also suggest that some teachers understood what was asked from them which was probably due to their understanding of the curriculum, along with the training that they received and the discussions that they had had with their colleagues. However, despite their understanding, some teachers did not implement the element because they were not ready to implement it. The reasons they gave to explain this included the Year 1 transition period, time constraints, unsuitable topics and lack of understanding of the element. Interestingly, there were some cases where teachers had actually implemented the element unaware that they were so doing and only realized it after they were so informed by the officers who had observed their lessons. From all the interviews with subject teachers and headteachers, on the whole, it seems that the E-element was being successfully implemented.

This chapter has focused on the respondents' answers to the third research question. The structure of the questions and the respective answers revealed five themes related to the implementation: the concept of a cross-curricular element, the teaching method, school administrators' supports, monitoring, and teachers' training. From the analysis,

it seems that all the respondents had a common understanding of the concept of a cross-curricular theme and that this was consistent with what was expected of them and was also consistent with the government guideline for the delivery. Teachers and headteachers understood that the element had to be incorporated in teachers' lessons indirectly but explicitly. There were three ways which teachers can use to integrate the element into their subject and these were established in the Entrepreneurship Guideline given to teachers and school administrators.

The findings also showed that teachers had mostly opted to use discussion as the teaching method for delivering the entrepreneurship element. They had embedded the element by discussing it with their students during their lessons. According to the CDC officer, teachers only needed to develop students' thinking and characteristics through discussion while teaching their own subjects. However, one headteacher had taken her own initiative to create entrepreneurship corners in her school, and her teachers were supportive of this. This was a good example of the element being developed to cultivate students' interest in entrepreneurship. Some teachers had also shown their own creativity to embed the element into their lessons by creating something (such as bookmarks or masks) with students in their teaching and learning activity. This was a good sign of teachers' understanding of the element.

Positive support from school administrators on the implementation of the E-element was also found. Headteachers seemed to give moral support to teachers whilst also providing the facilities that teachers needed to use in their lessons. Although a few teachers felt unsupported, this was a very minor occurrence.

Notwithstanding the positive support, teachers stated that there was a lack of monitoring, both by headteachers and by officers, concerning the element. Headteachers had observed their teachers but the observation was merely around the academic activity and none of them had touched on the entrepreneurship element. In addition, the form that the headteachers use to record the observations did not have a specific section for evaluating the implementation of the element. It therefore seems

that the element was not given much priority. Rather, the monitoring of the element proved to be poor. This is an issue that was admitted by the officers. Most officers visited schools to observe the implementation of the curriculum and other programmes, and they did not put much emphasis on the element, with only few officers so doing but in small numbers.

Finally, the findings have shown that teachers' understanding of the element was impeded by the lack of training and exposure. Those who had attended training sessions tended to argue that the training was inadequate and too brief. Some teachers even said that they did not benefit from the training and had to go and discuss the element with their colleagues to get a better understanding. Trainers and officers admitted that there were some weaknesses during the first training session but this was a common problem whenever a new curriculum was implemented, and matters improve over time. This was confirmed when some teachers said that the second training session was better. Overall, it can be said that the implementation of the E-element went well but that there were some issues that needed more attention and improvement.

CHAPTER 7

Conclusion

7.1 Introduction

In this chapter, I shall first summarise and discuss the findings arising from the research questions. Then the implications of the findings for practical application and the limitations of this research study will be discussed. This will be followed by recommendations for future research. This chapter concludes with brief paragraph offering the researcher's final reflection on the study.

7.2 Aim and summary of major findings

The aim of this study is to investigate the views of key respondents concerning the implementation of the entrepreneurship element (E-element) in the new Year 1 curriculum, which was introduced in all primary schools in Malaysia in 2011. In general, most of the respondents regarded the implementation of the E-element into the Year 1 curriculum as a positive change. However, the findings have shown that only 56% of the teachers questioned had incorporated the element into their teaching. In order to learn more about the implementation of this element and the issues surrounding it, in-depth interviews were conducted with a range of respondents from different levels of the education system. These interviews provided broader views and findings pertaining to the issues of implementation.

All the data from the interviews have been analysed and discussed in relation to both theory and practice. Nine specific themes emerged in relation to the three research questions.

1. Entrepreneurship education: contrasting perceptions between the respondents and the MOE;
2. Developing students' interest in entrepreneurship;
3. Helping ethnic Malays to progress;
4. Developing human capital and improving economic growth;
5. Common perceptions of the cross-curricular element;
6. Discussion as the most-used teaching technique;
7. Positive support and agreement from school administrators;
8. Lack of monitoring; and
9. Lack of training and exposure.

7.3 Summary of findings

I shall now offer a summary of these nine themes in relation to my research questions.

Research question 1 - What are the key respondents' perspectives and understanding regarding the concept of entrepreneurship education?

The interviews with the five different groups of respondents (officers, expert teachers, trainers, headteachers and subject teachers) showed that there were contrasting perceptions regarding the concept of entrepreneurship education between the teachers and headteachers and the MOE. The findings showed that the views of 71% of the teachers and 44% of the headteachers in regard to this concept contrasted with those of the MOE. The front-line respondents (subject teachers and headteachers) related the concept of entrepreneurship education to something similar to business and business-related activities (selling and buying, generating income, becoming successful businessmen). However, in the Entrepreneurship Element Guidebook, the MOE stated that the concept of entrepreneurship education is related to developing pupils' entrepreneurial characteristics, attitudes, thinking skills and culture. It is clear that quite large numbers of the teachers had different ideas of the concept compared with

those of the MOE. It can be argued that this might impede the effectiveness of the element because, in any educational reform, teachers should have a thorough understanding of the aim and objectives of the curriculum which they are required to deliver (Fagan, 2006; Hytti & Gorman, 2004).

Nonetheless, not all the teachers had a different understanding. The findings showed that two teachers had a similar understanding to that of the MOE when they reported that entrepreneurship education is about developing pupils' entrepreneurial characteristics and attitudes. The responses of the officers and trainers demonstrated that they also had similar ideas about the concept. This might be because of their involvement with the implementation and the first-hand information that they had received from the curriculum developers themselves. As for the expert teachers, their experience of teaching an entrepreneurship component (in the Living Skills subject) had given them the advantage of understanding the concept better. The findings also revealed that there were six teachers who did not understand the concept well, but this was due to their poor understanding during the training.

Research question 2 - What are the key respondents' perceptions of the purpose of the implementation?

The analysis of the findings showed that 27 of the 29 respondents (about 93%) who responded to this question reported that they thought that the implementation is good. They claimed to see the positive effects that this element has on pupils' development.

During the interviews, 19 teachers and six headteachers expressed similar views and opinions on the reason for the implementation of the E-element. From their responses, three themes emerged. The first theme is related to developing pupils' interest in entrepreneurship. Seven teachers reported that they thought that the element was introduced because the government wants to develop entrepreneurship interest among

students, and two headteachers thought that this element was introduced to develop students to become more business minded and involved with business.

The second theme is related to some teachers indicating that the objective is to help ethnic Malays to progress. There were only three teachers who raised this but it is nevertheless an interesting issue. These teachers claimed that the reason for this element being introduced in primary schools is because the government wants to help the Malay ethnic group to progress. It is widely known in Malaysia that the government has been helping the Malays and other indigenous people (the *Bumiputra*) to boost their economic level. Even though the Malays form the largest proportion of the population in the country, compared with other ethnic groups they have the lowest income. Thus in all its economic plans, the government consistently tries to improve the level of income for everyone in the country, but especially for the *Bumiputra*. Although these three teachers related the objectives of introducing entrepreneurship into schools to helping the Malays, the curriculum officer on the other hand stated that this element had been introduced to develop entrepreneurial characteristics and attitudes in all pupils regardless of their ethnicity.

The third theme derived from the analysis is that the teachers and headteachers suggested that the objective of the implementation is to develop human capital and thus improve the nation's economic growth. The findings show that two teachers believed that the objective is to develop human capital and another two teachers related it to improving the national economy. Two other teachers and two headteachers said that it is also about building an independent society and encouraging self-employment.

