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**An investigation of the relationship between
curriculum policy and assessment practice in
Malaysian classrooms**

A thesis submitted to the University of Glasgow for the degree
of Doctor of Philosophy

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Submitted June 2020

College of Social Sciences
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Abstract

This thesis investigates the relationship between policy intent and classroom practice of the recently introduced National Curriculum in Malaysia, KSSR (Standards Curriculum for Primary Schools). It mainly explores the factors related to the development of the new curriculum policy and examines the implications of the model of change for the enactment process of the curriculum in classrooms.

The study adopts a case study design, employing a phenomenology perspective within the qualitative interpretive paradigm. Data were obtained through an analysis of policy documents, classroom observations and interviews. The classroom observations involved eight teachers from two primary schools whilst the other interviews involved two officers from the Ministry of Education, two head teachers, and 13 students from the participating schools. Thematic data analysis guided the analysis of the data gathered from the multiple sources. A deductive approach to thematic analysis was employed during the analysis of the policy document while inductive approach was adopted to analysis the interviews.

The outcomes from the analysis revealed that there was a discrepancy between the policy intent and teachers' practices. International education policy has shaped the policy thinking of KSSR curriculum policy through policy-borrowing. Adopting this trend in the policy-making process in Malaysia has not produced the desired outcome. The findings from this study showed that the classroom activities have been primarily orientated towards examinations. Because of that, other activities that can engage students in improving their learning through formative assessment practice have been found ineffective, such as peer and self-assessment as well as feedback interaction. The top-down, mandated policy has contributed to the discrepancy which has affected teachers' beliefs, teachers' practices and the quality of school leadership.

This study provides insights into the discrepancy that exists between policy and practice in Malaysian classrooms. This phenomenon is attributed to the ineffectiveness of a systemic change that involves different people that have their specific roles in the process. Innovative changes integrated in the policy needs to

be deeply understood by every individual who is directly or indirectly involved in the process, for it is difficult to see real changes happen if any of these individuals move in a different direction from the aim of the curriculum. For this to happen, innovation needs to be designed for sustainable development through being based on the notion of collaborative practice to build in different perspectives from different communities (Gardner et al., 2010).

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~ In loving memory ~

Fatimah Abdul Ghani

1953 - 2019

Author's Declaration

I declare that, except where explicit reference is made to the contribution of others, this thesis is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.

Azima Abdul Aziz

June 2020

1 Introduction

Overview

The current study sets out to investigate the relationship between policy intent and practice in the enactment process of the KSSR curriculum in Malaysian classrooms, particularly examining the ways teachers integrate formative assessment in the classrooms. First, this introductory chapter sets the scene for the study as I introduce the background of this study, particularly highlighting on the recent curriculum reform in Malaysian primary schools. Discussing the gaps in the existing research literature on the complexity of curriculum change that can affect the relationship between policy and practice is also described to establish the foundation of this study. Then, I continue to outline the research objective as well as research questions that guide the study. The final section of this chapter outlines the organisation of the thesis which should also function as an overview for each of the chapter.

1.1 Background of the study

In 2011, the Malaysian Education Ministry launched a new curriculum policy known as Curriculum Standard for Primary Schools (translated into its Malay acronym KSSR) in its pursuit of becoming a nation that is competitive and functional in the global market. This aspiration emerged as the thinking about education had changed and the old curriculum seemed irrelevant to equip young Malaysians with the current economic demand. The old curriculum, Integrated Curriculum for Primary Schools (translated into its Malay acronym KBSR), was perceived as lacking relevance. This was mainly due to the nature of the curriculum that encouraged students to reproduce subject content to for evaluation purposes (Lee 1999; UNESCO 2013a; Nor et al. 2017) (Lee, 1993a, 1999; MOE, 2013, Nor, Leong, Kalsum et.al, 2017). Apparently, this approach of measuring achievement seemed less impactful in the modern economic context as it did not facilitate the individuals to demonstrate their abilities for a knowledge-based economy. In this economic landscape, the skill sets that are meaningful and useful are reasoning, making inferences and applying knowledge in a novel setting (ibid).

This understanding about the lack of KBSR emerged from the analysis of international benchmarking activities that Malaysia has actively participated. Malaysia's

participation in large-scale international assessments, namely TIMSS and PISA, has eventually become the major driver of this curriculum change and has significantly influenced the policy thinking process during the development of KSSR curriculum policy.

For example, the results of Malaysian students from the PISA 2009+ cycle informed the government that the existing national curriculum (KBSR) was not fit for purpose and should be reviewed. From the analysis of the result, it was found that Malaysian students could not respond to higher-order thinking skill questions appropriately (UNESCO 2013b), (MOE, 2013). Moreover, surveys from Malaysian and multinational companies substantiates this finding as they also believed that Malaysian students lacked the soft skills that were sought after by prospective employers, especially in critical thinking and communication skills (Hooi Lian, Thiam Yew, and Cheng Meng 2014; Samuel, Tee, and Symaco 2017), (Graduan2u, 2010; Seetha, 2014; Samuel, Lee & Symaco, 2017).

Therefore, the curriculum framework of KSSR emphasises on these aspects to bridge the gap between the current performance of Malaysian students and the international standard. Ultimately, the aim of the curriculum reform is to prepare the young Malaysians to stay competitive on an international stage to help strengthen the economy.

Essentially, the KSSR curriculum framework is designed based on the vision of the National Education Philosophy (NPE) of a balanced education for individual student aspirations. The vision of the NPE aims to produce individuals who are:

- Balanced in terms of intellectual, spiritual, emotional, physical and social aspects;
- Responsible Malaysian citizens;
- Functional in a global platform; and
- Knowledgeable employees.

Besides, the curriculum framework also drew on the critical aspects adopted from high-performing systems to build a refined articulation of the specific attributes and competencies that students need to succeed and thrive in an increasingly globalised world. Drawing from the local and international education aspirations, the concept of a balanced education is reflected through six elements in KSSR's curriculum framework. The emphasis is not just on the importance of knowledge, but also on developing critical, creative, and innovative thinking skills; leadership skills; proficiency in Malay Language and the English language; character and values; and a strong sense of national identity. There are also skills that students should develop to function in an advanced scientific and technological era such as exploration and inquiry, problem-solving, teamwork, innovation and responding to real-life issues (MOE 2016).

Central to the curriculum change in Malaysia is the improvement made to the assessment framework. In relation to the global trend of curriculum change, the Ministry reinforces teacher assessment or formative assessment practices as a tool to measure knowledge and skills which were not suitable to be evaluated in examinations. The improved assessment framework, School-Based Assessment (SBA), was introduced in 2014 in which the aim is to assess students holistically (Ministry of Education, 2013). The SBA outlines three domains of assessment which are cognitive, affective and psychomotor. Cognitive assessment comprises of school and centralised examinations which deal with knowledge attainment of students. Essentially, this category of assessment plays a significant role in the investigation of the relationship between policy and practice in this study as it is within this parameter that the complexity of curriculum change emerges. Other categories of assessment are not central to the focus for this study, but it is important to understand the complete framework of the SBA in Malaysian curriculum for primary schools. On that note, the affective domain is measured using psychometric testing. This is intended to support the identification of both natural talents and talents that students develop through the learning process. These tests also seek to identify areas of interest, attitude and personality which are intended to provide information to teachers to deepen their insights into students' interests, strengths and weaknesses. Ultimately, the information

gathered through affective assessment is intended to help teachers to prepare appropriate learning and teaching experiences and create a conducive and effective learning context.

Psychomotor assessment on the other hand, is evaluated during Physical and Health Education subjects where teachers record their students' sports activities, co-curriculum participation and extracurricular activities. Co-curriculum in this context refers to students' participation in different clubs, societies, sports and games bodies as well as uniformed bodies that the school offers while extracurricular activities include voluntary work and a school exchange programme that may take place inside and outside of the school (ibid).

1.2 Problem statement

Adopting educational ideologies from international context leads to the emerging issues in this study especially in the aspect of assessment shift in a highly exam-oriented education system like Malaysia. The focus on the assessment shift has been inspired by the Black and Wiliam's (Black and Wiliam, 2003) seminal work which has also stirred the emergence of assessment reform in other international contexts (eg: Birenbaum et al., 2015; Tan, 2017; Valtin, 2002; Wagner and Valtin, 2003; Yin & Buck, 2015).

From Black and Wiliam's analysis of the literature (2003), there are a range of reasons for this. First, the rising interest in assessment for formative purposes or teachers' assessment is primarily due to increasing concerns on the ineffectiveness of external testing as a means to improve learning. Besides, the efforts in preparing students for examinations have somewhat affected the nature of learning in the classroom (Harlen, 2010b). In tackling these issues, the findings from Black and Wiliam's work (2003) have strengthened the idea that formative assessment is an assessment practice that improves students' learning.

Though the benefits of formative assessment practice to the learning process are convincing, incorporating it into the classroom can be challenging. Evidence from various educational contexts has revealed that implementing it in educational contexts that are exam-oriented has increased its difficulty (eg: in England (Isaacs, 2010); in Germany (Valtin, 2002; Wagner and Valtin, 2003); (in Singapore (Tan, 2017) & in Hong Kong (Poole, 2016). The most common washback effect that can be observed in these contexts is that teachers tend to teach to the test. In many educational contexts, the focus on examinations has reduced the significance of formative assessment in the classroom. In Asian contexts, an additional issue is identified when investigating formative assessment in the classrooms. The Confucian learning heritage hinders the integration of socio-constructivist learning theory that underpins formative assessment practice as observed in Western educational contexts (Poole, 2016) & (Tan, 2017).

Generally, Asian students acknowledge the superiority of the teacher's role in the classroom, and they highly regard it as an important factor in improving their learning (Yin and Buck, 2015). There are aspects in formative assessment practices that require students to be independent and encourage students to interact with their teachers. These practices seem difficult to implement in Malaysian's classrooms, and this assumption is built after learning from other educational contexts, Western and non-Western, as they incorporated these formative assessment practices into their classrooms.

Additionally, the highly centralised governance structure in Malaysia may also widen the gap between the policy intent and practice as teachers undergo the enactment process of the new curriculum in their classrooms. This concern derives from the fact that the educational reform in Malaysia reflects a top-down approach. According to Matland (1995), the strength of a top-down approach is that it recognises patterns in behaviour across different policy areas where standardisation can be apparent. However, it is also criticised because enacting a top-down, mandated education policy

may affect the construction of knowledge and understanding about the policy among the community of practice in schools.

In the Malaysian context, this issue has been long withstanding. During the enactment of the KBSR curriculum, the initiatives of the government to empower teachers in the change process did not seem to prevail because teachers were not prepared to embrace the responsibility placed upon them (Rahman, 1987). In the context of classroom teaching, they were used to being instructed to perform a task and this prevented them from being autonomous (Rahman, 1987). In another example, during the enactment of 'Teaching Science and Mathematics in English' policy in 2003 (common acronym in Malay language is PPSMI), the teachers were unable to engage in the change process because the training for teachers was cascaded and informed instead of stimulating their thinking. Such approach has also failed to encourage their professional learning about the policy innovation.

In brief, implementing curriculum reform signifies a process of educational change. The issues described above govern the investigation of this study which focuses on the complexity of integrating formative assessment in Malaysian classrooms. This is due to the transformation of the assessment framework, from an exam-oriented assessment to teacher's assessment which inherently forces a major change in the way teachers teach and students learn. Furthermore, the model of change that adopts a top-down, mandated policy ought to also contribute to the complexity of change in Malaysia. Adopting a model of change that is mandated has limited the potential of growth among teachers and students as the instructions are directives. As a result, teachers particularly, are not given much opportunity to explore formative assessment practices that can be applied in their classrooms.

1.3 Objectives of the study

Based on the issues discussed earlier, this research project aims to examine the relationship between the policy intent and the enactment of School-Based Assessment

(SBA) in Malaysian classrooms. This case study project adopts the perspective of phenomenology as I seek to explore the phenomenon of assessment reform from the experiences of the individuals involved in the process. Generally, the objective of this research is to investigate the relationship between policy intent and formative assessment practice in Malaysian classrooms. The exploration of the study is guided by the following research questions:

Principal Research Question:

What factors influence the enactment of the recently developed Malaysian curriculum framework in teachers' classrooms?

Sub-questions

1. What are the policy intentions of the recent proposals for curriculum development in Malaysia KSSR curriculum policy?
2. How is it intended the policy to be enacted in schools?
3. What relationship exists between policy intention and policy enactment, especially in terms of the formative assessment practice, in Malaysian classrooms?

1.4 Organisation of the remaining chapters

This thesis is organised into eight chapters, including this introductory chapter, which provides a brief background to this study and an overview of the thesis.

Chapter 2 presents the context of education in Malaysia, particularly on the development of Malaysian curriculum and assessment from the pre-independence period until the most recent years. It consists, firstly, of a description of education during the periods of colonisation, largely during the British colonisation period. The following section entails the development of education in Malaysia after gaining independence. During this era, the emergence of a standardised curriculum and national examinations is observed. Education in the 21st century overlooks the review

of the curriculum policy in which where the KSSR curriculum policy emerges. The discussion continues with the description of the model of change used in the process of implementation of the newly developed curriculum policy, and the critiques of adopting a top-down model of change. It ends with a suggestion to integrate a systemic structure of change to establish a coherence process of educational change.

Chapter 3 primarily reviews the literature on the phenomenon that depicts the educational change process. At the beginning of the review, the chapter begins with the definition of key concepts that are pertinent in this study. Based on the initial understanding of the key ideas, the chapter continues to discuss the implications of globalisation on global educational contexts. It is then followed by the presentation of background information that elucidates the emerging popularity of formative assessment in the classroom, and the experiences of various educational contexts in integrating formative assessment practice in their classrooms. From these studies, it can be concluded that the main challenge of practising formative assessment in certain educational contexts is largely influenced by the impact of using the assessment results for accountability purposes. Based on that, the theoretical framework of this study is presented to underscore the outline of this study. This chapter is concluded with a discussion on the complexity of processes of educational change where the role of different individuals in the process is explored.

Chapter 4 discusses the methodological rationale for this study including the research paradigm, the use of case study design, sampling, procedures for data collection and analysis, quality criteria, and research ethics. I also consider positionality and reflexivity as a researcher who adopts the phenomenology research tradition.

Chapter 5 provides a detailed analysis of the policy document (The Preliminary Report Malaysia Education Blueprint 2013-2025). It includes the background of the curriculum policy that recognises international benchmarking as the major drive to modernise the curriculum and the sets of skills that are adopted from high-performing educational contexts are incorporated into the curriculum framework. The following section

encompasses the aims of the curriculum policy and outlines six aspirations of quality students to reflect the aim of the curriculum. The chapter then continues with a description of the transformation plan for teachers, school leaders and the Ministry to facilitate the change process on a wider scale.

Chapters 6 and 7 present the findings of classroom observations and interview data. The findings for Chapter 6 are organised according to the emerging themes that represent the teachers' teaching practices. In Chapter 7, the findings are organised according to the sets of participants – policy makers, head teachers, teachers and lastly, students. Essentially, the findings from these two chapters provide evidence that illustrates the relationship that exists between policy intent and practice.

Chapter 8, the discussion and concluding chapter, describes the original contribution of knowledge, responds to the research questions, discusses the implications of the findings as well as the limitations of the study, offers suggestions for further research, and ends with my personal reflections on the PhD.

2 Contextual background

Overview

Chapter 2 provides the contextual background of this study, particularly focusing on the development of education and assessment framework in Malaysia as well as the model of change that shapes the educational change process in Malaysian education system. It is important for readers to understand the context of education in Malaysia to allow them to understand the theoretical construct, political and cultural influence that have influenced the development of education in Malaysia.

Generally, education in Malaysia has undergone several education reforms since pre-independence (1824-1957) until the present time. Each time a reform was introduced, the primary intention was to improve students' learning though there were underlying political and cultural factor that contributed to the phenomenon. In this chapter, the changes in education policy which also outline the development of Malaysian education system is organised in three phases: pre-Independence, post-Independence and 21st century education.

Specifically, I will first provide an overview of the background Malaysian education system from pre-Independence until the present time which includes educational change initiatives that occurred at the different periods. I will also describe the assessment framework in Malaysian education system while at the same time, I unravel the transformation of assessment design in which the role of teacher has become prominent in the classroom.

Through the three educational phases, it is important to observe the aim of education at each phase as it has certainly guided educational leaders at that time to focus on developing the sets of knowledge that could help to achieve the proposed aim. Through the process, it is also important to note the factors that underpin the changes and observe how it progresses to follow the trend of global education. This is exemplified through the trend of benchmarking its education quality to an international standard which seems popular in many Western and Asian educational contexts

(Ringarp, 2016; Baird et al., 2011; Breakspear, 2012; Meyer and Benavot, 2013; Looney, 2016; Shimizu, 200; & Yong Zhao and Wei Qiu, 2012).

This chapter continues to describe the model of change adopted for the implementation of the new curriculum, KSSR. The salient information in this section is the outline of the road map, a 12-year milestone plan, that charts the pathways to improve the quality of education in Malaysia as presented in the Preliminary Report Malaysia Education Blueprint 2013-2025. Essentially, the road map addresses issues surrounding education in Malaysia especially in the process of improving the quality of education. It is within this process that the introduction of a new curriculum policy emerges. Then, the model of change is discussed for readers to evaluate the relationship between the government's plan for this educational change process and their decision on the adoption of the model of change. A critique of top-down change approaches follows after in response to the presentation of the model of change. Other issues are also discussed such as the role of teachers in the process of change and the role of schools in guiding teachers to enact a top-down curriculum change. It is concluded with a discussion on the inconsistency between the model of change and the implementation of the curriculum policy which calls for a revolution to create a roadmap that draws on a systemic change movement.