As discussed above, one of the objectives of this study was to explore the respondents' opinions on the issue forming the research purpose and from the findings, the three themes described above developed. Teachers and headteachers seemed to have their own opinions about why entrepreneurship is being promoted and this was due to their different levels of understanding and exposure to entrepreneurship.

Research question 3 – What were the issues faced by the respondents, especially the teachers, as they implemented the entrepreneurship element?

The findings show that more than half of the teachers who responded to this issue reported that they had implemented the element in their lessons. However, for various reasons (transition period, time constraints, unsuitable topics, lack of training), some teachers had not implemented it, but their numbers were very small. On the whole, the element had been successfully implemented.

By analysing the responses to research question 3, five themes were identified. The first is that there was a common perception among the respondents on the cross-curricular element. The teachers knew that it is an element that needs to be incorporated while teaching their own subjects and that it has to be taught indirectly but explicitly. The headteachers also understood this. The second theme is related to teachers' teaching methods and it was found that the teachers opted to use discussion as their teaching approach. This is in line with what was expected by the MOE. However, the findings also showed that there were some teachers and headteachers who were creative and had introduced entrepreneurship using more interesting approaches.

The third theme has to do with the administrative support given to the implementation of the E-element. The findings revealed that most teachers reported that they received good support from their school administrators. They said that their administrators were very helpful and supportive especially in providing the facilities that the teachers needed for their teaching. Nevertheless, the findings also revealed that there were teachers who felt unsupported, but this was only a very minor case. The fourth theme is about monitoring, since the findings revealed a lack of monitoring of the implementation. Most of the teachers involved in this study related monitoring to classroom observation and reported that their headteachers observed them but did not touch on the entrepreneurship element. The headteachers also said that there were not many officers who came to observe, and that if they did come to schools, they came

for other programmes. The findings also showed that only a few officers had come to some schools, observed the teachers and discussed the element with them. The headteachers also reported that these visiting officers had used the existing observation report form on which there is no indicator to report observation of the new element. On the other hand, the officers said that due to their particular circumstances, such as lack of personnel, they could not visit all schools and monitor each one of them.

The final theme is about the lack of training and exposure. The findings show that of the 30 teachers involved in this research, 24 had attended formal training, two had received in-house training and four had not attended any training at all. Nineteen teachers reported that the training pertaining to the E-element was poor and inadequate. The limited time allocated to introducing the element and the unclear explanations which had been given were said to be the factors that impeded teachers' understanding of the element. For the trainers, this element was not hard to learn or to implement. This might be due to the training that they had themselves received directly from the CDC. However, the trainers admitted that different understanding and approaches among the trainers would have given different results in teachers' understanding. The findings also show that the officers were aware of this problem, but they said that financial and manpower limitations had prevented them from giving additional training for Year 1 teachers. However, despite all of these problems, the findings indicated that things are improving. This can be seen in the reports of some teachers about better approaches to training during the Year 2 teacher training.

Overall, in answer to the main research question, 'How does a sample of key respondents perceive entrepreneurship education and its implementation in the Year 1 curriculum in primary schools?', it can be concluded that the respondents had different views on entrepreneurship education and its implementation. Nevertheless, most agreed that introducing the new element into their lessons was good. The respondents had various views on the concept of entrepreneurship education and its objectives, but this did not prevent the teachers from implementing the element. Although there was some evidence suggesting that this element was not implemented, this involved only a

very small number of teachers. Interestingly, discussion had been used by all of the teachers as their teaching method. A few of them had used their own creativity to add other teaching techniques to make their lessons more interesting. The findings also revealed that the teachers had received positive support from their school administrators. However, as in any other educational reform, the findings from this study suggested that there were some problems in the implementation: lack of monitoring, training and exposure were the issues that were raised by some of the respondents in this study.

With regard to literature review discussed in Chapter 2, this research study agrees with the work of most scholars (Carter, 1973; Chan, 2010; Flores, 2005; Fullan, 1982; MacPhail, 2007; Olantunbosun & Edouard, 2002; Rennie, 2001; Zhong, 2006) pertaining to curriculum reform, especially those from Malaysia who had specifically looked at the implementation of the previous primary school curriculum (Mohd Isa, 2007; Mukherjee & Singh, 1983; MOE Report, 1989; Noor Azmi, 1988). With regard to this current study, it is important to highlight the findings of both the work of Mukherjee and Singh (1983) and the MOE Report (1989) that had studied the previous curriculum. Both of these sources indicated that the training given to teachers was done hastily and briefly and that this had hampered some teachers and school administrators from understanding the changes. This undoubtedly had impeded the implementation of the previous curriculum.

This current study indicated almost the same finding. Even though the teachers had implemented the entrepreneurship element in their lessons, most of them stated that they were not given enough exposure and did not fully understand the concept. This they claimed had impeded the implementation. They also requested more training and exposure. According to Rabbior (1990), the effectiveness of teaching entrepreneurship education depends on the educators, and certainly teachers' confidence in implementing the curriculum comes from many factors, one of which is the understanding of the knowledge (Harlen & Holroyd, 1997). Thus, well-planned and continuous training is needed to ensure the implementation of entrepreneurship

education in primary schools in Malaysia because different people have different perceptions (Dalin, 1978) and it is important to understand the ways in which teachers interpret and deal with the change process (Flores, 2005). Furthermore, the success of the implementation depends on the understanding of and common belief about the aim and objective of entrepreneurship education in order to ensure the success of its implementation (Fagan, 2006; Hytii & Gorman, 2004).

7.4 Implications of the research for knowledge and practice

This study has attempted to look at the implementation of the entrepreneurship element by conducting interviews with some key respondents from various levels of the education system. This research was conducted as a case study with three major focuses: curriculum reform, human capital and entrepreneurship education.

7.4.1 Contribution to the knowledge of curriculum reform

In terms of its contribution to the knowledge of curriculum reform, this study enhances our understanding of several aspects of curriculum reform. The first is on teachers' knowledge and understanding. Previous studies have shown that to ensure the success of reform, teachers' knowledge (Tobin & Dawson, 1992) and understanding (Fullan, 1982) are important. Thus, this current study contributes to the existing knowledge of reform by showing that the front-line respondents (teachers) involved in this study had various perceptions and understandings of entrepreneurship education. Teachers are the implementers of the curriculum (Sufean, 2008) and their understanding of the reform is important. The teachers who participated in this study reported that they understood the implementation and the benefits that it has, but for a range of reasons, their perceptions and understandings varied in regard to the concept of entrepreneurship education and the objectives of its implementation. Their responses during the interviews showed that their knowledge, training and exposure to entrepreneurship education and curriculum reform had caused this to happen. Teachers

are all individuals, so their different perceptions and beliefs about curriculum change could become obstacles for educational change (Dalin, 1978).

When teachers' understandings of curriculum reform are diversified, this could lead to failure to achieve the aim of curriculum reform. This study therefore suggests that the curriculum developers at the MOE should look into this issue and ensure that all teachers have the same ideas about and understanding of the change that is being proposed. One way of doing this would be to look at the curriculum dissemination strategies. However, the findings of this study revealed that the dissemination strategy in this case had not been a total success because some teachers complained about the poor training they had received. The findings show that the CDC officers were aware of this and they said they had taken the necessary actions to overcome the dissemination problem for future training. Nevertheless, dissemination strategies are important in educational change because curriculum change can fail if the wrong dissemination strategy is used (Kelly, 2010). Thus, this research also highlights the importance of the curriculum dissemination process because for teachers to fully accept changes, curriculum developers need to find the appropriate strategy to deliver it (Cooper, 1977).