2.1 Education in Malaysia before Independence

Malaysia has been colonised by four major nations that also occupied other Southeast Asian nations. The first form of occupation in Malaysia was by the Portuguese who based themselves in Malacca, a coastal state in the Southern part of Peninsular Malaysia. The Portuguese stayed in Malacca for over 100 years, from 1511 to 1641 and had an impact on the language acquisition and cultural values of the people in Malacca through informal education, as there was no formal education or school institutions at this time. From 1641 until 1824, the Dutch took over Malaysia and were also based in Malacca. Again, there was no significant impact recorded of any formal education system except for the influence of language and cultural values.

A more significant impact on education was observed during the British and Japanese occupation, especially the British, which lasted even after Malaysia gained its independence. As mentioned earlier, during the Portuguese and Dutch occupations, the main form of education was related to language and cultural development which had not affected the lifestyle of the people which included survival skills such as fishing and farming. During the occupation by the British in Malaysia from 1824 until 1957, there were several attempts to improve the education system especially with regard to addressing the issue of inequality (Nor et al., 2017). The issue of inequality emerged because of the schooling system that existed at that time. Generally, primary schooling consisted of vernacular schools and English-medium schools (Nor et al., 2017). The vernacular schools were characterised by race; hence, there were Malay, Chinese and Tamil vernacular schools. The curriculum for each type of school had a different structure and focus from one another including the English-medium schools. This is also reflected in the use of textbooks and syllabus in Chinese and Tamil vernacular schools. The textbooks were imported from their original countries. In terms of assessment, there was no public examination in any of these vernacular school systems (Nor et al., 2017). Each of the vernacular schools also had developed its own education goal. For example, the Malay vernacular schools aimed to produce literate Malays while the Chinese and Tamil vernacular schools aimed to produce Chinese and Indian students for the workforce and to improve their economic status. The English-medium schools were set up by the British with English being the medium of instruction. They were open to all races. These schools aimed to produce students who were prepared for the next level of schooling – the secondary school and beyond. Education at this time lacked uniformity and created a gap between different races in Malaysia which caused segregation. According to Hussein (2012), having the different types of schools with their unique curriculum aim resulted in a ‘separatist’ and ‘divisive’ education system which was based on race and language.

Before we move to the next section, Table 1 sums up the education system in Malaysia before independence since the occupation of Portuguese in Malacca. Though the table displays Japan as one of the colonial nations, there was no further description

about its impact on education because they stayed in Malaysia for a short period of time compared to the other nations.

Table 1: The development of education system in Malaysia

No.	Occupying nation	Period	Impact on education
1.	Portugal	1511 – 1641 (130 years)	Based in Malacca Language and cultural influence Limited impact on education
2.	Holland	1641 – 1824 (183 years)	Based in Malacca Limited influence, focus was on Betawi (Jakarta now) No impact on education
3.	British	1824 – 1942 1945 – 1957 (130 years)	Significant influence on development of education Development of English, Malay, Chinese, Tamil and religious education Did not promote ethnic unity
4.	Japan	1942 – 1945 (3 and a half years)	Significant influence on relationship between ethnic groups

			School curriculum promoted Japanese culture and values
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Source: Education in Malaysia: A journey to excellence. Retrieved from: <http://www.slideshare.net/Fadzliaton/education-in-malaysia>

Prior to Malaysian independence, several advisory committees were set up to make recommendations on how to introduce changes in the school curriculum that could overcome the issue of inequality. Consequently, there were six sets of recommendations in separate documents for movement towards implementing a single unified curriculum in all the schools. These recommendations led to the publication of influential documents such as the Cheeseman Plan, the Holgate Report, Barnes Report, Fenn-Wu Report, Education Ordinance and Razak Report. The original reports had more lists of recommendations, but Table 2 displays the selected recommendations that supported the establishment of a national school system and common national curriculum in all schools.

Table 2: The list of selected recommendations that support the establishment of a national school system

Report	Recommendations /Aims	Outcome
The Cheeseman Plan of 1946	To provide basic education in all schools To make the English language a compulsory subject in all schools including vernacular schools	There was resistance when the suggestion was rejected by the Federal Legislative Council.

Barnes Report 1950	<p>To use a single standardised curriculum in all primary vernacular schools</p> <p>To use Malay and English language as the mediums of instruction</p> <p>To establish a national school system; thus, the vernacular schools had to be abolished.</p>	<p>The recommendations in this report received negative critique from the Chinese and Indians as they strived to protect their language that symbolised their identity.</p>
Fenn-Wu Report 1951	<p>To retain the Chinese vernacular schools but support the use of a single national curriculum</p> <p>Promote trilingualism (Malay-English-Chinese)</p>	<p>Some of the recommendations have served as preliminary ideas to develop the Education Ordinance 1952.</p>
Razak Report 1956	<p>To restructure a more appropriate Malaysian education policy that was reflected in the establishment of National School system and a standardised curriculum.</p> <p>To establish two types of public primary schools, the National and National-type schools (referred to as the Chinese and Tamil schools).</p>	<p>These recommendations were used as the basis of the education system of the newly independent state nation.</p>

	<p>Both types of national schools used a standard national curriculum.</p> <p>To use Malay Language as the medium of instruction in national schools and to retain the use of either English, Chinese or Tamil languages as the medium of instruction in the National-type schools.</p> <p>To make Malay language a compulsory subject for all students.</p>	
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2.2 Education in Malaysia after Independence: Phase 1 (from the year 1957-1979)

In 1960, the Rahman Talib Committee was set up to plan the implementation of the proposals of the 1956 Razak Report. The aim of the committee was to implement and consolidate the use of Malay language as a medium of instruction in both primary and secondary schools. Consequently, the Rahman Talib Report became the basis for the Education Act 1961 (Federation of Malaya, 1961). Thus, schools were encouraged to use the Malay language to teach all subjects and the supporting materials such as textbooks that were used in national-type primary schools were similar to those used in national primary schools, although the language used was different. By 1964, a national education system had been established, but there was no standardised curriculum or standardised testing at the primary school level. The curriculum that was

used at the time was called the Old Curriculum for Primary Schools (KLSR). The design of the curriculum depended on each subject and there was no integration or connection between the subjects. To address these issues, The General Syllabuses and Review Committee was set up which resulted in the implementation of Comprehensive Education in 1965 and the beginning of a standardised central examination at the end of Year 5 of primary education in 1967.

Shortly after this implementation, a racial riot erupted on 13th May 1969, and this incident marked the beginning of a drastic change in the economic sector, social development and also education policy agenda in Malaysia. The riot was politically driven with economic and social elements being the central issue. Following the riot education policy increased its efforts in trying to unify and centralise the school curriculum (Nor et al., 2017). In 1979, the Cabinet Committee Report, headed by the then Minister of Education, Mahathir Mohamed, was released with the main objective of reviewing the goals and effectiveness of the education system for the purpose of meeting the manpower needs of the country for the short and long terms. Among other things, the report recommended new approaches and strategies to further consolidate, strengthen and expand the national education system. In the economic sector, the New Economic Policy (NEP) was formulated to support the economy and social development of the native people (known as *Bumiputera*) and to eradicate poverty as well as to accelerate the process of restructuring Malaysian society. Essentially, this new economic policy was the framework for an appropriate education system that facilitated the production of labour forces to accommodate the requirements of the NEP. With the awareness of the need to raise the standard of education as stated in the Cabinet Committee Report and the New Economic Policy, a major curriculum reform took place in 1983 which introduced the New Curriculum for Primary School (acronym in Malay Language, KBSR) and New Curriculum for Secondary School (acronym in Malay Language, KBSM) in 1989. The education system at this point was very inward looking, that is, it aimed to support the increase of economic development within the country and provide a more equal relationship between the variety of races and cultures in the country.

2.3 Education in Malaysia after Independence: Phase 2 (from the year 1980-1999)

The New Primary School Curriculum (KBSR) was introduced to all Primary One students to replace the old curriculum primary school curriculum (KLSR). It was replaced for two main reasons: first, the subjects in the curriculum lacked connection and integration with one another. Each subject was designed independently which caused the lack of connection. Because of the lack of coherence, the syllabus was packed with too much content to be learned by the students. As a result, KLSR 'proved beyond ability of many students' (Nik Azis, 1995). They also did not acquire the knowledge and skills needed to build a modern nation. The government aspirations were aimed to move the country from an agricultural base into an industrialised nation (Nor et al., 2017).

In the following section, I will present an overview of the KBSR curriculum to provide a background knowledge on this curriculum and develop an understanding about the issues around it which led to the development of the new curriculum. In KBSR, the central focus of the education was to guide students towards achieving holistic and balanced development and acquiring the reading, writing and arithmetic competence through three basic components of the curriculum: Communication, Humanities and the Environment, as well as Individual self-development. In the Communication component, the acquisition of the basic skills of reading, writing and arithmetic were achieved through the Malay language, English language, vernacular languages and Mathematics. The second component, the Humanities and the Environment, included the subjects of Man and his Environment which combined the content knowledge of Science and Geography into one subject. It also included Islamic Education for the Muslim students and Moral Education for the non-Muslim students. The third component was Individual Self-development that consisted of Art, Music and Physical Education subjects. Teachers were encouraged to adopt active teaching and learning approaches and employed approaches that provided active involvement of students in group activities for learning (Nik Azis, 1995). The assessment system of KBSR

consisted of formative assessment, progress evaluation and summative assessment (Nik Azis, 1995). Formative assessment in this context was conceptualised as a series of tests that were administered after the teaching of the basic skills and the teacher was expected to conduct remedial activities for students who were found to have not yet acquired them. The progress evaluation was an assessment conducted at the end of the lesson unit and the teacher was expected to provide enrichment activities for students who had achieved the objective of the lesson unit. Summative assessment was administered after the teaching of several lesson units. The role of the teacher after analysing the results was to plan lessons for new units so that the instruction would be more effective. A standardised national examination for the primary school students, UPSR (Primary School Achievement Test) was first administered in 1988. According to Mohd Nor and other authors (2017), two of the purposes of UPSR results were to evaluate the effectiveness of the curriculum and to determine those students who were qualified to enrol at fully residential secondary schools and premier daily secondary schools.

Despite having the KBSR as a national framework for curriculum change, it was not effective in achieving its objective (Azizah, 1987). To respond to the failure, the Ministry of Education introduced the National Education Philosophy (NEP) (MOE, 1993; Curriculum Development Centre, 1989). The rationale of formulating the NPE was to strengthen the efforts towards national unity and the integration of the various subjects in the school curriculum in producing well-developed individuals. The aspiration of NPE was conveyed as the followings:

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 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.

Source: Ministry of Education, 1993

With the formulation of NPE as a foundation and guiding principle of education development in Malaysia, the existing curriculum, KBSR was revised and renamed the Primary School Integrated Curriculum (the acronym retained as KBSR). Because the element of integration was central in the NPE, the revised KBSR put greater emphasis on the integration of values in classroom teaching and learning. Other than that, the subject area Man and his Environment in the KBSR curriculum was replaced by two different subjects Science and Local Studies. In this case, it seemed relevant to introduce Science as an independent subject so that students could develop their scientific process skills and scientific manipulative skills.

At the end of the 20th century, there was another change in the primary school curriculum. This time, the Ministry of Education experimented with a primary school curriculum which aimed to prepare students to enter the secondary schools where they would learn using information and communication technology. This idea was initiated as a response to the setting up of the Multi-Media Super Corridor and the proclamation of Vision 2020 (Lee, 1999), an aspiration to bring Malaysia towards being a developed nation in its own mould by the year 2020. Smart School Initiatives were launched in 1995 (Shaharuddin and Abiddin, 2009). A Smart School Education Blueprint was developed to outline the planning and the development of these smart schools. In addition, KBSR was reviewed and revised to include the changes in teaching and learning approaches that were proposed by the Smart School Education Blueprint. The Smart School plan was piloted in four schools beginning in 1999 but did not expand to other schools after the pilot project was concluded in 2003.

2.4 Education in the 21st century

The latest revised version of KBSR was completed in 2000 and started to be implemented in 2001. One of the driving forces to revise KBSR was to align the curriculum content with the technological advances in an era where internet and technology had strengthened their position in facilitating people's lives. As such, it

became highly important to create an education system that enabled a workforce that was technologically competent and Information and Communication Technology (ICT) confident in the Malaysian context. In 2003, the government made a bold decision to change the language of instruction in the teaching of Science and Mathematics to English in all national and national-type primary and secondary schools. This policy was referred to by its Malay acronym (PPSMI). The decision was made due to the perceived pressure of global phenomena so that the students should be prepared for technological advancement and be able to access scientific materials that were readily available in English. It was believed that the students would develop to be more independent and learn to search for additional information from the internet and to read research articles, which are mostly written in English.

The policy of PPSMI was implemented gradually; starting with Year One cohort in 2003 and completed in 2008. However, at the end of its completion, the Ministry of Education decided to reverse the medium of instruction in the teaching of Science and Mathematics from English back to Malay language. The Ministry of Education (2008) provided three main reasons for the reversal: first, studies found that students faced difficulty in learning Science and Mathematics in English as they were not proficient in the language. Second, many Science and Mathematics teachers were not competent in delivering both the subjects in English and lastly, the PPSMI policy was politically opposed especially by the Malay nationalists as well as Chinese and Tamil educationalists (Nor et al., 2017).

Despite that, some parents were unhappy with the reversal because they had noticed that the English proficiency among the rural students who did not come from an English-speaking background was slowly improving. Nonetheless, the reversal of the policy took place, and it was replaced with the MBMMBI (the Malay acronym for Upholding the Malay language, Strengthening the English language) policy which was introduced in 2010. This policy was developed to ensure that students master both the Malay language and English language concurrently and, to support the implementation process, a revised Malay language and English language curriculum were introduced to improve the teaching of both subjects. However, the students who

had begun to do Science and Mathematics in English before 2010 were permitted to continue to do until they completed their secondary education. Eventually, the teaching of Science and Mathematics using the Malay language was re-implemented fully in national schools by 2016. The reversal of this policy was also an indication that the government was faced with political pressures from different ethnic groups. Their protest had to be taken into consideration to maintain the harmony of the Malaysian multi-ethnicity society.

It could be argued that the implementation of PPSMI policy, marked the beginning for Malaysia to address the impact of globalisation in education. Though it failed due to the reasons stated above, it is possible that the failure was also because the implementation of the policy lacked preparation and a clear intervention plan during the processes of change. Nonetheless, in the recent thinking of the new curriculum policy, Malaysia continued to adopt international education ideologies to shape the curriculum framework. PISA (Programme for International Student Assessment), an international assessment that has been the catalyst for education reform not only in Malaysia, but also in Western academic contexts since the 1990s, has been the driving force for this newly developed curriculum in Malaysia, KSSR (Standard Curriculum for Primary Schools). PISA is used as a measuring tool to evaluate the education system of a country in preparing students for the 21st global knowledge economy. This understanding is shaped by the fundamental purpose of PISA that OECD asserts is to provide information on the common characteristics of students, schools and education system that do well (Schleicher 2011). Additionally, the key knowledge and skills measured by PISA are essential for full participation in modern societies (Sellar and Lingard, 2014 & Steiner-Khamsi, 2014). A detailed description of the background of KSSR in Malaysia will be explained in the following section.

2.4.1 The background of KSSR

KSSR, translated as Standard Curriculum for Primary Schools, is the curriculum framework that has replaced the former curriculum, which was known as KBSR and described above. KBSR was an outcome-based curriculum and Malaysian students have historically excelled at reproducing subject content to demonstrate their achievement of specific learning objectives. However, most recently, thinking has changed, and arguments emerged (Ministry of Education, 2013; Nor et al., 2017). Lee (1993a, 1999) suggesting that this curriculum lacked relevance and was unlikely to result in students who had the competencies to support future economic growth. It was suggested that to succeed in future, students would be expected to be able to reason, to infer and to apply their knowledge creatively in novel, unfamiliar settings. These characteristics were found to be lacking when the performance of Malaysian students who participated in PISA (Programme for International Student Assessment) was analysed (Ministry of Education, 2013). The results from Malaysian students in PISA suggested that the existing national curriculum was not fit for purpose and should be reviewed as the students were struggling to respond to higher-order thinking skill questions. Moreover, surveys of Malaysian and multinational companies suggested that Malaysian students lacked the soft skills that were sought after by prospective employers; there was especially a lack of critical thinking and poor communication skills (Samuel, Tee, and Symaco, 2017) (Seetha, 2014).