This study has likewise enhanced our understanding of the second aspect, which is the training. There are many authors (as discussed in Chapter 2) who have emphasised the importance of training prior to curriculum reform. Some Malaysian authors who studied the previous reform of the curriculum (the KBSR) identified lack of training as one of the challenges faced during the reform (Hamidah, 2006; Mohd Isa, 2007; Noor Azmi, 1988), and this current study has reported the same finding. Teachers in this study raised the issues of training and exposure to the new element. They complained that the training that they had received was inadequate and had resulted in poor understanding about the element and its implementation. Undoubtedly, in order for any curriculum reform to be successful, emphasis must be put on teachers' training because for change to happen, teachers need to understand what they need to teach and how they should teach it (Shulman & Shulman, 2004). In addition, teachers'

knowledge is a very important component in curriculum reform (Tobin & Dawson, 1992), and therefore teachers need to understand the changes and be able to take the responsibility to become both learners and informers (Anwar, 1989).

This study has highlighted the lack of training issue and supports the findings of some previous studies conducted on curriculum reform which emphasized the issue of inadequate training. Undeniably, the success of any curriculum reform depends on teachers' understanding about how to execute it (Kelly, 2009) and ignoring teachers' development related to the reform might affect the reform process (Organisation for Economic Co-operation and Development, 1975). Therefore, it could be argued that training is crucial and it is important for the curriculum developers to emphasise teachers' training prior to implementation and also after implementation.

An interesting point about this study is that it also takes into consideration the views of teachers' trainers. There have been few research studies that have looked at trainers' perceptions when discussing curriculum reform. Adding the trainers has given a distinct advantage to this study because it made it possible to gather views from a varied group of respondents (from curriculum developers to trainers, expert teachers, school administrators and teachers) who are involved with curriculum dissemination and implementation. In addition, the trainers who participated in this study also offered their views on the training that had been conducted. Surprisingly, the findings revealed that the trainers claimed that there were some differences in the views and understanding among the trainers themselves regarding the implementation of the entrepreneurship element. This was because they had received training from different representatives from the curriculum developers. Their understanding was developed from the training that they had attended and this might have had some consequent impact on teachers' understanding as well (various levels of understanding among the teachers about the implementation). This finding is interesting and it adds depth to the literature pertaining to training. It indicates that not only is teachers' training important, but that curriculum developers should also emphasise trainers' training because their understanding is important as well. Trainers are the

disseminators of the curriculum. They train teachers and therefore training them is also crucial for ensuring the success of curriculum reform. Trainers' mutual understanding of and views on the implementation would enable them to deliver more accurate training for teachers.

The third aspect is monitoring, which is also considered to be an important element in ensuring the success of curriculum reform. According to Mojkowski (2000), monitoring helps schools and those involved in curriculum implementation to achieve their objective. Thus, to ensure the success of curriculum reform, monitoring is crucial. Although some previous writers (Earley, 2000; Hord & Huling-Austin, 1986) have emphasized the importance of monitoring in curriculum implementation, this current study showed a distinct lack of it by the respective authorities (headteachers and officers) and this had affected the implementation process. Education reform in Malaysia applies the top-down model (Macdonald, 2003) and all instructions come from the top management level (the MOE) and trickle down to the bottom level in schools, the teachers. Teachers in this system are expected to receive instructions and to implement all government plans and reforms. However, as implementers, teachers cannot avoid the challenges and problems that occur during the implementation. This study highlighted the fact that due to the lack of monitoring, most teachers claimed that they had not received feedback on what they had incorporated into their lessons. They also voiced their difficulty in finding the right expert to consult about implementing the entrepreneurship element, explaining that their headteachers were not well versed in the issue and that officers did not visit their schools. According to MacPhail (2007), lack of understanding of curriculum implementation and one-way communication in curriculum reform would leave teachers longing for more specific direction and clarity on what they were required to do and how to do it. Thus curriculum developers together with officers and headteachers should emphasise monitoring and observation because this might help teachers to realise their strengths and weaknesses in implementing the element.

In addition, the cross-curricular nature of the E-element made it all the more important that it should be monitored because there might be chances of teachers forgetting or purposely avoiding implementing it. Pauziah (2004) studied environmental education introduced as a cross-curricular element in primary schools and found that teachers had not implemented it because of lack of exposure during the training on environmental education, time constraints and the lack of teaching materials. Thus, a cross-curricular element needs to be monitored efficiently since failure to do so will result in it not being implemented.

7.4.2 Contribution to the knowledge of curriculum reform

The present study also provides additional evidence with respect to human capital theory. The findings support the notion of the existence of a relationship between human capital and education, and strengthen the theory that was raised by Nelson and Phelps (1966) and Sweetland (1996) about a positive relationship between human capital and education. However, this current study puts more emphasis on teachers as human capital in the education system. The interviews with some respondents revealed that they stressed teacher training. The officers said that teachers had been given training prior to the new curriculum implementation and the teachers argued that they needed more training to ensure that the implementation would be successful. Lack of training and professional development for teachers had resulted in poor understanding among the teachers. According to Smylie (1992), school effectiveness is achieved when teachers are prepared to show their understanding of the prior and new knowledge required in their teaching. Therefore, as curriculum implementers and human capital in the education system, teachers' training and continuous professional development is very important and should be taken into consideration by curriculum developers.

7.4.3 Contribution to the knowledge of entrepreneurship education

As for the contribution related to entrepreneurship education, this research showed an interesting finding pertaining to respondents' understanding of the concept of entrepreneurship education. Most of the literature has distinguished between entrepreneurship education and business education (Carland *et al.*, 1984; Gibb, 2007; Solomon *et al.*, 2002) and some scholars have argued that the two concepts are different and that even though they can be discussed under one umbrella, basically they are not the same (Carland *et al.*, 1984). Surprisingly, this current study found that some teachers and headteachers related entrepreneurship education to business-related activities. They talked about entrepreneurship education as something involving selling and buying activities, skills to generate income, and teaching students to become successful businessman. The findings showed that their views were slightly different to that proposed by the Ministry, since the MOE's idea of entrepreneurship education is to develop pupils' entrepreneurial attitudes, characteristics and culture. As was argued in Chapter 2, teachers' understanding of the concept of entrepreneurship education is important because the effectiveness of the implementation depends on them (Rabbior, 1990). It could therefore be argued that their understanding of the concept could be crucial. Furthermore, in ensuring the success of the implementation, both teachers and curriculum developers should have a thorough understanding of the aim and objectives of the programme or curriculum that they plan to install (Fagan, 2006; Hytti & Gorman, 2004). The findings of this current study seem to prove otherwise. Several teachers and headteachers had different views of the concept of entrepreneurship education. This study has therefore shown the importance of having adequate training on and exposure to the concept so that these respondents would really understand the concept and have similar ideas to the concept suggested by the MOE.

This study also adds to the growing body of literature on entrepreneurship education, particularly in primary schools. There have been many previous studies which have discussed entrepreneurship education in secondary schools and universities, but very little research which has focused on primary schools. In Malaysia, the

entrepreneurship element was only recently introduced in the new KSSR curriculum in 2011. To the best of the writer's knowledge, there has been no research that has looked specifically at the entrepreneurship element in the Year 1 curriculum. This study can therefore add to the literature relating to entrepreneurship education in primary schools. Furthermore, this study also looks at the implementation of entrepreneurship education as a cross-curricular element. Many articles and books on entrepreneurship education and on the cross-curricular approach were examined, and I also searched online sources for articles and books which specifically discuss entrepreneurship education as a cross-curricular element, but I could not find a single one. I therefore believe that this study will be a valuable resource for curriculum developers if they want to introduce entrepreneurship education into a curriculum using a cross-curricular approach. The responses from all the different respondents from different levels in the education system could provide a greater understanding of the implementation and the issues that surround it.