The New Economic Model (NEM), a transformation economy plan that was launched in March 2010 (Ministry of Education, 2013) identified quality of education as one of the key components that was necessary if Malaysia were to become an 'advanced nation' (MOE, 2013; Samuel, Tee, and Symaco, 2017) by the year 2020. The mechanism to facilitate the implementation of NEM was presented in the Economic Transformation Programme which was launched on 25th October 2010 by the Prime Minister (Prime Minister's Office, 2010). In this large-scale economic growth plan, the education sector was listed as one of the key economic areas that could help to improve the economy in Malaysia (Prime Minister's Office, 2010, p12). There were six

areas targeted as necessary to improve the quality of education in Malaysia to an international standard which are as follows:

1. Benchmark the learning of languages, Mathematics and Science to an international standard,
2. Launch new KSSM, the curriculum document for secondary schools and a revised KSSR curriculum policy for primary schools,
3. Revamp examinations and assessments to increase focus on testing higher-order thinking skills by 2016,
4. Raise quality of preschools and push to 100% enrolment by 2020,
5. Move from 6 to 11 years of compulsory schooling, starting at age 6+; supported by retention initiatives and job-ready vocational training, and
6. Increase investment in physical and teaching resources for students with specific needs.

Source: Ministry of Education, 2013

From the list above, introducing a new curriculum policy for both primary and secondary schools had been identified as the strategy for improving the quality of education. The curriculum was to embed a balanced set of knowledge and skills such as creative thinking, innovation, problem solving, and leadership and these elements were included in the educational policy document approved in a National Curriculum Committee Meeting in October 2009 (Ministry of Education, 2017). Many of the features of the previous policy were retained such as the focus on student-centred and differentiated teaching, interdisciplinary learning and the practice of formative assessment. Essentially, KSSR is a standards-based curriculum. A standards-based curriculum is commonly described as one that seeks to align learning attainment to

standards that are predetermined at the district, state or national level (Lund & Tannehill, 2014). Using the standards as the goal, the curriculum identifies the skills, knowledge and dispositions that students should demonstrate to meet these standards (Lund & Tannehill, 2014). In Malaysia, this curriculum approach also includes aspects of pedagogy, in particular, the activities that will allow students to reach the goals stated in the standards (Ministry of Education, 2013, 2016). Consistent with the development of the curriculum in Malaysia, the principles of KSSR continue to align with the National Education Philosophy (NEP) of Malaysia.

Particularly, KSSR aims to produce students who will embrace these six aspirations: knowledge, thinking skills, leadership skills, multilingual skills, ethics and spiritual values as well as national identity. Building an education system in a multi-racial and highly-centralised system as in Malaysia, these six aspirations represent the Malaysian leaders' aspirations to develop people who are fully literate and numerate, able to speak multiple languages, master a range of important cognitive skills including critical thinking skills, able to manage arguments and negotiations effectively, become a reliable and dependent leader as well as demonstrate a sense of patriotism through practising inclusiveness and embracing diversity to respond to the political landscape of a multicultural society like Malaysia. KSSR also includes the knowledge and skills that are pertinent in the field of Science, Technology, Engineering and Mathematics (STEM). The inclusion of these skills is aimed to facilitate the aspiration of Vision 2020 for Malaysia to become a developed nation. In this context, Science and Technology (STEM) are perceived to be particularly valuable as people need to acquire the specific set of skills related to the principles of learning STEM to cope with everyday challenges. They consist of exploration and inquiry, teamwork, problem-solving, innovation, and being aware of real-world issues (MOE, 2016). Another aspect of KSSR that corresponds to the overall objective of the curriculum is to make assessment practice integral to the learning process; however, the government still retains a summative examination, which depends on rote learning, at the end of primary schooling.

The intention behind the development of KSSR was to develop a curriculum designed to produce individuals who are creative, critical and innovative. These characteristics are manifested in various aspects of the teaching and learning domain. Ultimately, the aim of the new curriculum was that it should produce individuals who are:

- Balanced in terms of intellectual, spiritual, emotional, physical and social aspects;
- Responsible Malaysian citizens;
- Functional in a global platform; and
- Knowledgeable employees.

Being functional in a global platform and knowledgeable employees are identified as qualities that will help Malaysia to grow into a knowledge-based economy which is part of the New Economic Model manifested through Economic Transformation Programme (Prime Minister's Office, 2010) in Malaysia. In order to track the progress of this development, the government has designed a road map to set milestones as it takes on a journey of building 21st century education in Malaysia. The details of the road map will be explained later in this chapter.

At the beginning of this chapter, I have explained in detail the progress of Malaysian education system in terms of the educational reforms that have taken place since the time of British Occupation in Malaysia. Fundamentally, the principle of educational reform was to improve students' learning and academic achievement, and if these aims did not appear to be being achieved using the existing curriculum policy, educational leaders developed a new curriculum policy that was deemed to be pertinent to the current needs. What was lacking in the earlier section was the explanation of the assessment system in Malaysia and its purpose in relation to learning. In the following section, I will describe the assessment system in Malaysia which will also shed a light on the significance of it as a mechanism to inform learning.

2.5 The Assessment Framework in Malaysia

2.5.1 The value of external examinations in the Malaysian education system

In the context of education in Malaysia, following the establishment of a national education system and a standardised curriculum in all schools in 1970s, administering the public examinations was an important practice in measuring students' performance in schools that can provide information on their progress or for occupational opportunities (Chiam, 1984). The national exams in Malaysia consist of UPSR (exit examination of primary schools), PT3 (examination for lower-secondary education) and SPM (exit examination of secondary schools). If the students choose to enrol in a higher secondary education, they sit for STPM (Malaysian Higher School Certificate) at the end of the two-year programme. These national examinations come under the jurisdiction of the Malaysian Examination Syndicate (MES) that prepares, administers, scores and reports the test results. The results are presented in the form of grades and the students would have to wait for three months after the exam before the results are announced.

From the brief description above, it is understood that throughout the mandatory schooling of 11 years, students sit for three major examinations which outline the exam-oriented nature of Malaysian education system. Saw (2010) stated that external centralised public examinations were the dominant forms of assessment in the Malaysian education system, judging from the consistent administration of national examination at the end of each level of schooling. For example, at the end of primary education, the Year 6 students took UPSR (Primary School Achievement Test) exam. The results are used to measure the achievement of students in four core subjects – Malay Language, English, Mathematics and Science. Besides, the results are also used as a qualifying tool to enrol into privileged secondary schools. The significance of national exam's results seems to show an increased trend as the students move into their secondary education. Before students finish schools, they sit for SPM

(Malaysian Certificates of Education) exam. The purpose of this exam is to measure their academic achievement in six core subjects and three additional subjects of their choice as outlined in the secondary education curriculum.

Similar to the use of results from UPSR, SPM results also contain high-stake values to the students. They are primarily used for admission to tertiary education and for employment purposes (Chiam, 1984). The Malaysian Examination Syndicate (2007) confirmed that the main purposes of public examinations are for selection of candidates for educational opportunities, employment and certification for achievement. Therefore, preparing for these examinations becomes a top priority for both parents and teachers and has greatly affected the teaching and learning practices in the classroom (Hamilton, 2013).

Due to the significance of these exams in shaping the future of students, they have influenced the learning behaviour of nearly half of the students (Marimuthu, Mukherjee & Jasbir, 1984). The exams are perceived as the only valid measure of academic attainment. Therefore, teachers, parents as well as students are highly committed to prepare for these exams. As part of the preparation process, schools conduct mock exams which replicate the format of the actual exams. The purpose of mock exams is ultimately to familiarise the students with the format of the exams. This strategy can help students to identify their weaknesses and focus on improving them so that they can perform better in the actual exam.

As a result of emphasising on exam, other affective qualities such as the inculcation of good values and attitudes is not given great attention even though they are equally significant in the development of a well-rounded individual.

2.5.2 School-based assessments in the Malaysian education system

Apart from being exam-oriented, education in Malaysia also gives emphasis on school-based assessments. The implementation of school-based assessments is indeed not a new development. The purpose of school-based assessment in Malaysian schools is essentially to monitor students' overall growth, ability, progress and achievement in accordance with the curriculum. The outcomes from this assessment are potentially used to inform parents about students' achievement as well as to allow teachers to alter their instructional strategies according to the needs of their students. Prior to 1997, this form of school-based assessment operated without reference to the official Malaysian Examination Syndicate (MES) standards. Mainly, the way it was executed took in the form of monthly or at the end-of-term assessments.

In 1997, the conduct of the school-based assessment was reviewed and reintroduced as standardised common assessment tasks (PKBS). This assessment was carried out under the strict instruction and standards set by the MES. School-Based Oral Assessment (SBOA) developed for Malay Language and English was an example of the SBOA assessment. It was administered to Secondary 5 students who will sit for SPM, an equivalent to UK GCE 'O' Levels (Fook & Sidhu, 2015). The format and administration procedure of the assessments were prepared by MES and teachers carried these out during their lesson. There was a fraction of the results that were incorporated in the calculation of the overall national examinations grade.

Fundamentally, the framework of educational assessment in Malaysia depicts a standardised and highly centralised structure. It is characterised by the design of assessments for formative and summative purposes exemplified through school-based assessments and national examinations. Hence, it can be construed that the purpose of educational assessment in Malaysian context is mainly to evaluate the academic achievement of the students. There is no clear evidence to show that progression is valued and recognised as an important aspect in learning. The role of teachers, on the other hand, is passive as they follow the directives from the higher

authority; therefore, the students seem to be lacking in determining the teaching and learning activities in the classroom.

Establishing an assessment framework that is highly result-oriented is not without its critics. Measuring students' attainment through exams has been criticised for two main reasons: first, it includes testing many subjects in a single examination (Kamarulzaman, 2006); second, the grades do not demonstrate a realistic estimation of the overall achievement of the students. It has also apparently produced students who lack critical thinking skills. Moreover, the practice of school-based assessments also invites criticism as it is not operated as how it is desired. For instance, teachers carry out assessment for the purpose of recording the achievement of the students and not to inform the students on areas that need to be improved. Also, it fails to make teachers reflect on their teaching practices which could also contribute to the students' mediocre performance. It seems clear that the purpose of assessment in Malaysian education system is to measure students' achievement for summative purposes.

2.5.3 The design of assessment reform in the Malaysian education system

In responding to the issues related to the assessment system, the Malaysian Examination Syndicate (MES) organised seminars and workshops in the early 2000s to gather feedback and opinions from educators and the public on areas they deemed as important to be improved for a better educational assessment approach. Ultimately, the change was aimed to introduce assessment *for* learning instead of having assessment *of* learning (MOE, 2004) as well as to strengthen the practice of school-based assessments (Raja Zuha & Sazaki, 2006).

One of the strategies involved an exploration of alternative assessment which is an assessment approach beyond tests and examinations. As a result, in 2007, MES proposed a holistic assessment system developed using the elements of the National Educational Philosophy (NEP). The new assessment system that is being used in national schools at present consists of five forms of assessment: school assessments,

central assessments, central examinations, psychometric tests and physical activity assessments (Ministry of Education, 2007). The approach to a holistic assessment in this context signifies the approach to create an assessment system that can serve the purposes of both assessment *for* learning (AfL) and assessment *of* learning (AoL).

Among all five types of assessment, school assessments have enhanced teachers' role in its implementation as they are responsible for planning, developing, conducting and reporting the results at the school level.

Central assessment, on the other hand, reflects the operation of standardised common assessment tasks (PKBS) in which the assessment materials are prepared by MES for teachers to administer them in their classrooms.

Central examinations refer to the national examinations in which all aspects of the exams are prepared and managed by the MES. The other two assessments are new additions to the Malaysian assessment system: psychometric tests and physical activity assessments. Psychometric tests are to measure students' abilities and interests, while physical activity assessments record students' performance in physical activities including students' involvement in extra-curricular activities.

In view of the newly developed curriculum policy, the role of teachers in the classroom has been heightened. Indeed, they play an important role in translating the policy document into practice. Seeing the importance of teachers' role in the change process, understanding the profile of teachers in Malaysia gives readers an insight into their current beliefs and behaviours. This involves their epistemological stance as a 'teacher' which inherently shapes their understanding and belief in general. This is in line with Fullan's (2007) advice that investigating the challenges of transforming teachers' belief and behaviour in a change process should begin with *where the teachers are* (p130). A discussion on the relationship between teachers' beliefs and their instructional practices is described in Chapter 3 of this thesis.

The following section describes the model of change used in the implementation of the newly developed national curriculum, KSSR. This model of change is a presentation of an educational change process in a highly structured and centralised education system which ultimately challenges the curriculum change process in Malaysia.

2.6 The implementation of the new curriculum policy, KSSR

The previous sections have laid out the background of education in Malaysia from pre-independence period until the recent introduction of national curriculum. The assessment framework that is used to measure the quality of education in Malaysia is also included in the discussion as it is a key component that drives the recent change in the curriculum policy. From the discussion, it can be concluded that the impact of standardised education and assessment have somewhat decreased the quality of Malaysian students based on the result of international benchmarking practice. Hence, the newly developed curriculum is aimed to improve the quality of students through the transformation of curriculum content as well as the assessment framework. This section primarily focuses on the model of change adopted by the Malaysian government in the process of transforming the education and particularly, reorienting the purposes of educational assessment to align with the changes.

2.6.1 The Road Map: Developing and applying 21st century curriculum and assessment (Ministry of Education, 2013)

Building on the desire to improve the quality of education in Malaysia, KSSR was developed as a comprehensive primary school curriculum document with the aim of developing Malaysian students who are globally competitive in a knowledge-based economy. To facilitate the transformation of education in Malaysia, the government prepared a road map that charts the pathways to facilitate the process of achieving an educational quality that is equivalent to that of high-performing educational contexts.

The road map was included in the Malaysian Education Blueprint 2013-2025 (Ministry of Education, 2013) and presents a three-tier set of milestone goals to facilitate the improvement of education in Malaysia. The three phases were grouped in this fashion: Wave 1 (to be completed between the years 2013-2015), Wave 2 (years 2016-2020), and Wave 3 (years 2021-2025). A unit allied to the Ministry of Education called PADU (The Education Performance and Delivery Unit) was established in 2013. *“The primary role of PADU is to facilitate, support, and deliver the Ministry’s vision in transforming Malaysia’s education system through the success of the Malaysia Education Blueprint for 2013-2025.”* (padu.edu.my, n.d; Ministry of Education, 2013, p4). It is a unit comprised of experienced professionals and industry experts hired by the Ministry to improve the education in Malaysia. Particularly, PADU is responsible for delivering strategy, overseeing implementation, managing interdependencies and introducing new approaches that aim to propel Malaysia’s education system to become globally competitive (PADU, n.d.). The summary of these strategies and plans will be explained in the next section while a comprehensive explanation will be included in Chapter 5 of this thesis.

During the Wave 1 phase from years 2013-2015, the aims were to improve the current curriculum and to prepare for transformation and improvement. The following ideas outline the specific strategies for improvement which are:

1. Refining and revising curriculum content to align with international standards

The intention of the Ministry at this stage is to refine the curriculum content with international standards. The main purpose of the Ministry of Education in Malaysia doing the benchmarking of the curriculum to international standards was to ensure that they were likely to educate individuals who would be globally competitive as expressed in the policy document:

‘All students will have the opportunity to attain an excellent education that is uniquely Malaysian and comparable to high-performing education systems. This will require that Malaysia’s education system embark upon a path of improvement that will move it rapidly towards great performance, as

benchmarked against other countries by international standards' (Ministry of Education, 2013, p1).

From the excerpt, it is understood that the practice of benchmarking its curriculum learning and content was to ensure that the curriculum syllabus in Malaysia is aligned to the standards of high-performing systems so that Malaysian students too can achieve great performance. Additionally, the content of the curriculum should encompass important knowledge and skills that have been recognised for economic growth. These skills constitute of reasoning, making inferences and applying knowledge (refer to Chapter 2 for details). Besides, the breadth and depth of the content covered in the curriculum should be sufficient and manageable to be enacted in schools within the duration of schooling.

2. Intensifying support systems for teachers to improve 'delivery of the curriculum' (Ministry of Education, 2013, p106)

The Government's commitment to provide support for teachers to cope with the curriculum change was evidenced by the establishment of the SISC+ role (School Improvement Specialist Coach). This is a role designed by the Ministry specifically to assist teachers to develop classroom practices that reflect the curriculum policy, particularly in low-performing schools. These specialised coaches constitute of experienced teachers in their field, and they are trained to be 'master coaches' to help low-performing teachers to improve their instructional practices (Rozita, Mohammad Ibrahim & Azhar, 2016). The identification of these teachers depends on the specification determined at the Ministry level.

At the early stage of its establishment, this position was designed as a part-time role; however, as the government planned to intensify support for teachers, this position was enhanced to a full-time role, and they were placed in the District Education Offices. The role of these coaches encompasses the responsibilities of taking new curricula and assessments to the classroom, coaching teachers on pedagogical skills,

and monitoring the effectiveness of policy implementation (Ministry of Education, 2013, p106). The role of these coaches seems to be more helpful to teachers as they work closely with them and help them to manage issues arising as compared with the national or state trainers who only interact with the teachers outside of the school context.

3. The Ministry will roll out additional teaching resources (Ministry of Education, 2013, p107)

As a provision of support to the teachers, the Ministry prepared the supplementary materials such as video libraries of exemplar teaching for teachers' perusal.

4. Upgrading the assessment framework to increase higher order thinking skill questions

In helping the teachers to strengthen their practice of formative assessments and school-based assessment, the on-site training from the SISC+ coaches who have been trained by the Ministry is made available through the regular monitoring routines that include setting and conducting school-based assessment, particularly with regards to standard-referenced grading (Ministry of Education, 2013, p107). Along with that, during the introduction of the policy, there was a plan to systematically increase the proportion of questions in school-based assessments and the national examinations that represent the application, analysis, evaluation and creation components of Bloom's taxonomy. In 2014, the number of higher order thinking skills questions has been increased by 20% in national examinations (Hooi Lian, Thiam Yew & Cheng Meng, 2014).

5. The Ministry will pilot an International Baccalaureate (IB) Middle Years Programme to explore alternative approaches to learning

The pilot project aimed to involve 10 secondary schools in 2013 where there would be two further aims: to develop an emphasis on project-based activities and questioning techniques to develop students' capacity for higher-order thinking skills and to encourage greater connections to be made between different disciplines.

6. The introduction of LINUS 2.0 (Literacy and Numeracy Screening) programme to strengthen English literacy

LINUS is a programme designed to strengthen the literacy and numeracy skills of primary school children. LINUS 1.0 had showed an encouraging success by recording an improvement in Malay Language literacy from 87% to 98%, and numeracy from 76% to 99% in its pilot cohort in 2010 (Ministry of Education, 2013). Based on these encouraging results, LINUS 2.0 was introduced to include English literacy.

The second phase, Wave 2 was targeted to run from 2016 to 2020. The goal of this phase includes the introduction of KSSM and a revised KSSR (Standards Curriculum for Primary School). One of the major changes in the revised KSSR is the integration of different subjects into one curricular area. For example, the subjects of Art and Music were previously presented as Art Education and Music Education.

Wave 3 of the roadmap is set to be carried out from 2021-2025. Here, the focus is to explore accelerated learning pathways in the new curriculum. This is intended to allow high-performing students to complete secondary school in four years instead of five and/or primary school in five years instead of six. Further, the government intends to create a gifted and talented programme for the top 1% of the student population. The Wave 3 policy document (Ministry of Education, 2013) makes it clear that *"the Ministry intends to carefully research and evaluate these options to ensure that these pathways are psychologically and developmentally beneficial to the children and can be implemented in a manner that is not disruptive to the whole system"* (p107).

2.7 Model of change of KSSR

The introduction of KSSR as the national curriculum has imposed a great deal of change in primary education. The changes made to the content, pedagogy and assessment of the curriculum require a great change in the classroom. The approach that the Ministry adopted to change was cascading in which the information was passed down from the policy level to the teachers in school (Ministry of Education, 2013). Since it is an educational reform that is large-scale and adopted a top-down change model, the people involved at each level come from various backgrounds and have different social values. They also play different roles and bear different sets of responsibilities and expectations. The model of change below illustrates the delivery model of KSSR.

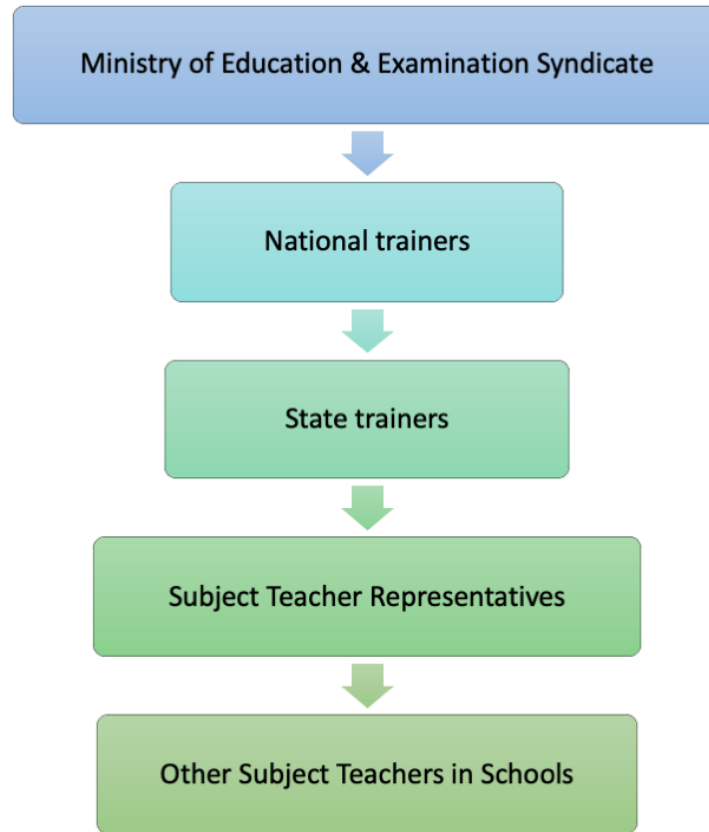


Figure 2-1: Delivery Model of KSSR

The model of change in Figure 2-1 displays the structure of the KSSR implementation as a nation-wide reform with a top-down approach. In this national reform, the planning and development of the policy involved those at the top of the structure while the enactment of the policy largely happened in schools.

At the top tier of the structure, the Ministry of Education and the Examination Syndicate made decisions on matters related to educational development and assessment, respectively. Within the Ministry, the Policy and Research Sector is responsible for policy making and research in education. This unit is essentially responsible for gathering evidence from research to support the policy decision-making process. Burril, Lappan and Gonulates (2015) surveyed the purpose of research in diverse academic contexts and showed that, commonly, it is used to gather resources in preparing standards in education by studying the standards of other countries (ie: curriculum guideline). However, the degree to which the data is used often depends on the vision, perspectives and beliefs of the policy-making team. For example, in Hong Kong, the development team might refer to documents from other countries as references, but the process is highly tactical and often depends on the expertise of the team members. In contrast, Brazil has used the data from a survey to develop the National Curricular Parameters in 1997 (Burril, Lappan & Gonulates, 2015).

In view of the policy development process in Malaysia, the proposal prepared by the research team was submitted to the higher authorities after which they decided whether to proceed or not with the suggestions in the proposal. This suggests that not all final decisions are made based on research evidence. The political culture in the governance structure has sometimes led to a policy decision that aligned with the Prime Minister's wish (Brown, Ali, and Wan Muda, 2004). In the formation of KSSR policy, the research findings together with the target in the New Economic Model informed the government that the curriculum content needed to be reviewed and that was how the higher authorities decided to create a curriculum policy that would facilitate a 21st century learning culture.

After the curriculum policy was published, the Ministry of Education then organised briefing sessions for school leaders about the introduction of the new curriculum policy. It was followed by cascade training for those appointed as National Trainers across Malaysia. The National Trainers then transmitted the information to State Trainers who were appointed to represent their local districts. They also organised cascade training that lasted for a week for subject teacher representatives from the schools in a particular district. During the training, the teachers were introduced to the policy and were briefed on the background and the underpinning principles by the trainers and were given opportunities to try out the materials and resources and also to demonstrate a classroom activity using the materials and resources relevant to the new curriculum. At the end of the teaching demonstration, there was a feedback session between the trainers and the other teacher-participants to discuss the strengths and weaknesses of the demonstrations and to generate ideas for improvements. Using the knowledge and experiences gathered during the cascade training, the teacher representatives then returned to their respective schools and organised in-house training sessions for other teachers in their schools. The primary purpose of each in-house training session was to impart and share knowledge about the new curriculum to the other subject teachers in their schools.

The in-house training session usually lasted one to two days depending on the individual's school management. After the in-house training session, the teachers began planning their classroom activities using the new curriculum and translating the policy into classroom practice accordingly.

2.8 Critique of a nationwide reform that adopts a top-down approach

2.8.1 Implications of a top-down approach to a process of change

The central tension in a change process which adopts a top-down approach, such as the one above, lies in the differential power relationship between the policy makers

and the implementers. The policy makers in the context of Malaysia consist of the executives who are politically appointed (Brown, Ali, and Wan Muda, 2004). These planners often hold power in the government institution which gives them more authority than the implementers who are represented by teachers in schools. The sense of authority of these individuals is shaped by their social status in the government. In the Malaysian government, the ministers, who are also members of the Parliament, are appointed by the Prime Minister (Bajunid et al., 2017). Teachers, on the hand, are civil servants who have a social obligation to follow the instructions of the ministries in which they report for duty. Furthermore, teachers usually play a minimal role in the process of policy development or sometimes are excluded from the process. With this status quo, it seems possible to relate a top-down approach of a policy implementation to the tension that exists during policy enactment.

As mentioned earlier, the decisions on the curriculum were made by government leaders and hardly involved the teachers. With this structure of policy formation and development, the process of understanding and deepening knowledge on the policy is not offered to the implementers in a top-down approach. When people with power initiate change, the policy becomes directive and the implementers are obliged to carry it out because that is the nature of federalism in the government administration (Bajunid et al., 2017). This is a flaw in any top-down approach to a change process. 'Innovation cannot be assimilated unless its meaning is shared' (Marris, 1975, p.121). A shared meaning in this context denotes the opportunity for those responsible for policy implementation to understand the policy intention and to consider how the policy intention might be realised in their own practices. The implementers need to experience the process of understanding and meaning making of the policy for them to fully understand the logic behind the changes. By understanding the policy background, their beliefs and behaviours will tend to change, which is important to influence changes in their practices. However, this can only happen if the teachers positively accept the policy. In the case where the new policy opposes their deep-seated beliefs about teaching and learning, the process of transforming their beliefs can be challenging. For example, a study in China has shown that implementing

formative assessment is difficult because of teachers' cultural traditions (Poole, 2016). The culture of assessment in China is still heavily influenced by summative assessment and teaching practices which include transmission of knowledge through memorisation and repetition (Brown, Andrade & Chen, 2015). This cultural tradition is also reflected in the Malaysian educational context with the mandatory national examinations that students need to take at different phases of their schooling period. It may be a difficult process to make formative assessment effective in these educational contexts compared to that which has been presented by research findings in Western academic traditions.

Darling-Hammond (2005) argued that early 'implementers' who had had the opportunity to become deeply engaged in the change process by contributing ideas in the process of school invention had developed the commitment and capacity to undertake new practices. Others, however, she suggested, were later expected to enact these complex and different ideas without struggling through a process of questioning and developing their own practices. She believed that the process of inquiry and understanding the logic behind educational changes contributed to the development of the teachers' practices when they enact the curriculum. As a consequence of the power play between the policy makers and the implementers, Pfeffer and Sutton (2000) acknowledged the problem that implementers might feel fear of the imperatives directed at them. For instance, a study by Clement (2014) in New South Wales that explored teachers' perspectives of mandated change revealed that teachers perceived mandated change negatively because they get frustrated with changes that they perceived as ill-conceived; they stated that they did not get enough support during the enactment process, and they were given insufficient time to digest the changes. They further expressed concern that these factors did not facilitate the changes desired by the policy makers and they felt demotivated to drive the changes in their own context. This situation has also been observed in other countries that use a top-down approach in their change process.

To sum up, the main issue of using a top-down approach in policy implementation is the influence of the power play that exists between educational leaders and the teachers. This power difference is shaped by the governance structure that determines the role of educational leaders and teachers, respectively. In a broad sense, educational leaders are directly involved in the policy thinking and decision making of the policy, whilst teachers are main actors in the field of policy enactment. This has impacted the way teachers behave during the process of translating ideas into practice (Lovat & Smith, 1995; Handal et al., 2001) which indicates that teachers' beliefs about the changes play a significant role in the process. This summary highlights the importance that teachers have as central agents of change which will be discussed in the following section.

2.8.2 Teachers as change agents in the process of change

Since the early part of this millennium, there has been increasing recognition of the centrality of the role that teachers play in the process of change. Hargreaves (2004) recognised the need to deepen the understanding of the impact of mandated change on teachers. He conducted research with teachers in 15 Canadian elementary and secondary schools where he aimed to analyse the teachers' emotional responses to educational change. The findings showed that a mandated change did not affect the teachers significantly, unless the design and conduct of the changes were inclusive or exclusive of them. This indicates that teachers are not affected by a mandated policy change as long as they are engaged in the enactment process. In another study, (Clement, 2014) investigated the effects of mandated change on teachers. She found that the teachers in her study were concerned about the sense of compulsion they felt, the lack of opportunity to make meaning of the changes before having to implement them and the transitory/temporary nature of the reforms. These findings suggest that teachers are resistant to changes when the changes are imposed upon them and when they are not given enough time and experience to make sense of the changes.

Those who advocate teachers' influence in the processes of change suggest that any act of 'telling schools' to make changes has failed to produce markedly different teaching over many decades of efforts in curriculum reform (Cuban, 1990; Reid et al., 2015). Since policies 'cannot mandate what matters most' (McLaughlin, 1990), they must alter the conditions for local learning if they want to achieve their goals and this refers to the inclusion of teachers in the change process. The idea of engaging teachers in the process is also positively viewed by Hayward et al. (2017). They believed that 'the process of change is inherently constructivist. Any reform that is merely implemented will eventually recede rather than taking root' (p370). Additionally, (Harlen and Gardner, 2010) have identified key strategies to build effective and sustained processes of change. Two of the key strategies are related to teachers, where they promote professional learning and accept teachers as change agents. Professional learning that can drive changes should facilitate teachers to undertake personal reflection and share experiences to participate in the designing of suitable professional learning activities in their context (Harlen, 2010a).

Meanwhile, it is also important to understand the concept of teachers as change agents where the emphasis is on the concept of agency (Harlen & Gardner, 2010). The notion of agency is based on the importance of teachers being at the forefront of changing their teaching practices, and this transformation requires them to understand their needs as well as students' needs to generate intrinsic motivation that can drive inherent changes (Harlen & Gardner, 2010). This demonstrates that teachers have to be actively involved in the process of seeking knowledge about and understanding the changes. The importance of inquiry and meaning making of reforms at the school level has been long recognised. For example, the success of progressive schools in America in the 1930s was linked to the process of inquiry that the researchers undertook together with teachers (Chamberlin, Chamberlin, Drought & Scott, 1942). This indicates that the commitment of participants and a school wide capacity for collective problem solving are important in a change process.

Darling-Hammond (2005) argued that policymakers should be making shifts from designing controls to direct systems to developing capacity for a shift towards the conceptualisation of 21st century education. It is an expression that refers to the trend in advanced economies towards greater dependence on knowledge, information and high skill levels (OECD, 2005). The lifelong learning set of skills and knowledge are displayed through the understanding of complex concepts, ability to generate new ideas using the newly acquired concepts, criticality, ability to express oneself and apply knowledge in interdisciplinary fields (CERI, 2008, p1). This set of skills also should develop citizens who are motivated, self-reliant and risk-taking (Darling-Hammond, 2013). Manifesting this education paradigm requires more than a mandated way of dissemination policy. Darling-Hammond (2005) further reiterated that changes that are envisioned and desired by policymakers will not work if mandated, but instead have greater potential to succeed if the changes are understood among those responsible for their implementation.

She further urged school reformers to focus on building the capacity of schools and teachers to undertake tasks they have never before been called upon to accomplish – ensuring that all students will learn to think critically, inventively, productively and to be problem solvers (2013). In her view, reforms that rely on the transformative power of individuals to rethink their practice and redesign their institutions can only be accomplished by investing in individual and organisational learning – in the human capital of the educational enterprise. This is conceptualised as a school-oriented approach where individual schools should interpret and operate the change process within the academic, social and cultural background of the members of the school which represent the culture of the school.

In this approach, enactment should begin from where the teachers and pupils currently are. 'What change means for them will be a great deal more powerful if it begins by helping people identify some of the existing principles and practices that guide their work and the constraints that affect them, and to compare these to the principles and practices introduced by the change' (Wedell, 2005, p36). Thus, for change to be successful and sustainable, schools should engage in the change process by adapting

the changes to their local contexts. This way, the changes do not seem foreign to the teachers and pupils and create a sense of ownership among teachers and learners.

An important aspect in building a school-oriented approach is the process of 'reculturing' (Fullan, 2007; Wedell, 2009). All education systems have a 'culture', which was referred to by Wedell (2009) as a longstanding and widely agreed way of thinking about the meaning of terms like 'education' or 'knowledge' or 'teaching' or 'learning'. The process of reculturing involves deep understanding, interaction, collaboration and teamwork between district leaders, school leaders and the teachers as they work together to unravel and interpret the proposed changes and adopt changes that are suitable to the capacity of their respective schools.

2.8.3 The relationship between a top-down approach to change and change related to beliefs and behaviours

Clement (2014) reporting on a study where she investigated the effects of mandated change amongst teachers, suggested that if top-down change is inevitable, there should be a strategy to manage mandated change and hopefully to improve the emotions of teachers in such a situation. Her suggestion was to operate the changes using a school-oriented approach. In a school-oriented approach, the school members collaborate and interpret the meaning of the changes in the context of their school's goals and their own priorities. Her proposition was a reiteration of Fullan's previous recommendation. Fullan (2010) recommended that teachers and schools define their own reform goals in relation to government policies in such a way that they maintain ownership. Much earlier, Goodson (2001) had argued that the personal aspect of change, that is the beliefs and missions of individual teachers needed to be integrated with the external and internal system if change is to be effective. Hargreaves (2005) supported this view when he said, 'external change can lead to positive and productive teacher emotions if it is inclusive of teachers' purposes, respectful of their priorities and sensitive to their working and implementation conditions' (p301). Additionally, when changes are inclusive of the teachers, their emotional responses are usually

more positive (Fullan, 1993; Hargreaves, 2005; Elmore, 2007). In brief, school improvement is most likely to be successful when teachers engage in frequent, continuous and increasingly concrete and precise discussions about teaching practice. Through such discussions, teachers build up a shared language around the complexity of teaching and what different approaches to learning and teaching advocated by changing policy might look like in practice. However, this approach to developing policy into practice in the context of this study may not transpire as desired. In the policy plan, the government has included strategies to involve teachers in the change process, but on a transmission model, this might be challenging because the transmission model does not promote interaction and collaboration with the people involved in the change process. This issue will be further explained in the following section.