7.4.4 The strength of the research

As indicated throughout this thesis, this research is an exploratory case study. It should be noted that this study does not test or generate any theory but involves investigating the questions of what is happening and why (Thomas, 2011). This study looks at respondents' perceptions of the implementation of the entrepreneurship element in the Year 1 curriculum and uses case study as its research design. The strength of this study lies in three aspects. The first is the variety in the group of respondents who were selected from different levels of the education system. This study involved officers (including curriculum developers), expert teachers in the entrepreneurship education field, trainers who trained the teachers, headteachers who monitor the implementation in schools, and the subject teachers who are the implementers of the curriculum. Various responses were gathered from these groups and this has allowed the implementation issue to be discussed in greater depth and more comprehensively. The second strength of this thesis is in the selection of the research sample. There were three sampling methods used in this case study; the systematic sampling method

(for choosing schools first, then selecting subject teachers and headteachers), the purposive sampling method (officers and experts teachers) and the convenience sampling method (trainers). As all the schools were selected using a random sampling technique, this ensured unbiased sampling and allowed the findings to be generalised to the whole district. In other words, this study gives curriculum developers and school administration general ideas about the implementation issues in their schools and the whole studied district. Any action to be taken to ensure effective implementation could be applied to all the schools in the same district. The third strength of this study lies in the research instrument used, the semi-structured interview. This kind of interview allows a researcher to have face-to-face and in-depth interviews with individual respondents. It also gives more freedom for the respondents to speak their minds with the researcher probing where necessary to elucidate any unclear issues that are being discussed. All these three strengths of this research have undoubtedly made the reading more interesting.

7.4.5 Implication on practice

This study could also become a guideline for the MOE. It has investigated respondents' perceptions of entrepreneurship education and its implementation. The results show that most respondents agreed that the change is good and some of the teachers had implemented it. However, this study also reported several problems that arose during the implementation, especially on the issues of the lack of training and monitoring. Teachers and headteachers highlighted these issues and this means that there are some flaws in the implementation process. These issues need to be taken seriously because they might impede the success of the implementation. Therefore, this study might suggest to the MOE that action should be taken to give extra training for teachers and headteachers so that they can have a better understanding of entrepreneurship education and its implementation. This might take time and expense (which had been the constraints), but investment in education will help to develop better human capital in the country (Becker, 1992; Kumar, 2006, Nelson & Phelps, 1966). Furthermore, this thesis could benefit the MOE when it plans to implement

future curriculum reform or education policy. The findings have highlighted the importance of providing teacher training and effective monitoring. So, in introducing any new reform, the MOE should concentrate more on these two aspects. These two aspects work hand-in-hand because monitoring is the tool that helps to track the progress of an implementation (Earley, 2000) and without proper monitoring, it would be difficult to ensure the success of any implementation.

7.5 Conclusion

Human capital development is a significant investment for any developing country as it has a positive impact on society and on the national economy. Malaysia, as other countries, has invested in its human capital through its education system. Education undeniably is seen as a way to improve people's social lives and boost the level of the national economy and for that reason, it is important to have an excellent and globally competitive education system. Recently, the MOE has reformed the primary school curriculum and has introduced entrepreneurship education as a cross-curricular element. This was intended to develop entrepreneurial characteristics, attitudes and culture among pupils. This reform is also expected to help to develop students who could become a high-quality and competitive source of human capital.

Entrepreneurship education in Malaysia is not new as it had been emphasised since the 1970s when the government introduced its first National Economic Policy. It had been introduced widely across society through various training programmes and was also introduced in schools, colleges and universities. However, introducing it in Year 1 in primary schools is a new attempt and there are so many things to look at and to explore. Nevertheless, it is not too late. Developed countries such as the USA introduced it in their elementary school systems many years ago and there have been many studies that have shown the positive impact of this implementation.

Entrepreneurship education in Year 1 is taught by incorporating the entrepreneurship element into all the subjects in primary school and this study has investigated the

perception of respondents from different levels in the education system in regard to its implementation. In general, it can be concluded that most respondents had positive views of the implementation of the entrepreneurship education. Even though there were slight differences in the understanding of the concept of entrepreneurship education, the findings of this study have shown that some teachers had implemented it in their lessons. The teachers also understood the cross-curricular approach and used discussion as their principal teaching technique. In addition, it can also be concluded that most school administrators had been very supportive of their teachers in the implementation process and this might be part of the essence of successful implementation. However, like previous research studies related to curriculum reform, the findings of this study also highlighted various difficulties and identified lack of training and monitoring as major problems that were faced throughout the process. Teachers indicated that they had inadequate exposure to the subject and its implementation. They also stated that there was a lack of monitoring by the administrators and curriculum developers of the implementation process. This is believed to have impeded the implementation success. Although this study was conducted in only one district, it has nevertheless tried to cover as widely as possible all areas related to the implementation. However, the findings from this research should not be taken to represent the situation across the whole nation because this study has its inherent limitations. Nevertheless, it can be guidance for curriculum developers and administrators as it has reported issues and limitations pertaining to curriculum reform and the implementation of entrepreneurship education.

It is important to highlight that entrepreneurship education in primary schools in Malaysia is still at an early stage and there are many things that could be done to improve it. I have to agree with Mukherjee and Singh (1993) who argued that more time is needed to look at the issues and process of curriculum implementation. Nonetheless, this does not mean that it cannot be successful. Reform might take time to be successful, but with continuous improvement and constant monitoring it should be possible.

7.6 Limitations of the research

There are some inevitable limitations to this research, and these will be discussed next.

7.6.1 Generalizing the findings

This research was conducted in only one district in one of the thirteen states in Malaysia. This will therefore limit the possibility of generalising the findings to the whole state, far less to the whole country. Each district has different characteristics and the findings from one district cannot be applied in any other district unless it has virtually identical characteristics. However, this research used a random sampling method when choosing the schools for the case study. This allowed the researcher to generalise the findings to the same district. In other words, the findings from this study reflect the actual scenario in all the schools in the studied district. This is in line with Bryman's (2008) suggestion that inferences could be made from findings because of the random sampling of the population.

Furthermore, only specific subject teachers, headteachers, trainers, expert teachers and officers were selected as respondents. The findings therefore only reflect what these particular respondents had to say. So the findings cannot represent the scenario of the whole country but they can be used as guidance for a better understanding of the subject matter.

7.6.2 Number of respondents interviewed

This study involved interviews with five different groups of people; curriculum officers, expert teachers, teachers' trainers, headteachers and subject teachers. Although data were collected from these different groups, the number of respondents in each group was not large. Due to time and budget constraints, I have had to be realistic with my work. Bryman (2008) stated that time and costs are important factors that need to be considered when choosing samples for study. Thus, for this research study, I chose samples which I thought were appropriate and sufficient for my

research purposes. I have covered different levels of representation from the curriculum developers who introduced entrepreneurship education, officers and headteachers who monitored the implementation, expert teachers who are expert in the entrepreneurship education field, trainers who trained the teachers and teachers who had implemented the change. This would suggest that I have covered almost every level involved in the issue. However, I would agree that it might possibly make a difference if a larger sample of respondents had been used.

7.6.3 Length of interviews sessions

I had set the interviews questions to take up to 35-40 minutes for each session. However, because of various limitations,⁸⁵ the length of the interviews among the respondents varied. This affected my findings to some extent, especially in the interviews with teachers. I could not ask all the questions that I had planned to ask all the teachers because of the time limitations. Some interviews were brief, not in-depth and did not cover many aspects. This was beyond my control. However, I made sure that I tried my best to ask all the important questions that would produce answers to the main research questions.

7.7 Recommendations

Based on the findings from this study, some recommendations for action to be taken by relevant parties related to entrepreneurship education in primary schools in Malaysia can be proposed. If the MOE really wants this element to be successful, these recommendations should be taken into consideration:

⁸⁵Some teachers arrived very late for the interview session and this left me with only a few minutes to interview them. This was also the case with the headteachers; I could not talk longer with them because they had many things to do. Most of the interviews were interrupted by phone calls and by teachers or clerks approaching the headteachers for their signature or for other reasons.

7.7.1 Syllabus

In the new curriculum, teachers were asked to implement the E-element wherever and whenever they felt it possible to do so. The findings showed that many teachers were not sure when and where to incorporate the element into their lessons. Some of them felt that it was a burden to them because they not only needed to think about planning and teaching their lessons, but also needed to think about incorporating the element. It is therefore suggested that curriculum developers in the MOE should be more specific in the syllabus and scheme of work for teachers on when and which topics are suitable for introducing it. It is hoped that if this is done, teachers would not face problems with incorporating the element anymore; they can just follow the scheme of work and introduce it. This would also ensure that the element is implemented throughout the year. In the current system, the findings showed that some teachers had not implemented it because they could not find suitable topics in which to incorporate it. The officers, on the other hand, claimed that this element is easy to incorporate in any topic in every subject. Thus, with an appropriate and detailed syllabus, this problem could be overcome. Furthermore, this element is a cross-curricular element. If teachers are not given relevant details about when and where to incorporate it, there are possibilities that they might not incorporate it at all.