2.8.4 The relationship between the model of change and the implementation strategy of KSSR

In the context of Malaysia, the newly developed curriculum policy is a curriculum model designed for use nation-wide in primary schools. The process involved in the policy thinking, its development and its implementation reflects a top-down approach with the cascading method being the primary dissemination strategy. Earlier sections in this chapter have presented the arguments related to top-down approaches and cascading strategy, and how they may affect the effectiveness of the change process. Strategies suggested by advocates of a change process to guide people who have to manage a top-down reform approach in inevitable situations have also been highlighted.

Essentially, adopting a top-down approach in the operation of KSSR curriculum policy seems inconsistent with the aim of the curriculum, and it may affect the operation of the policy. First, the framework of the curriculum is based on socio-constructivist learning theory (Vygotsky, 1962) where knowledge construction is socially situated, and is manifested through interaction with others. However, the model of change does

not promote such collaborative interaction. As explained earlier, the process of policy thinking is led by educational leaders who also make decisions on the policy development. When the policy is implemented, the cascading strategy is adopted, which does not promote active interaction and engagement of teachers in the process. Osman and Kassim (2013) pointed out that a typical training model for teachers is that they are presented with 'prescriptive modules that give precise instruction to teachers on the 'what' and 'how' to teach specific subjects and content' (Osman & Kassim, 2013: 17). These teachers will then transmit the information received during the training and pass it on to other teachers in their schools.

Looking at this process, teachers and schools do not seem to have played an important role other than as passive implementers. They have been expected to conform to the standard routine that has been decided by the Ministry. As a result, this model of change does not seem to promote systemic change. The notion of systemic change is a model of change that drives all individuals involved in the process of change – the educational leaders, school leaders, teachers, students and the community – to support the change process (Hayward & Hedge, 2005; Fullan, 2009). Small-scale reform as in a pilot study is relatively easier to manage and has a higher degree of success because it involves a small number of people. When the criteria for success in a small-scale reform are adopted without adapting to the new local context, it is likely to endanger meaningful change (Hayward & Spencer, 2010). This is especially relevant in a large-scale mandated reform because problems in the change process tend to arise after there have been successes reported in the pilot study.

Systemic change is vital because it seeks support from those involved to move in the same direction to achieve the same goal. Darling-Hammond (2005) consistently emphasises the importance of systemic change and the necessity for interaction, collaboration and engagement among all stakeholders including researchers, policymakers, practitioners and, to a certain extent, society. She consistently offers a critique of mandated approaches to change. She believed that having a uniform set of changes that are planned and designed by 'experts' in the field leads to the failure of implementation because the 'implementers' are not included in the process. Thus,

their belief systems and contextual values are not aligned with the intended policy principles. The aspects that can facilitate systemic change were highlighted by Fullan (2000) as follows:

1. Improve the infrastructure and remuneration package for the teaching profession. The infrastructure includes the development of professional development and assistance agencies, assessment and accountability units, and the strengthening of institutions responsible for training education personnel.
2. The organisational culture of learning must change along with the individual learning. Coherence-making involves aligning individual professional development, learning communities and programme goals and activities.
3. The interaction that focuses on similar priorities and information generates a large number of implementers engaged in the reform effort, which creates energy for further reform.
4. Large scale reform cannot be achieved unless the system promotes commitment in educators and the public.
5. A farther and faster reform can be achieved by producing quality materials and establishing a highly interactive infrastructure of pressure and support.
6. Professional learning communities incorporate pressure and support in a seamless way. In these systems, there is great 'lateral accountability' as well as support, as teachers work with each other focusing on student progress.
7. The more that the school works collaboratively on improvement at the school level, the more it engages critically with external standards and policy.
8. Working with the system means conceptualising strategies with whole systems in mind.

The eight strategies proposed by Fullan (2000) largely promote collaboration with every stakeholder in the system and support them to actively engage in the change process because that seems to be more effective than burdening a single stakeholder, such as the teacher, to make changes. In the context of Malaysia, there have been various initiatives to achieve this, but they are somewhat constrained by the highly directive structure in Malaysia which can affect the effectiveness of the plan.

Hayward and Spencer (2010) also identified four key features that needed to be observed in a large-scale change. Among them, the authors asserted the importance of teachers strengthening and enriching their understanding of learning and teaching. In order to achieve this, there was a constant need to discuss ideas and explore novel strategies and approaches to assessment procedures with colleagues and other professionals. It was also important to recognise the differences that are context-sensitive, and this calls for more collaboration with people from various communities and background to further understand the change process. Lastly, the authors highlighted that the complexity of change should be embraced and confronted; there are no simple shortcuts on the journey to success. Referring to the features of change in Hayward and Spencer's perspective, Malaysia may not achieve the desired result with the employment of the transmission model and the top-down governance structure of the policy.

The absence of systemic change facilitation in the curriculum change process in Malaysia has negatively impacted on teachers' collegiality (Madiha, 2012). Studies that examined teachers' collegiality have shown that improved interaction among teachers has the potential to increase the level of innovation and enthusiasm among teachers (McLaughlin, 1993), improve classroom practices (Martin, 2008) as well as the ability to cope with the uncertainty and complexity of the change process (Hargreaves, 1997). In the Malaysian road map, one example of the support system provided by the Ministry to represent this aspect is the establishment of the SISC+ (School Improvement Specialist Coach) role under the jurisdiction of District Education Offices. Since these SISC+ are not drawn from the teachers in a particular school, the establishment of the position was not aligned with the notion of collegiality that

encourages the engagement and interaction between teachers within a particular school or context. It is seemingly difficult to establish a professional learning community or to instil the sense of teachers' collegiality between a SISC+ and the teachers because they are not colleagues; the SISC+ are considered external to the school culture.

The ideas that represent the notion of collegiality such as a professional learning community and building a school-oriented approach are consistently emphasised in research related to educational reform. Fullan (2007) believes that the concept of collegiality increases the success rate of reform as the communication, support and help among teachers could formulate changes in their beliefs, teaching styles, and materials, and this can be achieved through a process of professional development in a social context (p139). Hayward and Hedge (2005) also promoted the importance of a professional learning community as a mechanism to close the gap between research, policy and practice. It appears that the role of SISC+ is intended to be helpful in supporting teachers who are struggling to translate the curriculum policy into classroom practice, but an unintended consequence may be that the role of school inspectors and school leaders becomes redundant. Essentially, the role of school inspectors is to oversee and monitor the change process at the school level, and if they find any irregularity, they will offer suggestions for improvements. With the presence of SISC+ in schools, it suggests that there will be a multilayer inspection and monitoring from different authorities assigned by the Ministry. This coaching process does not sit well with the concept of professional learning communities as it does not promote the sense of participation and responsibility amongst teachers; instead, it inculcates a culture of 'teaching' rather than 'learning' and it is learning that is the essence of a professional learning community. Even though the role of SISC+ is intended to help teachers who are perceived to need help, this kind of support does not necessarily develop the teachers professionally; instead, it can increase the dependence of teachers on them.

Chapter Summary

In this chapter, we have learnt about education in Malaysia in three aspects: the progress of education from pre-independence until the present time; the assessment framework that underscores its exam-oriented system; and lastly, the presentation of the model of change that was adopted for the implementation of the new curriculum policy. The importance of understanding education in Malaysia is to allow readers to comprehend the basis of the current curriculum change policy. Besides, it can also inform readers about the governance structure and chain of instruction practiced in Malaysia through the presentation of the model of change. Generally, understanding the context in which the change process operates enlightens the readers on how people in this nature of education system behave and respond to the change process. Indeed, these aspects are strongly connected; if one aspect is weakened, the transformation of education is at stake.

Summing up the series of educational reforms in Malaysia since the pre-Independence days, we have established that educational leaders made all the decisions related to the improvements in education in Malaysia. This decision is made without a formal agreement with the front liners of the policy enactment (ie: teachers, school leaders, students and parents). Particularly, this situation substantiates the process of policy thinking that has been clearly dominated by educational leaders while the change agents (teachers) remain passive at the receiving end.

Among the decisions made that have impacted the curriculum is the trend of international benchmarking. This has apparently become one of the driving factors in the development of KSSR curriculum policy and managing the processes of change continues to be challenging in this context due to the implication of the borrowed policy ideology in designing the curriculum change approach.

The establishment of KSSR curriculum policy is an outcome of the international benchmarking trend. It was initiated because the Malaysian government felt that the previous curriculum was no longer relevant to cater to the increasing demands of future economic growth. To function in the phase of future economic landscape, young people need to develop critical minds and possess characteristics that can drive them to be globally competitive.

However, the results of PISA in 2009+ (Ministry of Education, 2013) raised concerns among the educational leaders that Malaysian students generally lacked higher order thinking skills and the ability to reason and build a sound argument in novel, unfamiliar settings. Following that, under the New Economic Model, the federal government established the 11 shifts of transformation plan (refer to early sections in Chapter 2) to transform the Malaysian economy policy to fit into the 'advanced nation' mould (Prime Minister's Office, 2010) by the year 2020. One of the 11 shifts of transformation plans is the improvement of education in Malaysia by creating an educational curriculum that is geared towards promoting skills and knowledge pertinent to the 21st century. These ideas become the framework of the KSSR curriculum policy.

It is within this parameter that school-based assessment emerges. Fundamentally, with the refined school-based assessment concept, students should have better opportunity to be empowered and engaged in the classroom and eventually, they can become critical thinkers and independent learners as aspired by the curriculum policy.

Despite having a clear direction and inspirational objective at the phase of curriculum planning, the selection of model of change seems inappropriate; thus, it seems to affect the curriculum change outcome. As Malaysia is a highly centralised nation, the government adopts a top-down approach through the cascading model to deliver the policy to the wider community of practice.

This chapter has highlighted the arguments that critique the top-down approach in a large-scale reform. The most prominent argument is that changes which are externally mandated lack a sense of ownership among its implementers (i.e., teachers) and this

makes them feel discouraged from transforming the changes into practice. This is largely derived from the differences in teachers' beliefs about the change and the lack of coherent interaction between the educational leaders and implementers.

In responding to the challenges of enacting mandated changes, there has been a strong proposition to promote systemic change by engaging the policy makers, school leaders and teachers to work collaboratively in managing the change process through professional learning communities. It requires the members to be committed in the change process and constantly reflecting to promote the process of reconstructing the school culture.

It has become clear that change happens when there is a shared effort and understanding among people involved and associated with it. It is also essential to acknowledge that change is a learning process and the process is not linear, regardless of the dissemination model. Hayward and Spencer (2010) have expressed the seriousness of the change process as 'a complex process which must be embraced'. Searching for ways to escape the complexity is not helping the change process; indeed, it is through the complexity that people learn to work together to make change happen.

Chapter 3 of this thesis will consist of reviews of literature on the important aspects of this study including the growth of international education policy trend and how it contributes to the integration of assessment for learning in classrooms. The knowledge on these ideas substantiates the issue of the complexity of change process where socio-constructivist learning theory (Vygotsky, 1962) is at the core. It is hoped that readers are able to relate their knowledge and information in this chapter to building an understanding that managing change in Malaysia reiterates Hayward and Spencer's (2010) belief about the complexity of change.

3 Literature Review

Overview

Chapter 3 of this thesis sets out to explore the complexity of curriculum change in Malaysia, particularly in the context of assessment. As referred to in Chapter 2, the newly developed curriculum policy (KSSR) is the product of policy thinking that has been influenced by international educational trends. This trend in Malaysia began with the practice of benchmarking the quality of education against an international standard. However, cultural difference sits at the centre of arguments that illustrate the limitations of such an approach. Therefore, this study needs to explore the experiences of other countries who are involved in processes of educational change, particularly in the integration of formative assessment practices into classroom activities as well as to reflect on the possible implications for Malaysia of the issues that emerge from global educational change practices.

Before I delve into the educational change process as experienced by educational contexts around the world, I begin this chapter with the definitions of key concepts that are conceptualised from the literature. These key concepts inform readers of how they operate in the context of this study. I then continue to elaborate each aspects of change based on the exploration of related literature. This section starts with a discussion on the implications of globalisation on education and explores how that has led to the current international trends for educational change. Learning that emerges from the experiences of other countries in the processes of change are then considered insofar as these countries share common ground with Malaysia. Next, I set these more general ideas in the context of assessment and investigate the background of assessment for learning that has become prominent in leading educational change in Malaysia as the country attempts to respond to global economic requirements. I then review the purposes of assessment in education and seek to identify ideas in assessment that are considered crucial to facilitate students' learning. This is substantiated by studying the practice of formative assessment in both Western educational contexts and Asian contexts including Malaysia to consider the challenges faced by practitioners in these different contexts.

The next focus of my literature review is change. In understanding the complexity of the change process, I adopted the model of a change process advocated by Fullan (2007) that governs the framework of this study. Particularly, he believes that the important part in driving changes is during the implementation phase. It is at this phase that understanding the meaning of change would determine the effectiveness of the change. Additionally, central to the notion of 'meaning' in the change process, I also adopt the model of change that encourages the practice of 'dissemination of transformation' (Hayward, 2009). Through this model of change, I discuss on the importance of building understanding among teachers to facilitate the process of change in the classrooms. These models of change govern this study as past studies have informed that in dealing with curriculum and assessment change, attention should not only focus on the work of policy initiatives, but a greater emphasis should be given to the processes of change within which the new policy will emerge. It is during this phase that a transformational change can be developed. In the final section of this chapter, I seek to explore the importance of teachers' beliefs in the relationship between ideas and practice and the extent to which cultural values that are embedded in a society impact on ideas of empowering school leaders and teachers and recognising the impact of students' voice in leading educational change.

3.1 Definition of key concepts

As part of the curriculum change process in Malaysian schools, there are some key terms that need to be defined to illustrate the way they operate in this study. Fundamentally, the operation of change in this study involves improvements made to the curriculum and assessment domains. Therefore, understanding how these terms are defined can build an understanding on the extent to which the enactment process reflects the policy ideas. These terms are therefore the key concepts that frame the policy thinking which then affects the policy design and eventually informs the policy enactment. The key concepts encompass curriculum, standards-based curriculum, assessment for learning/teacher assessment and assessment of learning/exams.

- **Curriculum**

Curriculum is a term used to encompass all knowledge, skills and learning experiences provided to students within the school programme. From the perspective of Lund and Tannehill (2014), curriculum includes planned and sequenced learning experience that allows students to reach significant goals (p6). Similarly, in the definition of prescriptive curriculum, the details in the curriculum present us with what “ought” to happen and often, they take the form of a plan, an intended program, or expert opinion about what needs to take place during study (Ellis, 2004, p. 4). Based on these views, curriculum is used to present information that entails organised plans for a particular program to achieve its goals. Su (2012) discusses the various definitions conceptualised by scholars which demonstrate the scale of its development. Among the various definitions, he advocates the way curriculum is defined by Beauchamp (1977) and Barrow and Milburn (1990). In their view, there are scholars who view curriculum in a limited and simplistic way while there are those who produce a broad conception of a curriculum. He further demonstrates the continuum of curriculum definitions and present them in the following list:

1. Curricula as a set of objectives = goals or objectives
2. Curricula as courses of study or content = content + goals
3. Curricula as plans = content + goals+ teaching methods
4. Curricula as documents = content + goals + methods + assessment
5. Curricula as experiences = **content + goals + methods + assessment + extracurricular activities and learning environment + hidden curriculum + cultures**

Source: Su, S.W. (2012). The Various Concepts of Curriculum and the Factors Involved in Curricula-making. *Journal of Language Teaching and Research* 3. 10.4304/jltr.3.1.153-158.

From the list, the conception of ‘curricula as experiences’ seems to provide a comprehensive definition as it includes all related aspects of a curriculum from the phase of curriculum thinking until the process of curriculum enactment. In fact, it includes the prevalence of ‘hidden curriculum’, a set of unstated promotion and enforcement of certain behavioural patterns, professional standards, and social beliefs

in a learning environment (Miller & Seller, 1990). Based on the various conceptions and perceptions of a curriculum presented earlier, I situate the operational definition of curriculum in this study as 'curricula as experiences' based on the definition of national curriculum by the Ministry of Education:

".. an educational programme that includes curriculum and co-curricular activities which encompasses all the knowledge, skills, norms, values, cultural elements and beliefs to help develop a pupil fully with respect to the physical, spiritual, mental and emotional aspects as well as to inculcate and develop desirable moral values and to transmit knowledge".

Education Act, 1996

In brief, curriculum in this study is characterised as a document that describes the learning objectives, required content knowledge, assessment strategies, extracurricular activities along with the implicit aspects of culture.

- **Standards-based curriculum**

The pressure from the emergence of global standards of 21st century learning forces the reconceptualisation of the curriculum (Carson, 2009) through the international high-stakes testing (Anderson-Levitt, 2008). In this sense, the local authority promotes the importance of staying competitive in a global market to legitimise the adaptation of a standards-based curriculum within their contexts. In general, standards refer to the skills, knowledge, and dispositions that students should demonstrate in their learning process (Lund & Tannehill, 2014), and these standards are globally referenced. Therefore, a curriculum model or activities used in a particular educational context should provide the knowledge and skill set that will allow students to reach the internationally recognised outcomes. It is within this parameter that the new curriculum policy, KSSR is developed. The framework of the curriculum adapts the global standards of education in the policy. In Malaysian context, standards-based curriculum are defined as essential knowledge, skills, understandings and strategies that pupils

need to learn as well as the degree and quality of proficiency that pupils need to display for a particular year (Curriculum Development Division, 2011). To facilitate the achievement of the stated standards, curricular assessments are used to track students' success and become a tool to reflect on the teaching approaches. It is believed that improvements in these aspects can bring the students closer to the established national standards. Therefore, redefining assessment in a way that can help to achieve the stated standards is pertinent to this study, especially to the development of the curriculum policy.

- **Psychometric testing**

Psychometric testing is a new component included in the Malaysian school-based assessment system. The application of this personality test into the national curriculum further supports the intent of Malaysian government in varying its assessment approaches to match against the new standards-based curriculum that aims to be more holistic and robust. According to the Ministry of Education (2012), psychometric assessment refers to aptitude tests and a personality inventory to assess students' skills, interests, aptitude, attitude, and personality. Particularly, aptitude tests are used to assess students' innate and acquired abilities such as thinking and problem solving. The personality inventory is used to identify key traits and characteristics that make up the students' personality. The purpose of conducting psychometric test in Malaysian schools is to gather information that can build students' profiles. Using the gathered information, teachers can identify students' potential and further improve and refine it. Besides, the psychometric assessment is also useful to identify students' traits that can be improved through learning activities in the classroom.

- **Assessment for learning/teacher assessment**

In relation to the earlier discussion, the use of formative and summative assessment in education is the central focus as the initiation of the curriculum change in Malaysia is driven by the development in the way these two assessments are viewed globally. The evidence base presented in Black and Wiliam's (1998) study has impacted the way formative assessment is used in the classrooms and has also driven other scholars in the field to further investigate its effectiveness in improving students'

learning. Before the term formative assessment is widely used, Scriven (1967) used the term 'formative evaluation' which was defined as an activity that involves progression of a programme while 'summative evaluation' referred to an evaluation of the programme that is performed at the end of it. Using the essence of the definition developed by Scriven, Bloom et al. (1971) brought a new perspective to the term to suit its use in the context of education. In their view, formative assessment consists of activities that are concerned with progress in learning which opposes the definition of summative assessment as a practice of evaluating the achievement of the learning. The concept of these two terms, especially formative assessment, has become the tool to connect assessment and learning.

This relationship is observed through the large-scale projects by Assessment Reform Group (ARG) such as *Inside the Blackbox* (Black and Wiliam, 1996), *Working Inside the Blackbox* (Black, Harrison, Lee, Marshall and Wiliam, 2002) and *Analysis and Review of Innovations in Assessment (ARIA)* (2008). Essentially, these projects have helped to build a fundamental understanding of formative assessment practices in the classroom. ARG conceptualises formative assessment by focusing on the purposes of the assessment. As such, formative assessment or assessment for learning is defined as:

"...the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there".

(ARG, 2002)

The definition by ARG highlights on the role of feedback in learning which is crucial in manifesting the practice of assessment for learning. In fact, Ramaprasad (1993) has long placed importance on the role of feedback to both the teacher and pupil as it informs the present understanding and the required skill development to determine the way forward. Black and Wiliam's (1998) seminal work echoed this as it promotes the notion of 'adapting the teaching in the light of evidence about the success of previous episodes' (p538). It is within this parameter that feedback emerges as a

crucial element of formative assessment. In 2009, Black and Wiliam further refined the definition of formative assessment as:

“Practice in a classroom is formative to the extent that evidence about student achievement is elicited, interpreted, and used by teachers, learners, or their peers, to make decisions about next steps in instruction that are likely to be better, or be better founded, than the decisions they would have taken in the absence of evidence that was elicited”.

Black and Wiliam, 2009, p9

Based on the foundation of assessment for learning in the classroom, the use of formative assessment in Malaysian context adopts the conceptualisation of assessment for learning (Ministry of Education, 2016). In the guidebook that entails new ideas of KSSR curriculum, employing assessment for learning in the classroom allows teachers to plan for classroom activities that are pertinent to students' needs (Ministry of Education, 2016). Since the term assessment for learning (AfL) is specifically used in the guidebook, the definition of AfL expressed by Black and Wiliam (2009) and ARG (2002) are the most appropriate representations to conceptualise the use of AfL in this study.

- **Assessment of learning/exams**

Along with the application of AfL in the school-based assessment approach, the Ministry identifies assessment of learning (AoL) as another aspect that facilitates the practice of the school-based assessment. Earl (2006) specifies six characteristics that can define the practice of assessment of learning which seem to imply that assessment is performed for a particular purpose. Hence, this notion of assessment seems to connect with the way Harlen and James (1997) view summative assessment. In their view, it is an assessment that is conducted to describe learning that has been achieved at a certain time for the purposes of reporting to parents, other

teachers, the pupils themselves and, in summary form, to other interested parties such as school governors or school boards.

This definition indicates that there is a specific purpose of using the results of the assessment, and this also seems to echo Brown's (2008) perspective on assessment. He argues that all purposes of assessment fall into one of the three major purposes which includes 'assessment as making schools and teachers accountable for their effectiveness (school accountability)'. However, in the context of this study, these definitions do not seem to apply. From the perspective of the Malaysian educational leaders, assessment of learning (AoL) is referred to as "a practice of gathering information to measure students' overall achievement at the end of a course or programme" (Ministry of Education, 2016, p51). This definition does not concur with earlier scholars' conceptualisation of AoL; instead, it is more closely related to Bloom's et al. (1971) description of a summative assessment which is a practice of evaluating the achievement of the learning.

Based on the definitions presented above, it can be concluded that Malaysian educational leaders have tried to align the new curriculum policy to an international standard based on the international definition of these terms. To further understand the curriculum, change in Malaysia, the following sections present the literature that will illustrate the emergence of the key concepts presented above.

3.2 The implications of globalisation for education

Participating in large-scale international assessments, particularly PISA, is a phenomenon linked to globalisation. It is a means by which individual countries can judge their own progress in what has become an international educational market. This has affected the context in which educators operate and altered people's experience of both formal and informal education. The role of schools and colleges in this context is described using economic discourses. For example, educational leaders in many countries have developed policy discourses that extend beyond the

national educational values and incorporate ideologies that represent international perceptions of quality education (Rizvi & Lingard, 2010). In the context of primary and secondary education, this is represented by the adoption of various standards-based reform models. These models both elucidate curriculum standards that consist of sets of knowledge and skills that have been identified as likely to produce individuals who are globally competitive and identify large-scale assessment programs as the primary lever to encourage improvements in the overall quality of an education system (Volante, 2017).

Consequently, the implications of globalisation in education can be observed in the way educational policies and curriculum change processes operate. The international practice of participating in PISA and TIMSS has created a global phenomenon of benchmarking one's educational system against the scores of high-performing countries which subsequently leads to the initiation, design and development of new curriculum policy in the home educational context. PISA especially has become a central driver in this process because of the role of OECD in shaping policies that are internationally recognised and benchmarked. OECD (Organisation of Economic Cooperation and Development) is an international organisation that consists of 37 countries as the members. In education, OECD works on developing policies by gathering evidence from large-scale international assessment and finding solutions to a range of educational issues.

PISA bases its assessment of student outcomes on three domains of literacy which are reading, mathematical and scientific literacy. At the turn of the century, these three domains have been identified by OECD, and it has been argued that a literate person in the modern world should go beyond the ability to read and write. A literate person has a range of competencies which is represented in these three domains. Results from PISA in these three domains are analysed and countries that do not perform well will be provided with suggestions for improvements in aspects of pedagogical experience derived from best practice sharing and with advice on public policies and international standard setting (www.oecd.org).

These measures are in line with the core purpose of PISA that was introduced at the beginning of the PISA 2000 cycle. 'While it is expected that many individuals in participating countries, including professionals and lay-persons, will use the survey results for a variety of purposes, the primary reason for developing and conducting this large-scale international assessment is to provide empirically grounded information which will inform policy decisions' (OECD, 1999). Hence, PISA has become the driving force in many countries to introduce new education policy that highlights areas for improvements informed by PISA data. OECD through its statement asserts that, 'PISA offers policy makers and educators a way to identify the world's most effective education policies that they can then adapt to their local contexts' (Sellar & Lingard, 2013). The OECD makes further claims for the PISA survey, claiming that it can help identify the most effective pedagogical strategies by stating that 'PISA helps stakeholders assess how well schools are equipping today's youth for adult life, whether education systems are fair, and whether some schools and teaching methods are more effective than others' (OECD, 2014, p2).

In short, OECD seeks to position PISA as having a major impact on the future of education. This aspiration has been realised in that educational policies have been changed in a number of countries who have initiated educational policy reforms in response to evidence emerging from data sets prepared by OECD (Niemann, Martens, & Teltemann, 2017; Martens, Knodel & Windzio, 2014).

For example, in Germany, PISA has been seen to be highly influential because it led the government to make changes to the education system following what was described as the PISA shock. Results from PISA 2000 cycle that were made public on 4 December 2001 in Paris (Ringarp, 2016) showed that German students had performed below the OECD average in all subjects and Germany was among those OECD countries with the highest level of performance variation across students (Niemann, 2009). Results from this PISA cycle were an awakening for Germany because until that point, Germany had believed that their education system was at the top (Ringarp, 2016). As a result, Germany was actively involved in comprehensive

reform programmes that included improving students' reading skills and understanding of mathematics and science, developing and quality-assuring education in regard to standards and evaluations and improving teacher professionalism (KMK Niederschriften, 2001–2012: NS296; cf. KMK Niederschriften, 2001–2012: NS298).

In England, initially, the government did not think that participation in PISA had an impact to its education field. The Government believed that its education system was already aligned with the OECD's economic orientation to education (Thomas, Gana & Munoz-Chereau, 2016) based on the argument that since the 1980s, education in England had as one of its goals the need to boost productivity, in ways similar to those promoted by OECD (Knodel, Martens & Niemann, 2013). Therefore, from England's perspective, participating in PISA might not impact the education field in the same way that other countries have been impacted by PISA. However, more recently, the Conservative government seemed keen to refocus attention on the relationship between the economy and education. In doing so, they saw the potential of international test rankings acting as an indicator of England's position in education globally, and thus, began to actively seeking ways to improve England's position relative to other countries, irrespective of other consequences (Knodel, Martens & Niemann, 2013, p48).

This decision was made after viewing high-performing countries in PISA such as Japan and Korea who had also modernised their policy in response to evidence from PISA data. Essentially, the interest of England in participating in international assessments emerged from examining how PISA data was linked to the development of curriculum standards which consisted of international standards of skills and knowledge to facilitate productivity of the economic sector of a country (Breakspear, 2012). Following this, since 2010, England has started to move along the continuum of increasingly aligning its education system to an international standard (Baird et al., 2011; Breakspear, 2012; Meyer & Benavot, 2013). The examples of PISA impact in these two educational contexts (Germany and England) have shown that the global

economic drive as suggested by PISA can legitimise the educational policy plans of policymakers. The data that consists of suggestions for improvement can be used by policymakers to justify changes or introduce new ideas in the national policy.

Nonetheless, not all countries participating in PISA has the same goal. For example, in Scotland, it is more difficult to draw a direct line between the use of PISA data and changes in curriculum policy, as was the case in both Germany and England. Scotland's involvement in PISA is more symbolic which was deliberately intended to show that Scotland as a country has a distinctive place on the international stage (Hayward et al., 2017). Initially, Scotland participated in three different international assessments, TIMSS, PIRLS and PISA, but in 2011, Scotland withdrew from both TIMSS and PIRLS. Spencer (2013) reporting on interviews with Scottish Government staff, described that a number of factors influenced the withdrawal. One of them was the rising concern that the burden of administering the surveys in schools would be too demanding since the cycles for PIRLS and TIMSS were due in 2011, and the next PISA survey was in 2012. In the interim, the new Scottish National Qualifications were also being introduced, and this could have added pressures on secondary schools. Besides, financial constraints were also listed as a factor in reaching the decision following the collapse of the banks in 2008 (Yu et al., 2016; Machin, McNally & Wyness, 2013).

Despite the withdrawal from two of the international surveys, Scotland continued to take part in the PISA survey. This was driven by its perceived high regard internationally and its focus on 'skills for life' that were considered to relate well in terms of policy, philosophy and aims to the Curriculum for Excellence, the Scottish curriculum framework (Hayward & Spencer 2010). This view was reinforced by Grek et al. (2009) who argued that the main reason for Scotland's continued engagement with the PISA survey did not lie with the PISA data but with the symbolism attached to a high-status international survey. It seems that participating in PISA was perceived to give Scotland a place on the international stage separate from the other UK countries, which was an important indicator from political standpoint, as it portrayed its aspiration to become an independent nation (Hayward et al., 2017). Furthermore, the positive

achievement in PISA over the years by comparison with other countries was also a symbol that indicated the value of Scotland's 'balanced' approach to evaluation that included school self-evaluation (Hayward et al., 2017).

Ireland is also another country that has used PISA data as a yardstick against which changes made to curriculum policy might be assessed. Though it was implicitly done at first, it later became an explicit move after Irish students performed better in PISA 2012. This was claimed to be a positive implication of changes to curriculum policy following suggestions from previous PISA data (Birenbaum et al., 2015).

Looney (Birenbaum et al., 2015) describes how Ireland did not acknowledge PISA in its policy development work in 2002 when the National Council for Curriculum and Assessment (NCCA) published a consultation paper on the future of upper secondary education. In the consultation paper, there was no reference to PISA nor to Ireland's strong performance in PISA 2000, as a rationale or context for change (NCCA, 2002). The post-consultation proposals were finally published in April 2005 and by this time, the results of PISA 2003 were published. These results showed that Ireland was ranked 17th out of 29 countries in Mathematics, a far less impressive achievement compared to its reading component. The poor Mathematics results were referenced in the proposals for change (NCCA, 2005a) which indicate the need to 'engage higher achieving students in more in-depth application of knowledge and skills' (p. 6). In short, good performance in an international test is not mentioned in the initial consideration of senior cycle reform, but the average performance and an identified system weakness become part of the rationale for change 3 years later.

Following that, Ireland continued to make new educational policies highlighting their weaknesses and linked to proposed plans for improvement. Birenbaum et al. (2015) stated that 'the series of NCCA publications between 2002 and 2006 is evidence of the growing influence of the results of international tests as evidence of the need to reform' (p82). In 2009, Ireland experienced PISA shock, similar to Germany, when Ireland's ranking in PISA fell to 17th position from 5th position in the earlier PISA cycle. The decline was uniform across all ability groupings; thus, it was not attributable to

poor performance of one particular group of students. The Minister's response to this was rather calm as she maintained that PISA was only one measure of students' achievement. The Minister urged that, 'we must make a major effort to improve our literacy and numeracy standards' (Department of Education and Skills, 2010b, para. 1). She referred to the launch, in the month *before* the PISA results emerged, of the draft national plan to improve literacy and numeracy standards (Department of Education and Skills, 2010a) in that context.

The Literacy and Numeracy strategy plan again showed that Ireland did not explicitly make reference to PISA as the factor that initiated the proposed changes; instead the NCCA claimed that the local efforts and initiatives that had motivated the changes. For instance, the rationale for change was focused on the evidence of consistent performance in national assessments (presented as an absence of improvement) and on evidence from inspections and evaluations conducted by the Department of Education and Skills (Looney, 2016). The only reference made to the international testing in the draft was a commitment to continue participating in PISA and to join both PIRLS and TIMSS (Department of Education and Skills, 2010a).

In PISA 2012, Ireland reclaimed its position prior to the PISA 2009 cycle. Ireland ranked 7th out of all participating countries and 4th out of OECD member countries. In Mathematics, Ireland was significantly above the OECD average, as was the case before 2009. In Science, Ireland's performance significantly improved on both 2009 and 2006 scores. The official response of the Department of Education and Skills reflects on the Irish reform journey:

PISA 2012 shows that it takes time for initiatives to impact on performance. It is only now that we are seeing the positive impact of revisions to the science curriculum at primary level in 1999 and the Junior Cycle in 2003 which focus on practical investigation by students. In the next round of PISA in 2015, we should begin to see the impact of the Literacy and Numeracy Strategy, and of Project Maths, which is now being experienced by all students starting Junior Cycle.

Department of Education and Skills, 2013, para. 10

This quote discloses the evolution of the influence of international tests on policy development in Ireland. It shows that PISA past, PISA present and PISA future have come to play a central role in policy deliberations and decisions about schooling in Ireland.

The countries described in the literature in this chapter illustrate how PISA data have been used to inform policy decisions, implicitly or explicitly. PISA's reputation and status in the field of international assessment and the comparative nature of the data have become significant features in driving educational leaders to propose changes in their local educational contexts to international standards.

However, PISA is not without its critics. The most profound critique of PISA is that it can create unintended consequences by linking local policy to international comparisons (Alexander, 2014; Goldstein & Thomas, 2008; Hamilton, Maddox & Addey, 2015; Smithers, 2013 and White, 2014). Particularly, the argument focuses on PISA's methods of data collection and presentation since the results compare highly diverse education system with different historical paths and traditions. It is argued that reducing the comparison to a simple ranking is an inappropriate method for evaluating such complex and diverse national education systems (Meyer & Benavot, 2013). Furthermore, the process of globalisation shifts the power to construct national education system to the supranational agencies. This could lead to the perception that there is less trust and less investment in professional capacity at the national, local level (Hopfenbeck, 2015).