7.7.2 Training

The findings identified the lack of training: 87% of the teachers said that they had attended the training, but many of them reported that the training was poor and inadequate. They said that they needed more exposure. It was also reported that there was no further training or professional development given to the Year 1 teachers. In curriculum reform, teachers' understanding of the reform is important, thus the training for the curriculum introduction stage is crucial. The findings showed that the training related to the E-element was carried out hastily and was inadequate, and this had resulted in a lack of understanding among the teachers. Therefore, the MOE has to give careful consideration to the training sessions in the future to ensure that more detailed and high-quality training is given to teachers. It would help if the training on

this element were given more attention (more hours of training and some workshop/hands-on training) so that teachers would have a much clearer idea about what they have to do and deliver. In addition, the MOE also needs to look at teachers' development in implementing it. Thus, continuous training would help teachers to maintain their understanding, productivity and efficiency in delivering the element (Olaniyan & Okemakinde, 2008).

The findings also highlighted that budget had been one of the problems that restricted further training. If this is the problem, the MOE could suggest that every school should use the expertise that is already present in the school. In every school, there are Living Skills teachers who have experience of teaching business and entrepreneurship components, and these teachers could help to enlighten other teachers about entrepreneurship education. Furthermore, headteachers could establish a small committee of the teachers in their school who have a better understanding about the E-element as a cross-curricular element or ask expert trainers to share their knowledge and understanding with other teachers through in-house training. This would help to kill two birds with one stone because the teachers would gain better understanding and, at the same time, there would be no cost involved.

7.7.3 Trainers

It is also suggested that the MOE should provide eligible trainers who are specialists in entrepreneurship education to contribute to training sessions. The teachers who participated in this study raised issues about some of trainers who were not well versed in the element. The officers also admitted that there were no specialist trainers engaged for teaching the E-element and that this element was only taught by normal subject trainers. It is therefore likely that the lack of expertise in the training sessions could have impeded teachers' understanding of the element. In relation to this, the findings emphasise the importance of having trainers who are well-versed in the element and in curriculum reform.

7.7.4 Specific officer or teacher to handle entrepreneurship education

Furthermore, it would also be helpful if the MOE could have specific officers or teachers in every department or school who could help teachers with the implementation. These officers/teachers should be people who are easily contactable and are creative in helping teachers to solve the implementation of the element. As argued in Chapter 1, this suggestion is deemed to be important. Someone in this key position could help teachers to understand better and this might speed up the implementation process and ensure success. It might be argued that it is a waste of resources to have someone just to monitor or help teachers with this element, but I would argue that it would not be a waste. The officers or teachers could multi-task, but they would need to give priority to the implementation and development of this element. Introducing this element is not the end of the reform process, but the beginning (Bantwini, 2010).

7.7.5 Practical exposure for students

Malaysia is becoming a developed nation and thus having good quality human capital is a necessity. One of the ways to ensure this is through education (Becker, 1992; Kumar, 2006). Because of the increasing demands of the global economy, the MOE has introduced entrepreneurship education as a cross-curricular element in the country's schooling system as early as Year 1. So far, it is still only a cross-curricular element without any specific practical lessons. As a researcher and someone who has been involved in teaching entrepreneurship education, I suggest that the MOE should introduce some practical experience for students in the future syllabus. In the US, students in elementary schools have been exposed to entrepreneurship programmes such as the Mini-Society (introduced by Marilyn Kourilksy) which allow them to be personally involved in entrepreneurial activities. That programme does not just give students hands-on experience, it also increases their understanding of entrepreneurship and economics. In relation to entrepreneurship education in Malaysia, if students are given earlier exposure which allows them to be involved practically, this would give

them a better understanding of entrepreneurship. This would also help to develop entrepreneurial characteristics, attitudes and culture among them.

7.8 Future research directions

This study has provided some insight into entrepreneurship education in primary schools by exploring the perceptions of some key respondents of the implementation of the E-element using the cross-curricular approach in the subjects taught in Year 1. It has also given an insight into some issues surrounding the implementation. So far, little research has been carried out on entrepreneurship education in primary schools in the Malaysian context, and there is much scope for future study. It is felt that these insights can contribute towards decisions and actions for the successful implementation of this element in the future. The following areas of research are suggested for future study.

7.8.1 As has already been discussed, one limitation of this present study is that it was carried out in only one district in one of the thirteen states in Malaysia, and this restricts the generalizability of the findings. In order to obtain a bigger picture of the implementation of this element in all primary schools in the country, future research should be based on a larger sample including different schools in the country representing all districts and states. Using a larger scale might give different answers to the same research questions. However, to explore and study a larger sample, the methodology might need to use instruments such as survey and focus group in order for it to be more cost- and time-effective.

7.8.2 This was a qualitative research study and used only one quantitative method instrument which was semi-structured interviews. However, if other methods and instruments were used, the results could probably show different findings. Thus, for more diversified results in future research, it is suggested that researchers should use a

mixed-method approach which combines qualitative and quantitative techniques. By using the mixed-method approach, a researcher could obtain a broader range of answers (Johnson & Onwuegbuzie, 2004). A researcher might also show robust evidence in research through a combination and justification of findings from both qualitative and quantitative methods. They might get the best of both methods (Bryman, 2008; Johnson & Onwuegbuzie, 2004) and this could help in understanding the implementation better.

7.8.3 Further research could also look at the effectiveness of the entrepreneurship element. This current study only explored the respondents' perceptions of the implementation. It would be interesting if future researchers could examine how effective this element is for the development of entrepreneurial characteristics, attitudes and culture in pupils. This would then help the government to see the effectiveness of their programmes.

7.9 Researcher's final reflection

This research study was conducted to explore respondents' views of entrepreneurship education in primary schools. This involved interviewing five different groups of respondents from different levels of the education system. As in all other studies of this scale, this involved collecting all the relevant data, analysing it and discussing it in as much detail as possible.

This study was drawn from my interest and experience in learning and teaching entrepreneurship education in schools and at Teacher Training College. My interest in entrepreneurship education is both personal and professional. I started learning entrepreneurship in school and obtained my first degree and my master's degree in subjects related to business studies and management. Further experience acquired while running my own business and working in a multi-national company enabled me to develop a deeper interest in entrepreneurship. I have also taught entrepreneurship

education in schools and in Teacher Training College. From all of my experiences, I came to realise the potential of entrepreneurship education to enhance students' ability and positive attitude in schools and in adult life. I therefore believe that entrepreneurship is a very important subject to be taught in schools, colleges and universities. In addition, with all the government's efforts to develop entrepreneurship in the country, having an entrepreneurship element at the very early stage in the education system is a good move and a crucial first step for developing high-quality human capital.

During the process of writing this thesis, there are many things that I have found and learned. I have always known that educational change is not easy and that there are many obstacles to be encountered in implementing it. Carrying out this research study has confirmed my assumption. There are many loopholes where things can go wrong with the implementation. There are also many complaints about and much dissatisfaction with the implementation. However, from my experiences with the Malaysian education system, I know that no matter how hard it is or how much people might disagree with it, reform will usually be accepted sooner or later. Everything can work as planned with continuous changes made by the curriculum developers in order to provide the best education for all. According to Fullan (2007), educational change cannot be accomplished overnight: it takes time, effort and cooperation from everybody involved with the change process.

Appendix A

Enrolment numbers for all levels of schooling and universities for Tenth Malaysia Plan

Enrolment at pre-school, primary and secondary levels increased with improved accessibility to quality education	In pre-school education for children aged 4+ to 5+ years old, the participation rate rose from 63.0% in 2005 to 67.6% in 2009. This increase was made possible with the expansion in pre-school classes. The number of primary schools increased from 7,601 in 2005 to 7,664 in 2009, while the number of secondary schools increased from 2,028 to 2,219.
Enrolment in higher education rose from 649,000 in 2005 to 949,000 in 2009	As a result, the participation rate in the 17-23 years age group rose from 27.0% in 2005 to 31.4% in 2009.
Intake in public technical and vocational training institutes rose by 1.5% per annum.	With the establishment of 10 skills training institutes and upgrading of 16 existing institutes, intake rose to 88,050 trainees. Intake at the Malaysian Skills Certificate (<i>Sijil Kemahiran Malaysia</i> or SKM) at Level 4 or diploma in the advanced public training centres increased from 7,110 in 2005 to 29,840 in 2009, reflecting greater emphasis on skills enhancement to meet industry requirements.

Appendix B - 1

Interview Questions (Curriculum Development Officer and Head of Sector)

General questions

1. How long have you been working in the CDC?
2. How long have you been involved with the department that deals with entrepreneurship education in schools?

Perception and understanding of entrepreneurship education

Recently, entrepreneurship had been a subject of discussion among many people and in the New Economic Model, the prime minister had raised the issue of developing entrepreneurs and entrepreneurship. The Ministry of Education has made changes to the education system by introducing entrepreneurship element into the new curriculum.

3. How important or valuable do you think entrepreneurship education is in the Malaysian education system?
4. What benefits does it bring?
5. Why do you think we need entrepreneurship education?
6. What do you think of the implementation of entrepreneurship in schools in general? Why is an earlier approach to entrepreneurship for primary school students necessary?

Opinion on changes in the Year 1 curriculum; the introduction of entrepreneurship education as a cross-curricular element

7. As you know, last year the Ministry of Education made changes to the Year 1 primary school curriculum. The KSSR curriculum was introduced and there were changes in the approach to entrepreneurship education which allowed it to be introduced in Year 1. Can you explain the reason for the changes?
8. What is the thought behind the changes and who proposed them?
9. What is the role of entrepreneurship education in the new curriculum?
10. Why is it being introduced into the curriculum as a cross-curricular element and not as a discrete subject? What is a cross-curricular element?
11. What are the benefits of learning that it has as a cross-curricular element compared with teaching it as discrete subject? What is the strength of a cross-curricular approach?
12. How does a cross-curricular element work in the curriculum? How is it being incorporated into the subjects?

13. Does the teaching of the entrepreneurship element through the cross-curricular approach have any significance for the development of the Year 1 subjects as well?
14. What is the role of the Curriculum Development Centre in the implementation of entrepreneurship education in the Year 1 curriculum? What do you do in this regard and how do you do it?

Support

15. How does the Curriculum Development Centre support and help Year 1 teachers to implement the entrepreneurship element into their subjects?
16. Do you offer any training programme for them? When and what for?
17. What are the offers or help given in addition to the training?
18. Are there any resources given to teachers to help them to implement entrepreneurship as a cross-curricular element in their subject?
19. What about officers in the state/district education department? Do you train or brief them on the implementation?

Monitoring the implementation

20. How should Year 1 teachers implement and incorporate the entrepreneurship element into their teaching? How should they teach them and what should they do?
21. How do you monitor the implementation of entrepreneurship education in the Year 1 curriculum? What do you do to ensure that the entrepreneurship element are being incorporated in all the subjects and that the students learn entrepreneurial skills?
22. Who are responsible for monitoring the implementation at the state and district level?
23. Do you arrange any meetings for officers from state or district, headteachers and teachers to discuss any problems that occur during the entrepreneurship implementation? Do you ask them? Or do they call you and seek for advice?
24. Do you go to any state, district or school to monitor the implementation? Do you carry out any observations? How often? What do you find from the observations? Are they being carried out as expected by the MOE? If not, what is your plan for dealing with the problem?

Challenges

25. What do you think will be the challenges in ensuring the success of entrepreneurship education in the Year 1 curriculum? How will you overcome them?
26. What challenges do you think that teachers and headteachers will face?
27. Do you think that creating an entrepreneurial culture in primary schools can be achieved through the cross-curricular element? Why do you say so?

Appendix B - 2

Interview Questions (curriculum officers in the State Education Department and District Education Office)

General questions

1. How long have you been working in JPN/PPD?
2. How long have you been involved with the department that deals with entrepreneurship education in schools?
3. How did you get to know about the changes to the curriculum and the implementation of entrepreneurship as a cross-curricular element in the Year 1 curriculum?
4. Have you attended any meetings or briefings on the subject matter? When and where?

Perception and understanding of entrepreneurship education and the cross-curricular element

Recently, entrepreneurship had been a subject of discussion among many people and in the New Economic Model, the prime minister had raised the issue of developing entrepreneurs and entrepreneurship. The Ministry of Education has made changes to the education system by introducing entrepreneurship element into the new curriculum.

5. How important or valuable do you think entrepreneurship education is in the Malaysian education system? Do you think we need it?
6. Is developing entrepreneurial skills an important issue for society and the nation? What benefits does it bring?
7. How familiar are you with entrepreneurship and entrepreneurship education? What is entrepreneurship education as you see it?
8. What do you think of the entrepreneurship implementation in schools in general? Do you think an earlier approach to entrepreneurship in primary schools is necessary?

Opinion on changes in the Year 1 curriculum; the introduction of entrepreneurship education as a cross-curricular element

9. As you know, this year the Ministry of Education made changes to the Year 1 primary school curriculum. The KSSR curriculum was introduced and there were changes in the approach to entrepreneurship education. What do you think about these changes?

10. Can you tell me about the reason for these changes? What is the thought behind the changes and who proposed them?
11. What is the role of entrepreneurship education in the new curriculum? Why is it being introduced in Year 1?
12. Why is it being introduced into the curriculum as a cross-curricular element and not a discrete subject? What are the benefits?
13. What is your understanding of a cross-curricular element?
14. How does a cross-curricular element work in the curriculum? How is it incorporated into the Year 1 subjects?
15. What is the State/District Education Department's role in the implementation of entrepreneurship education in the Year 1 curriculum? What do you do in this regard and how do you do it?

Support

16. How does the State/District Education Department support and help Year 1 teachers in implementing the entrepreneurship element into their subjects?
17. What about financial support? Is any allocation given to teachers or schools to help them to implement the elements?
18. Is any book/module given to teachers to help them to implement entrepreneurship as a cross-curricular element in their subject?
19. If you have any problems or doubts regarding the implementation, who would you refer to? Why?

Training

20. Do you offer any training programme for them? When and what for?
21. When I carried out a pilot study last May, there were many teachers who complained that they were not clear about the element and how to implement it. Has any extra training been given to the existing Year 1 teachers to address this?

Monitoring the implementation

22. How should Year 1 teachers implement and incorporate the entrepreneurship element into their teaching? How should they teach them and what should they do?
23. How do you monitor the implementation of entrepreneurship education in the Year 1 curriculum? What do you do to ensure that the entrepreneurship element is being incorporated in all Year 1 subjects in the primary schools in this district?
24. Do you make any arrangements for meetings between officers from the district, headteachers and teachers to discuss the entrepreneurship implementation and problems that occur? Do you call and ask them? Or do they call you and seek for advice?

25. Do you go to schools and observe the teachers? How often? What do you find from such observations? Are they being carried out as expected by the MOE? If not, what is your plan to deal with the problem?

Challenges and barriers

26. What do you think will be the challenges to ensuring the success of entrepreneurship education in the Year 1 curriculum?
27. What challenges do think teachers and headteachers will face?
28. Do you think that an entrepreneurial culture in primary schools can be achieved through the cross-curricular approach? Why do you say so?

Appendix B – 3

Interview Questions (Expert Teachers)

General questions

1. How long have you been teaching Living Skills?
2. How many Living Skills classes are you teaching now? Which year (4, 5 or 6)?
3. Can you tell me about your educational background? Your academic qualification and what you majored in?
(Diploma, Bachelor's degree, Master's degree, PhD, Professional certificate, Teaching certificate)
4. Are you teaching any other subjects too?