The examples from these educational contexts illustrate that information obtained from PISA data has been used to change their education policy. Furthermore, the meaning of education has been altered in individual countries following what other countries have achieved and a globally recognised understanding of education has been adopted in the various designs of education policy across the world. Clearly, the educational priorities of mainly Western countries have shaped a global understanding of what matters in education, an understanding that is influencing thinking and policy in other parts of the world.

Within Asia, Malaysia has been influenced by the international trend of participating in international assessments and has used the data to change its education policy. The basic principle of KSSR, as mentioned earlier, was to create individuals with critical thinking skills and equipped with skills and knowledge for the 21st century. As such, there is a drive to change the instructional strategies in the classroom, from a teacher-oriented approach to one that allows for more active participation of students in the learning process. Similar to Malaysia's aspirations for curriculum development, Singapore's review of the curriculum was a conceptualisation of a model for 'Thinking Schools, Learning Nation' that was introduced in 1997 (Ministry of Education Singapore, 1997). The aim of this curriculum was to develop a nation of thinking and committed citizens capable of meeting future challenges and an education system geared to the needs of the 21st century. Countries such as Japan and China have also embedded the influence of Western reforms in their educational contexts in terms of the redistribution of central government's power to the district level through the concept of decentralisation to improve their education system (see Shimizu, 2001 & Yong Zhao and Wei Qiu, 2012).

Apart from the emerging pattern of adopting ideas of reform from other educational contexts into a particular local context, the effect of globalisation has more serious implications in the field of educational change. This is largely represented by the use of PISA data to legitimate domestic reforms in education (Niemann, Martens & Teltemann, 2017). The practice of adopting ideas from other contexts may harm the

educational change processes in the local contexts. As suggested by Volante (2017), governments around the world should not overlook the harm that may arise from adopting education ideas uncritically from international contexts without considering the importance of cross-cultural diversity. The information gathered from international assessment surveys such as PISA should inform, rather than direct, national efforts of large-scale reform. This echoes Sobe's (2018) thought that the figures or analysis from PISA reports tend to be taken as 'what is' rather than perceiving these as thoughts of 'what should be' or 'what could be' (p330). Similarly, Elliott-Johns (2014) challenged the meaning of PISA data as they lacked contextual factors despite being widely used as points of reference in many education systems in the world.

In conclusion, the implication of globalisation, particularly in using large data sets from international assessments has initiated a highly internationalised policy field. Drawing from the way other countries have used the PISA data, it seems clear that in most countries, PISA data has affected the way curriculum modernisation is being developed in individual educational contexts. In Malaysia, this pattern can also be observed with the development of KSSR curriculum policy in which the primary objective is to produce students who are competitive and relevant in the 21st century knowledge-based economy. This includes a transformation in the way formative assessment is now perceived to be central to learning activities, and the change in this aspect seems to have challenged the traditional role of assessment in the Malaysian education system. The following section will present the development of educational assessment in Malaysia and how the use of assessment to foster learning rather than merely to provide information on students' academic achievement is becoming the central focus in classrooms. By exploring this, a more comprehensive understanding of the curriculum change phenomenon in Malaysia can be developed.

3.3 The relationship between internationalised education policy and formative assessment practice in Malaysian classrooms

Earlier, we have argued that globalisation in education has created an internationalised education policy as an effect of participation in large-scale international assessment, particularly PISA. Many participating countries have used PISA data to lead educational changes in their local contexts with the aim of improving the quality of their education systems in line with international standards. In Malaysia, besides using PISA as a driving force to introduce a new curriculum policy, the integration of international policy ideas within the local policy development includes the practice of formative assessment in the classroom as a means to foster learning (Ministry of Education, 2013). Promoting formative assessment practice in Malaysian classrooms as promoted by Black & Wiliam (2003), can be considered as new given the background of educational assessment in Malaysia (refer to Chapter 2 of this thesis).

In this section, I will explain the concept of assessment in education from a general perspective and how formative assessment is argued to play an important role in fostering learning in modern educational society. I will also describe the use of formative assessment in both Western and Asian academic contexts including Malaysia while discussing the challenges for implementing it in classrooms. This leads to the contentious debate on the purposes of formative and summative assessments in learning, especially in educational contexts that are dominated by high-stakes examinations. Building a clear understanding of this aspect is the key to developing a deeper understanding of the assessment reforms in Malaysia.

3.3.1 Beginning to define formative assessment and summative assessment

Assessment in education is a fast-changing landscape and attempts to define both formative and summative assessment are contentious. Commonly, the development of the definition of terms in relation to formative and summative assessment has embodied the function or purpose of the assessment activities (Black & William, 1998; Newton, 2007; Harlen, 2007). For example, in early attempts to define the terms, Scriven (1967) defined formative evaluation as an activity that involves progression of a programme whilst summative evaluation is an evaluation of the programme that is performed at the end of it. Bloom et al. (1971) used the essence of the definition by Scriven and situated it in an education context which brought a new perspective to the terms, formative and summative assessment. Essentially, they argued, formative assessment consists of activities that are concerned with progress in learning whilst summative assessment is a practice of evaluating the achievement of the learning. The essence of these concepts developed by Bloom et al. (1971) remains at the core of thinking to distinguish between formative and summative assessment in the context of education.

3.3.2 Factors influencing the rising popularity of integrating assessment in the classroom practice

Due to the strong impact of formative assessment on learning attainment (eg: Black and William, 1998a; Black, 2005; James et al., 2007), it has become a central theme for assessment reform in a number of international educational contexts (Birenbaum et al., 2015; Gamlem et al., 2017; Yin & Buck, 2015; Valtin, 2002; Wagner & Valtin, 2003).

There are a range of reasons for this. First, the rising interest in assessment for formative purposes or teachers' assessment is primarily due to increasing concerns about the ineffectiveness of external testing as a means to improve learning.

Furthermore, the efforts in preparing students for exams have somewhat affected the nature of learning in the classroom (Harlen & Gardner, 2010). Furthermore, the findings from Black and Wiliam's work (1998) have strengthened the evidence base of the influence of formative assessment in education as an assessment practice that improves students' learning.

Moreover, the projects from Assessment Reform Group such as *Inside the Blackbox* (Black and Wiliam, 1996), *Working Inside the Blackbox* (Black, Harrison, Lee, Marshall and Wiliam, 2002) and *Analysis and Review of Innovations in Assessment (ARIA)* (2008) have provided evidence and pedagogical advice that promote the use of formative assessment in the classroom as a means to improve learning. For example, the 'Inside the Blackbox' series is a collection of books that offer practical advice for teachers on how to implement the key techniques within formative assessments that include questioning, feedback and peer/self-assessment. Meanwhile, the ARIA project published articles and books that discuss the understanding of teachers' assessment. These projects can be used to build a fundamental understanding of formative assessment practices in the classroom. For example, from the ARIA project, the researchers have outlined key processes in changing assessment practice to ensure sustainable changes of assessment practice in large-scale contexts (Gardner et al., 2008). The key processes that can formulate changes in practice include innovation, warrant, dissemination, agency, professional learning, impact and sustainable development (Gardner et al., 2008).

However, the original promise of formative assessment to improve learning was only partially realised. While some projects reported learning improvement (eg: James et al., 2007), the concept itself became subject to a significant critique. Marshall and Drummond (2006), for example, in their observation of teachers in their classrooms, have identified a twofold behaviour of formative assessment practice; one is that of teachers who embody the 'spirit' of Assessment for Learning while the other group of teachers displays behaviour of just conforming to the 'letter' of Assessment for Learning. Fundamentally, the outcomes of this study have established a relationship

between teachers' beliefs and teaching practices which will be explained later in this chapter.

Bennett (2011) has also criticised the widely claimed effectiveness of formative assessment in the classroom as a means to foster learning (eg: Black and William, 1998). He presented an argument based on six interrelated issues which were – definition, effectiveness, domain, measurement, professional development and system. First, he argued, the researchers' attempts to define formative assessment were counterproductive and they lacked theoretical underpinning to properly define the concept. For example, the claim that the representation of assessment for learning as a formative practice seemed to absolve summative assessment from having any responsibility for supporting learning. He further argued that the concept of formative assessment without any clear theoretical underpinning cannot be used to compare across studies. He argued that for formative assessment to foster learning, a theory of action and a concrete instantiation should be established. Second, he argued that the effectiveness of formative assessment should not be compared across educational contexts because the benefits may vary widely in kind and size from one subpopulation of students to the next. Third, he suggested that formative assessment should be conceptualised and instantiated within specific domains to examine its effectiveness. Bennet (2011) also suggested that rooting formative assessment in only pedagogical skills was insufficient. Fourth, he viewed that formative assessment is *assessment* which should focus on the inferences about what students know and can do. Fifth, he argued that insufficient attention had been paid to the knowledge of teachers in implementing formative assessment in the classroom in which he asserted that teachers need substantial time and support to develop it. Finally, he warned that formative assessment should not be viewed as the only critical part in the learning system. There was a need to rethink assessment as a coherent system which situates formative assessment as part of a larger system.

In short, Bennet's argument opens up new perspectives on the practice of formative assessment in classrooms. He enlightens the need to research and explore this topic further especially in building a theoretical perspective to strengthen its use in education. This is in line with Hayward's (2018) arguments. She argued that one reason that formative assessment had not achieved its potential was that there was a lack of attention given to the relationship between formative assessment and curriculum.

In a project to support the development of the new national curriculum in Wales that involved policy makers and practitioners, the researchers explored an assessment design that gave the assessment for learning a new perspective. It is designed to focus on the progression in learning for students rather than creating learning standards that are predetermined by external authorities. The CAMAU project (Hayward et al., 2018) aimed to restructure the learning experience for pupils in Wales, from discrete and generalised stages of attainment, to a progressive learning continuum. The progression in learning is represented in the form of 'I can' statements. Each learner moves forward fluidly through statutory education from age 3 to 16, guided as appropriate by reference points, supported and challenged according to his/her needs, and assessed in relation to the four purposes of the curriculum which support children and young people to be ambitious, enterprising, ethical and healthy (Welsh Government, 2020).

Echoing the use of assessment in other contexts, assessment in the context of Wales is purposeful and designed to support the progression of each child's learning by obtaining information based on the following aspects:

1. What does each child need in order to move forward?
2. What difficulties might she/he have?
3. What are the next steps and how might these steps best be supported?

Learners are encouraged to take responsibility for their own learning, to become proactive, and teachers are encouraged to ensure learning is meaningful and 'authentic', so that it has real world relevance. However, this vision of student-teacher relationship should not be viewed typically, as teachers should take a proactive role in progressing students' learning. 'Teachers, with the support of articulated progression frameworks, undertake to work intentionally with each learner in the direction of progress and to maintain a focus on pace and ambition throughout this process' (Hayward et.al., 2018, p184). Essentially, progression in learning is a joint collaboration between teachers and students, and it is a learning activity on its own. This concept of progression has broadened the understanding of formative assessment practice in the classroom and it seems to suggest that acquiring the knowledge on the concept of progression can further strengthen the effectiveness of integrating formative assessment in classrooms as described in the subsequent sections of this chapter.

3.3.3 Key aspects of formative assessment and suggested strategies

Formative assessment practice has been recognised as a means of fostering learning and its effectiveness has been first discovered through the seminal work of Black and Wiliam (1998). Since it is effective, it is important to discover the strategies that can illuminate formative assessment practice and improve learning. Black and Wiliam's (1998) seminal work has identified the key characteristics of formative assessment to inform future learning and for teachers to adjust teaching and learning activities. In their view, formative assessment includes 'adapting the teaching in the light of evidence about the success of previous episodes' (p538) and it is within this parameter that giving feedback emerged as a crucial element of formative assessment. Besides that, the following conceptualisation by Black and Wiliam (2009) captures the meaning of formative assessment that can be found in the literature:

Practice in a classroom is formative to the extent that evidence about student achievement is elicited, interpreted, and used by teachers, learners, or their peers, to make decisions about next steps in instruction that are likely to be better, or be better founded, than the decisions they would have taken in the absence of evidence that was elicited.

Black and Wiliam, 2009, p. 9

Fundamentally, formative assessment practices in the classroom should encompass classroom activities that can gather information to be used by teachers, students or their peers to inform the next steps in instruction. Researchers that investigated formative assessment practice have employed some strategies that have yielded positive results in improving students' learning. For example, Crichton & McDaid, (2016), investigated the perception of teachers and students of AfL strategies, particularly learning intentions (LI) and success criteria (SC) within lessons. In the article, they outlined three other strategies that have been extensively used in the UK and European based studies which were open questions (Wiliam, Lee, Harrison & Black, 2004), self and peer-assessment (Nicol & McFarlene-Dick, 2006) and targeted feedback (Hodgson & Pile, 2010). Authors of another study that were based in Sweden, Andersson & Palm, (2017), have also identified formative assessment strategies to improve learning that consist of teachers' adjustment of teaching (Yeh, 2009), feedback (Hattie & Timperley 2007), self-regulated learning (Dignath & Buttner, 2008), self-assessment (Tay 2015) and peer-assisted learning (Rohrbeck et al., 2003). These are among the studies that have employed formative assessment strategies similar to those I adopt for this study. Particularly, learning outcomes and success criteria, questioning, self and peer-assessment as well as feedback will be employed in the observation of teachers' teaching practices to examine their formative assessment practice as part of the investigation of policy in practice.

Besides that, these strategies have also been observed in successful large-scale studies of the implementation of formative assessment in classrooms to foster learning in the Western educational contexts. They are worth exploring because the findings from these studies illuminate the aspects that make formative assessment practice successful in the context of educational change, and they can be used as references to analyse the effectiveness of formative assessment practice in other educational contexts.

3.3.4 Investigating formative assessment practices in classrooms: large-scale projects

In this section, I explore examples of large-scale, government funded projects which focus on exploring the way formative assessment is used in classrooms. These projects are selected because they claim to adopt the key ideas outlined in the Black and Wiliam's (1998) meta-analysis review into classroom practices.

King's College Medway Oxford Formative Assessment Project (KMOFAP)

Following the meta-analysis study by Black and Wiliam (1998) that provided evidence about the effectiveness of formative assessment practice in the classroom, the researchers sought to put the key findings into practice in a funded two-year project called King's College Medway Oxford Formative Assessment Project (KMOFAP) (Black and Wiliam, 2003). The project was initiated because the authors wanted to explore how schools could secure the benefits of formative assessment practice by putting them into practice. However, the authors acknowledged the complexity of disseminating the strategies that they had found effective in their research to the participating teachers in the selected secondary schools in the UK. They agreed with Ginsburg (2001) that teachers need to be able to transform or 'morph' the strategies and so create new practical knowledge relevant to their work (Black and Wiliam, 2003). The strategies that were put in practice were developed from the four key themes that emerged from Black and Wiliam's research (1998). They were feedback, active

participation by students, modified teaching and learning approaches using the information from the feedback and the self-assessment practices.

The original participants in KMOFAP study consisted of 48 teachers who were teaching Mathematics and Science. Later, English teachers were invited to participate from three schools in each local authority in the UK. It was an action research project in which the researchers worked closely with the teachers throughout the project. The researchers did not impose the strategies that should change the teaching practices on the teachers; instead they took advice from the teachers to try out innovations from the research (oral feedback in classroom questioning, feedback through marking, peer and self-assessment, formative use of summative tests). At the end of the project, the evidence collected suggested that these approaches had been successful in promoting quite radical changes in the practices of almost all of the teachers involved. From this work, the researchers drew a number of conclusions about what mattered if assessment were to improve learning.

1. Teachers were open to accepting the strategies proposed by the researchers because the idea of the project aligned with their professional identities. Naturally, a teacher's purpose in teaching is improving learning in the classroom and the project was addressing that intention clearly.
2. The project focused specifically on developing effective formative assessment practice without the pressure of external examinations which reduced the possibility of teachers having a divided attention during the teaching and learning process. They could focus on building formative assessment practice without having to worry about the need to prepare for external tests.
3. The acceptability was also enhanced because the teachers were free to choose between different formative practices, so they developed their own personal portfolios, added or omitted components as experience and the experiences of their colleagues led them to change.
4. The researchers were experts; therefore, their credibility and trust from the teachers were acknowledged.

5. The researchers provided space to meet regularly with them and other teachers, and this has inculcated the habit of peer-learning.
6. The process of professional development was designed to show that the researchers understood that teachers needed time, freedom and support from colleagues in order to reflect critically and to develop their practice (Lee and William, 2000) whilst also offering practical strategies and techniques about how to begin the process.
7. The strategies were not mandated for the teachers to follow; rather, the researchers presented them with a practical question gathered from their research findings and the teachers had to try looking for solutions to the problems.
8. The teachers were engaged in a process of knowledge creation though it might only be relevant in the settings in which they operated (Hargreaves, 1999).

The outcome of this study showed that formative assessment was effective in fostering students' learning for three reasons. Firstly, teachers were engaged with decisions about their classroom teaching; secondly, external examinations were not part of the assessment system and this allowed teachers to give full attention to practise formative assessment in the classroom; and lastly, discussions with colleagues and researchers took place regularly whereby they exchanged ideas and shared suggestions to improve their instructional practices. These factors helped teachers to shape their role in the classroom and the positive changes to their pedagogical approach were driven by the effectiveness of formative assessments in the classroom.