Opinion on changes in the Year 1 curriculum; the introduction of entrepreneurship education

As you know, last year, the Ministry of Education made changes to the Year 1 primary school curriculum by introducing the cross-curricular approach into the curriculum. The KSSR curriculum was introduced and there were changes in the approach to entrepreneurship education. Until now, it has been taught as part of Living Skills subject, but now it is being implemented as a cross-curricular element in Year 1 subjects with the aim of developing entrepreneurial skills and practices in students until it becomes a culture among them. To achieve this, all subject teachers in Year 1 have to incorporate entrepreneurship into their teaching as a cross-curricular element.

5. As a teacher who has been teaching the Business and Entrepreneurship component for so many years, what do you think of the change? How do you regard these changes?

Perception and understanding of entrepreneurship education and the cross-curricular approach

6. How familiar are you with the terms 'entrepreneurship' and 'entrepreneurship education'? What is entrepreneurship education as you see it?
7. Do you think we need entrepreneurship education? Why? Does it bring any benefits to the nation and society? How?
8. What do you think of the implementation of entrepreneurship in schools in general? Do you think an earlier approach to entrepreneurship in primary students is necessary? Why?
9. Do you agree that entrepreneurship should be introduced in primary schools?

10. Now that entrepreneurship is being taught as a cross-curricular element in the Year 1 curriculum, what is your understanding of this curricular element? How do you perceive it?
11. Do you agree that entrepreneurship should be taught as a cross-curricular element? Why? Do you think that students can benefit from learning through the cross-curricular approach?
12. As a teacher who has experience of teaching entrepreneurship as a discreet component, what do you think of implementing the entrepreneurship element using a cross-curricular approach? Do you think that it is more effective?

Support

13. As an expert teacher, how do you help Year 1 teachers to implement the entrepreneurship element into their subjects? Do you offer any guidance or assistance for them on the entrepreneurship subject content?
14. In your opinion, what is the effective way or approach that can help subject teachers to understand the basic entrepreneurship knowledge and skills that could help them in their teaching?

Challenges and barriers

15. What do you think will be the challenges to ensuring the success of entrepreneurship education in the Year 1 curriculum?
16. What about the teachers' challenges? What do you think will be the challenges and barriers that will be faced by Year 1 teachers in implementing the entrepreneurship element in the Year 1 curriculum?
17. Do you think that entrepreneurship culture in primary school can be achieved through the cross-curricular element? Why do you say so?

Appendix B – 4

Interview Questions (Headteachers)

General questions

1. How long have you been the headteacher in this school?
2. Did you have any teaching experience before? What subject and where? Primary or secondary school?
3. Can you tell me about your educational background? Your academic qualification and what you majored in? (Diploma, Bachelor's degree, Master's degree, PhD, Professional certificate, Teaching certificate)
4. How did you get to know about the entrepreneurship implementation as a cross-curricular element in the Year 1 curriculum? Did you hear about it from the Curriculum Development Centre (CDC), the State Education Department (JPN) or the District Education Department (PPD)?
5. Have you attended any meeting or briefing given by CDC/JPN/PPD on cross-curricular element implementation early this year? When and where?

Perception and understanding of entrepreneurship education and the cross-curricular element

Recently, entrepreneurship has been a subject of discussion among many people and in the New Economic Model, the prime minister has raised the issue of developing entrepreneurs and entrepreneurship. The Ministry of Education has made changes to the education system by introducing the entrepreneurship element into the new curriculum.

6. How important or valuable do you personally think entrepreneurship education is in the Malaysian education system? Do you think we need it?
7. Is developing entrepreneurial skills an important aspect of society and nation? What benefits does it bring?
8. How familiar are you with entrepreneurship and entrepreneurship education? What is entrepreneurship education as you see it?
9. What do you think of the entrepreneurship implementation in schools in general? Do you think an earlier approach to entrepreneurship for primary school students is necessary? Why?

Opinion on changes in the Year 1 curriculum; the introduction of entrepreneurship education as a cross-curricular element

10. As you know, last year, the Ministry of Education made changes to the Year 1 primary school curriculum. The KSSR curriculum was introduced and there were changes in the approach to entrepreneurship education. Until now, it has been taught as part of the Living Skills subject in Years 4, 5 and 6, but now, in the new curriculum, entrepreneurship is being introduced in Year 1 and implemented as a cross-curricular element in all the Year 1 subjects. What do you think of the change? How do you regard these changes?
11. What is your understanding of a cross-curricular element? How do you perceive it?
12. Do you agree that entrepreneurship should be taught as a cross-curricular element? Why? Do you think that pupils can benefit from learning through a cross-curricular approach?
13. Do you think that incorporating entrepreneurship in other subjects as a cross-curricular element is enough to help to achieve MOE's aim?

Teaching and learning in school

14. How do the teachers in your school incorporate the element into their teaching? Are they given freedom to choose and carry out class activities in their own way?
15. Are there any special modules or text-books given to the subject teachers on entrepreneurship implementation?
16. What are the resources and facilities given to the teachers to help them to implement entrepreneurship as a cross-curricular element in their subject? Do they have easy access to these resources and facilities?

Support

17. Do the teachers get all the support that they need from the State and District Education Department in implementing entrepreneurship as a cross-curricular element?
18. As a school administrator, how do you support your teachers?
19. What about financial support? Are the teachers given any allocation for them to carry out entrepreneurial activities in the classroom? What if they want to take the students for a trip or for out-of-classroom activities? Would you allow them to do so? How frequently?

Training for teachers

20. Do you give/prepare training for your teachers in order to help them to teach entrepreneurship as a cross-curricular element? Do you have any In-Service training for them?

21. Do you think that teachers know what to do and what is expected from them in developing pupils' entrepreneurial skills and practices?

Monitoring the implementation

22. How do you monitor the implementation? What do you do to ensure that it is being incorporated into lessons?
23. Do you observe your teachers when they implement the element in their classroom? How often? If you do not, who does observe them? Are the observers familiar with entrepreneurship education or are they subject teachers themselves?
24. What if the teachers encounter any problems in implementing the entrepreneurship element? What can they do? Are there any channels for them to discuss their teaching problems? Can they easily meet you?

Challenges and barriers

25. What do you think are the challenges and obstacles faced by the teachers and the school in making sure that this element is being implemented in the curriculum in accordance with the MOE requirement?
26. Do you think that an entrepreneurial culture in primary school can be achieved through the cross-curricular element? What makes you say so?

Appendix B – 5

Interview Questions (Subject teachers - Malay Language/Arts/English Teachers)

General questions

1. How long have you been teaching Malay Language/Arts/English?
2. Can you tell me about your educational background? Your academic qualification and what you majored in?
(Diploma, Bachelor's degree, Master's degree, PhD, Professional certificate, Teaching certificate)
3. How many Year 1 classes are you teaching now?
4. Are you teaching any other subjects too?
5. How did you get to know about the entrepreneurship implementation as a cross-curricular element in the Year 1 curriculum? Did you hear about it from the State Education Department (JPN), the District Education Department (PPD) or from your headteacher?
6. Have you attended any training given by JPN/PPD on implementing the cross-curricular element into your teaching either early this year or last year? When, where and for how long?

Opinion on changes in the Year 1 curriculum; the introduction of entrepreneurship education

As you know, last year the Ministry of Education made changes to the Year 1 primary school curriculum by introducing the cross-curricular approach into the curriculum, and the aim is to develop entrepreneurial skills and practices in primary school students until it becomes a culture among them. To achieve this, all subjects teachers have to incorporate entrepreneurship element into their teaching as a cross-curricular element.

7. As a teacher who has been teaching Malay language/Arts/English for so many years, what do you think of the change?
8. As a subject teacher, do you understand what is being asked from you in the new curriculum? Do you know what to do and how to do it?

Perception and understanding of entrepreneurship education and the cross-curricular approach

9. How familiar are you with the terms 'entrepreneurship' and 'entrepreneurship education'? What is entrepreneurship education as you see it?
10. Do you think we need entrepreneurship education? Why? Does it bring any benefits to nation and society? How?

11. What do you think of the entrepreneurship implementation in school in general? Do you think an earlier approach to entrepreneurship for primary school students is necessary? Why?
12. Do you agree with entrepreneurship being introduced in Year 1 as a cross-curricular element? Why/why not?
13. What is your understanding of a cross-curricular element?
14. Is it worth students learning entrepreneurship? Does it benefit them? Is it related to their daily life?

Training

15. You said earlier that you had attended training on how to implement the cross-curricular element in your teaching. During the training session, were you told how to incorporate the entrepreneurship element into your teaching?
16. Was the exposures given during the training enough for you to implement the elements into your teaching?
17. If you were offered training in teaching the entrepreneurship education as a cross-curricular element in the near future, would you attend the course again? Which issue should it cover, teaching approaches or subject knowledge? Why?

Syllabus

18. I believe that you are familiar with the Malay language/Arts standard document (the syllabus). Is the implementation of entrepreneurship education as a cross-curricular element clearly stated in that document?
19. According to the document, when and how should you incorporate the entrepreneurship element into your teaching? Is there any guidance given to you on how to implement it?

Teachers' readiness

20. Since it is compulsory for all subject teachers to incorporate entrepreneurship as a cross-curricular element into their teaching, what is your readiness?
21. After a year of implementation, how do you feel? Do you think you are able to cope with the changes? Do you have any experience of teaching or dealing with entrepreneurship education?
22. Do you know what elements have to be implemented and how? Are you clear about what is being asked from you in the new curriculum? Do you know about the five elements in the entrepreneurship element?

The implementation of the entrepreneurship element into teachers' subjects

23. So far, have you incorporated the entrepreneurship element into your lessons? How many times, and how do you do it?
24. As a teacher who has attended the training, do you find it easy or difficult implementing entrepreneurship using the cross-curricular approach? Why?

25. What are the teaching activities you have used when incorporating the entrepreneurship element into your teaching? Are the elements explicitly shown? Can you give some examples of how you teach them?
26. Have you been given any text-book or module to assist you to incorporate the entrepreneurship element into your lessons? If you have, how do you find the book/module? Does it help you?
27. What are the challenges and barriers that you have faced in making the teaching of this element a success? How have you overcome them?
28. Do students know about the concept that lies underneath the lessons? What do you do to ensure that students get the benefits of the elements?
29. Do you think that the cross-curricular element is enough to develop an entrepreneurial culture in students? Do you think this is an effective way to apply entrepreneurship skills and practice to them?

Support

30. Do you get all the support, such as training and advice that you need from your school administrator for implementing entrepreneurship as a cross-curricular element in your teaching? What about the support from the State and District Education Departments? How have they helped you?
31. If you have any problems in understanding the requirement of the cross-curricular element or need to discuss the teaching methods or materials, who would you refer to? Do you go to your colleagues, panel teachers, headteacher or curriculum officers? Why?
32. Are there enough facilities to help and support the teaching of this element in your school? Do you have free access to these facilities?

Appendix B – 6

Interview Questions (Trainers)

General questions

1. How long have you been a trainer?
2. Are you teaching any Year 1 subject too?
3. Have you attended any training given by JPN/PPD on implementing a cross-curricular element into your teaching (early this year or last year)? When, where and for how long?

Perception and understanding of entrepreneurship education

4. As a trainer, what do you think of the latest changes? How do you regard these changes?
5. How familiar are you with the terms ‘entrepreneurship’ and ‘entrepreneurship education? What is entrepreneurship education as you see it?
6. Do you think that we need entrepreneurship education? Why? Does it bring any benefits to nation and society? How?
7. What do you think of the entrepreneurship implementation in schools in general? Do you think an earlier approach to entrepreneurship in primary schools is necessary? Why?

Training

8. What is the subject that you train?
9. Is there any special trainer for entrepreneurship education?
10. How long is the training for the subject teachers and how do you conduct it?
11. Do you have special slot for entrepreneurship?
12. How is it conducted? Do you have any workshop for it?
13. Some teachers have said that they do not understand entrepreneurship clearly. Do you have any ideas how this has happened?
14. Teachers have said that trainers are not well prepared and have different ideas about the entrepreneurship element. Can you explain to me why they think this?
15. Are all the trainers trained by the curriculum developer?
16. What do you think are the challenges in giving the training? How do you think these can be overcome?
17. In your opinion, what should be done to improve the quality of training?

Appendix C

Letter of approval from Economic Planning Unit, Malaysia



UNIT PERANCANG EKONOMI
Economic Planning Unit
JABATAN PERDANA MENTERI
Prime Minister's Department
BLOK B5 & B6
PUSAT PENTADBIRAN KERAJAAN PERSEKUTUAN
62502 PUTRAJAYA
MALAYSIA



EPU
ECONOMIC PLANNING UNIT
PRIME MINISTER'S DEPARTMENT, MALAYSIA

Telefon : 603-8872 3333

Ruj. Tuan:

Your Ref.:

UPE: 40/200/2768

Ruj. Kami:

Our Ref.:

7 April 2011

Tarikh:

Date:

Munirah Binti Abd Hamid
Lot 15448
Rumah Murah Padang Tembak
36000 Teluk Intan
Perak.
Email: irah75@yahoo.com

APPLICATION TO CONDUCT RESEARCH IN MALAYSIA

With reference to your application dated **10 August 2009**, I am pleased to inform you that your application to conduct research in Malaysia has been *approved* by the **Research Promotion and Co-Ordination Committee, Economic Planning Unit, Prime Minister's Department**. The details of the approval are as follows:

Researcher's name : **MUNIRAH BINTI ABD HAMID**

Passport No. / I. C No: **750908-08-6370**

Nationality : **MALAYSIAN**

Title of Research : **"ENTREPRENEURSHIP EDUCATION: THE IMPLEMENTATION IN YEAR ONE PRIMARY SCHOOL CURRICULUM IN DISTRICT [REDACTED] MALAYSIA"**

Period of Research Approved: **3 YEARS**

2. Please collect your Research Pass in person from the **Economic Planning Unit, Prime Minister's Department, Parcel B, Level 4 Block B5, Federal Government Administrative Centre, 62502 Putrajaya** and bring along two (2) passport size photographs. You are also required to comply with the rules and regulations stipulated from time to time by the agencies with which you have dealings in the conduct of your research.

3. I would like to draw your attention to the undertaking signed by you that you will submit without cost to the Economic Planning Unit the following documents:

- a) A brief summary of your research findings on completion of your research and before you leave Malaysia; and
- b) Three (3) copies of your final dissertation/publication.

4. Lastly, please submit a copy of your preliminary and final report directly to the State Government where you carried out your research. Thank you.

Yours sincerely,



(MUNIRAH ABD. MANAN)
For Director General,
Economic Planning Unit.
E-mail: munirah@epu.gov.my
Tel: 88882809/2818
Fax: 88883798

ATTENTION

This letter is only to inform you the status of your application and **cannot be used as a research pass.**

C.c:

Ketua Setiausaha
Kementerian Pelajaran Malaysia
Bahagian Perancangan Dan Penyelidikan Dasar Pendidikan
Aras 1-4, Blok E-8
Kompleks Kerajaan Parcel E
Pusat Pentadbiran Kerajaan Persekutuan
62604 Putrajaya
(u.p: Dr. Soon Seng Thah) (Ruj. Tuan: KP(BPPDP)603/01/ Jld. 14(4))

List of Abbreviations

CDC	Curriculum Development Centre
DEO	District of Education Office
E-element	Entrepreneurship element
EPRD	Economic and Planning Research Development
KBSM	Integrated Curriculum for Secondary Schools
KBSR	New Curriculum for Primary Schools (previous)
KSSR	Standards-based Primary School Curriculum (current)
MOE	Ministry of Education
MOHE	Ministry of Higher Education
NDP	New Development Policy
NEAC	National Economic Advisory Council
NEM	New Economic Model
NEP	New Economic Policy
OECD	Organization for Economic Co-operation and Development
PEMANDU	Performance Management Delivery Unit
PUM	Young Entrepreneurs Programme
SED	State Education Department
SRI	Strategic Reform Initiatives

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