OECD projects

The second large-scale study is an OECD project where the findings were published in 2005. The objective of the project was to investigate the practice of formative assessment in lower secondary schools where it was argued that formative assessment was not practised systematically and barriers to innovation and change were often more difficult to overcome. These barriers included perceived tensions between classroom-based formative assessments and highly visible summative tests for school accountability (teachers tend to teach to the test), and a lack of connection

between systemic, school and classroom approaches to assessment and evaluation. This project provided insights to the concept of formative assessment across the researched countries and analysed how policies supporting the use of formative assessment can develop. The outcomes of this project are significant in this study as they provide a wide repertoire of formative assessment practices in different countries and the analysis of the barriers they have experienced. There were also suggestions that demonstrated the ways educational policy could better support the wider practice of formative assessment.

The OECD project constituted eight developed countries which were Canada, Denmark, England, Finland, Italy, New Zealand, Australia and Scotland, in lower secondary schools. In the project, the elements of formative assessment that were observed encompassed: establishment of classroom cultures that encourage interaction and the use of assessment tools; establishment of learning goals and tracking individual student progress toward goals; use of varied instruction methods to meet diverse student needs; use of varied approaches to assess student understanding; feedback on student performance and adaptation of instruction to meet identified needs; and active involvement of students in the learning process.

One major finding from this international study was the centrality of the role of both educational leaders and school leaders to lead changes in practice. It was found that system-wide changes in teaching and assessment required strong policy leadership. To achieve this, policymakers and officials need to send consistent messages about the importance of quality teaching and learning, adapting teaching to meet diverse student needs, and promoting students' skills for 'learning to learn' (OECD, 2005, p.17). One part of the study was presented by Sebba (2012) who reported that the case studies in Queensland, Australia, were deemed successful primarily because in Queensland, there was no external assessment in the form of tests and examinations embedded in the system. In this context, teachers were trying to ensure that the students understood the outcome-based statements and could assess themselves against the standards through self-assessment practice. In her view, self and peer-

assessment were strong features of the lessons observed in the case study. One of the activities they used required students to write down their reflection of the lesson in a journal and the teachers used them to decide on the lesson plan. A further feature, Sebba argued, that contributed to the success of this project was attributed to the school's management context and policy context in Queensland. The schools in the case studies showed strong support for the development of formative assessment practice. The schools recognised the importance of engaging with the wider community and had well-developed mechanisms for ongoing dialogue with parents about formative assessment. Another significant factor was the assessment design that excluded the use of examinations. This was perceived to have improved the teaching practices because teachers had better opportunities to practise formative assessment effectively and efficiently without worrying about preparing students for the tests.

In conclusion, perhaps the most significant contribution made by the large-scale OECD project (2005) that investigated formative assessment practice in eight different countries representing diverse contexts was that the fundamental feature of successful formative assessment practice is to build a coherent and functional system to drive changes in schools. Teachers are not able to make changes in their classrooms if others in the terrain of change have different expectations. Therefore, the system needs a reform that engages every educational leader and school leader to the same orientation of change as intended from the policy document.

Learning How to Learn (LHTL) project

Building from this work, further projects paid attention to the model of change that highlighted the importance of the interaction between schools, teachers and students and highlighted the importance of effective communication between individuals involved in the change process. A clear articulation of intention and shared understanding facilitate the process of making formative assessment in classrooms effective. The LHTL project (James et al., 2007) was based in the UK, and it was a large-scale, multi-project Research Council funded programme that aimed to explore

the relationship between learning and teaching. The formative assessment project within the LHTL programme explored ways to enable learners to reflect upon and understand their own learning processes and to develop ways of regulating them. They argued that formative assessment strategies had the potential to be used as tools to develop autonomous learning. In order to achieve this, the researchers investigated the strategies to inculcate formative assessment practice in the classroom, the challenges posed for teachers, and the teacher development support that could develop through knowledge creation and sharing within schools and across networks (James et al., 2007, p6). This project involved the participation of 40 schools, over 1000 teachers and 4000 students. The project was guided by the model of change that linked school management policies, teachers' professional learning, their classroom practices and their own and students' beliefs about learning. This model of change is selected because the literature shows that the interaction and engagement of individuals across these aspects can strengthen the development of autonomous learning in the classroom.

The analysis of the data illuminated key ideas that were important in promoting autonomous learning. First, though assessment for learning practices were found to be important tools for learning, essentially, the practices employed in the classroom should serve underlying principles such as making learning explicit and promoting learning autonomy. Second, the development of beliefs and practices were interrelated; thus, it was important to develop them together. Otherwise, practical strategies for classroom implementations may become ritualised and mechanistic without understanding the principles of learning that underpin them. The third factor was attributed to teachers' attitude to demonstrate a capacity for strategic and reflective thinking about what happened in their classrooms. They consistently looked for ways to improve the learning experience for pupils. Fourth, teachers attributed the lack of motivational practices to the policy context that encouraged rushed curriculum coverage and teaching to the test. Moreover, the quality of leadership played a significant role in terms of supporting and giving space to teachers to create innovations in their classrooms. Lastly, the interaction among teachers and their

engagement in the learning process contributed to the positive changes of the practice. This indicates that in promoting autonomous learning, the culture of learning how to learn should be embraced by the pupils, teachers and organisations to create an effective and coherent learning system.

Drawing from the findings of these projects that were mostly based in UK and Europe, there are three salient points that are vital to facilitate changes in practice in the classroom. Firstly, teachers need to be given opportunity to engage in the changes and build a sense of ownership of changes they make in their classroom activities. Secondly, teachers need to have positive beliefs about the change initiatives and develop positive attitudes to allow their creativity and innovative skills flourish. These behaviours can help them to constantly look for solutions for issues they face in the classroom. Thirdly, teachers must be provided with space to interact and engage with their colleagues to discuss the innovative practices to develop a culture of learning among them. Finally, building a coherent and functional system that includes positive leadership quality and consistent understanding across the system about the change initiatives is also a significant feature to support the change from all aspects.

Essentially, these large-scale projects in the UK and Europe have established key features of making effective change process through the integration of formative assessment in the classroom. Apart from these projects, there are many other academic contexts that have embedded formative assessment in their classrooms and have raised concerns on a set of issues which further contribute to the contentious debate on educational assessments. Primarily, the issues relate to establishing a link between the practice of assessment for learning in an accountability context. The following section describes these experiences in various academic contexts which show the conflict for teachers in managing formative assessment (assessment for learning) and summative assessment (assessment of learning) in their classrooms.

3.3.5 Exploring formative assessment practice in various educational contexts

Western educational contexts

In England, the educational development that raised challenges for the practice of formative assessment at the present time was rooted in issues emerging in the educational sector in 1980s. During that time, the stated purpose of publishing examination results in 'league tables' was to inform parents about students' academic performance in their schools following the 'market-mechanism' policy that extended parents' involvement in education matters (Machin & Vignoles, 2006). As a result, educational assessment has become a tool for accountability as the pressure to increase a school's placing in the ranking system is heightened, and it also narrowed the teaching practice and values of learning (Isaacs, 2010). Schools started teaching to the tests, and this practice weakened the principles of the curriculum and its learning goals. A report by The Children, Schools and Families Communities in May 2008 (House of Commons, 2008a) reported the impact of standardised assessment on teaching practices. It was found that there was an increase in teaching to the test, doing test practices and narrowing teaching particularly in English, Mathematics and Science as these were the subjects tested. As a result, teachers' creativity and children's access to a broad and balanced curriculum were compromised (Isaacs, 2010). Based on this educational background in the UK, Black and William (2005) argued that teachers' judgements that were part of the national assessments were considered as not making a significant impact on practice because teachers had concerns for reliability and accountability. This shows that the conflict between assessment for learning and assessment for accountability is quite prominent in England. However, England was not the only country to experience such effects. The following examples further illustrate the challenges faced in other educational contexts as they attempted to integrate assessment for learning in a context that emphasises assessment for accountability purposes.

For a long time, Germany used a national 6-point marking system (grade 1–6, where 1 is the highest) to monitor students' achievements. Around the 1960s, a strong critique of grades emerged because several empirical studies demonstrated that this form of assessment was not helpful for student learning (Ingenkamp, 1971). In addition, during this time, there was a shift in perceptions about learning that are commonly and internationally labelled as the need for 'lifelong learning' and 'learning-to-learn'. The emergence of this notion motivated educational reformers in Germany to abolish the grading system and encouraged the use of formative assessment. The practice of formative assessment in Germany was manifested in the form of reporting students' progress verbally. However, based on research evidence, students did not benefit greatly from verbal reports though this could have been caused by irregular practice in teachers' feedback procedures. From the observation, it was reported that teachers only gave feedback when writing a report and not when doing daily activities in the classroom (Valtin, 2002; Wagner & Valtin, 2003).

A different situation was observed in France where in 1975 the French government initiated the 'Haby' reform with the goal of identifying and developing students' true talents (Brauns & Steinmann, 1999). One initiative was the virtual abolition of all public examinations below 18+ Baccalaureate level (the final school leaving examination). Furthermore, there was also support for the practice of assessment for formative purposes where teachers' assessment was used to identify the needs of the students in learning. However, given that high-stakes public examinations remained in place for school leavers, students and teachers preferred to create lessons which prepared for the examination and, normally, lesson content consisted of conventional types of knowledge and competence (Bonnet, 1997).

In Greece, before the enactment of education reforms between 1981 and 1986, the assessment system had been summative-oriented and greatly focused on accountability and selection where assessments used numerical or grading for recording and reporting the results. However, in 1985, the Ministry of Education proposed a change in its pedagogical approaches which shifted from traditional

learning approaches to progressive child-centred pedagogy. Mavrommatis (1996) investigated the implementation of assessment in Greek classrooms and found that it was difficult for teachers to practise formative assessment in the classroom because comparison between students was still practised regardless of the changes in policy. There were a few teachers who tried formative assessment in the classrooms, but they were challenged by issues such as large class size and time constraint. It was also observed that the practice of feedback was ineffective because it was too general and short which was insufficient to help students improve.

A similar situation can be observed in Spain where the study by Remesal (2007) revealed that there was a mismatch between the reform intentions and teachers' conceptions of assessment. The teachers in the study were inclined to associate assessment with accountability instead of linking it with teaching and learning. Similarly, in Portugal, the teachers acknowledged the importance of formative assessment for improving students' learning but still preferred to design tests that mirrored the external examination format (Fernandes, 2009).

In Australia, the use of formative assessments in classrooms adopted the strategies found in Black and Wiliam's work (1998). Following that, the Curriculum Corporation developed a website that provided links to assessment tasks, background research reference materials and professional learning modules including DVDs to promote professional learning as the government's effort to support teachers' understanding about formative assessment. These resources were focused on the importance of feedback, self-assessment and peer-assessment and strategic questioning (Birenbaum et.al., 2015). However, it was found that teachers across Australia did not regularly or consistently use assessment for learning strategies despite the abundance of self-help resources. Furthermore, the understanding and uptake of the practice varied because each state or jurisdiction adopted its own approach (Birenbaum et. al., 2015). The cause of the lack of formative assessment practice in Australian classrooms is similar to that in other countries such as Spain and Portugal. Particularly, in the wider context of the emerging trends in international assessments

such as TIMSS and PISA as well as the National Assessment Programme in Australia (NAPLAN), teachers were struggling with 'ensembles of policy' (Bowe, Ball & Gold, 1992) and their various conflicting pressures. To meet the accountability demands imposed, many Australian teachers appear to be directing more attention towards student preparation for summative type tests than to AfL strategies (Luke et al., 2011).

On the other hand, New Zealand's involvement in the contentious debate of formative-summative assessment started in recent years. For a long time, the educational system in New Zealand had embedded formative assessment practices to foster learning, and that was the primary source of educational assessment. Even during the time when many other countries in the world started to include standardised examinations in the 1990s, New Zealand remained committed to their own educational assessment practices. However, in 2012, the Minister of Education made an announcement which was claimed to be the greatest threat to the formative assessment tradition in New Zealand. The Minister decided to publish school-level results in which the data can be used for school comparisons (Birenbaum et al., 2015). The introduction of the standards was highly contested (New Zealand Ministry of Education, 2010), and indeed this step has increased the stakes related to assessments with a more summative purpose. Although, in theory, the overall teacher judgments can still be used for formative purposes, and teachers have been encouraged to do so, a recent report by the OECD (2013) identified that 'there is a risk that pressures for summative scores may undermine effective formative assessment practices in the classroom. Such tensions between formative and summative assessment need to be recognised and addressed' (OECD, 2013: 215). In this context, the formative assessment practices may be threatened when the purpose of summative assessment takes centre stage, similar to other countries discussed earlier in this chapter.

Examining recent studies on formative assessment practice in various classroom contexts, it seems that the issues identified in the large-scale projects 10-15 years ago still exist in the findings reporting on more recent formative assessment practices. One of these issues is the provision of sufficient support for teachers to implement formative assessment effectively in their classrooms. Andersson and Palm (2017) reported a finding from a study among 22 Swedish Mathematics teachers participating in Professional Development Programme (PDP) in formative assessment. They observed that among the challenges detected from observations and interviews were the struggles of managing students' different abilities, students' interrupting teaching, and time pressures. Teachers expressed the need for further support and knowledge on how to continue the practice, the opportunity to work within networks and increased collaboration with more colleagues using the new approach.

On another note, I have described how large-scale assessments such as PISA can lead to a negative impact on the education system of a country. This is in spite of its claim that the PISA data is used to inform the policy decision to improve the quality of education. Ontario, Canada, is one example of a state that has experienced backwash effect of this large-scale assessment. Though Ontario has maintained its good ranking in PISA over the years and has been used as an example for other educational contexts to follow, the current system that is operated by the Educational Quality and Accountability Office (EQAO) seems to portray conflicting expectations and roles. This has unfortunately affected the teachers (Jang & Sinclair, 2017) as they end up focusing upon the EQAO data, which the authors claim do not always capture the richness of students' learning. Therefore, the authors suggested providing substantial support for teachers' development in this aspect of assessment (Jang & Sinclair, 2017).

In essence, studies that investigated the effectiveness of formative assessments in Western educational contexts have gained popularity after the publication of Black and William's (1998) seminal work. Since then, as presented previously in this thesis, many large-scale and small-scale studies were performed in diverse educational contexts to investigate the effectiveness of the practice and to identify factors for success. While

a number of large-scale projects in the UK and Europe addressed a wide array of topics including teachers' beliefs, teachers' attitude and a sense of collaboration, studies that explored formative assessment in other Western educational contexts commonly discussed the struggle to find an appropriate balance between formative assessment practices and the pressure from external high-stakes examinations. This issue is highly relevant not only to Malaysia, the context of this study, but it is also a dilemma that is experienced in many educational contexts in Asia, as the issue of formative assessment in accountability contexts becomes a contentious debate in the domain of assessment reforms. In the next section, I will describe the experiences of Asian educational contexts to demonstrate the issues faced by them as they attempt to enact formative assessment in their classrooms.

Asian educational contexts

Formative assessment practice or more commonly referred to as assessment for learning in Asian-based studies (Wei et al., 2018), is faced with pressure from the exam-oriented systems that dominate their educational contexts. A review of formative assessment practice in East Asian countries revealed that the pressure from high-stakes external examinations was the greatest obstacle to the implementation of AfL (Bryant & Carless, 2010; Hui et al., 2017; Tan, 2016; Yatab & Shahrill, 2014; Yu, 2015). The following experiences of different nations in the process of integrating assessment for learning in the classrooms shed a light on the contentious debate of integrating formative assessment in the context of assessment used for accountability purposes (Griffin et al., 2016; Hui et al., 2017; Tong, 2011; Yan & Cheng, 2015).

In 2009, the Primary Education Review and Implementation (PERI) Committee in Singapore had called for the examinations in Primary One and Two to be replaced by school-based holistic assessment practices to support learning (Tan, 2017). The concern over the prevailing negative effects of examination practices on students' learning was a principal impetus that initiated the Ministry of Education (MOE) to re-examine the relationship between assessment and learning in primary schools (Tan,

2017). It was argued that in these early years (typically 7 to 8 years of age), too much emphasis on examinations would impede students' confidence and desire to learn and prevent students (and teachers) from understanding and using assessment to support and improve learning (Klenowski, 2009). The PERI Committee (2009) recommended that, while the PSLE (Primary School Leaving Examination) remains firmly entrenched at the end of primary school (Primary 6), schools should develop their own assessment system for the other levels, particularly at Primary 1 and 2, when students are just beginning school. These (bite-sized forms of) assessments at the lower primary levels should focus on building pupils' confidence and desire to learn, and 'place greater emphasis on skills development and the provision of constructive feedback which enables more meaningful learning in support of both academic and non-academic aspects of a pupil's development' (p. 35).

The challenge of implementing bite-sized assessment in Singapore was attributed to the impact of high-stakes examinations on one's life in which 'one succeeds only if one finished high in the rank order' (Stiggins, 1995). Such high stakes and societal mechanisms placed great pressures on students and teachers to produce results from any school assessment preceding the PSLE and produced adverse effects on students' current and future learning (Tan, 2011). Consequently, the high stakes afforded to examination results have become an institutional authority determining the purpose of assessment in schools and have created standards of performativity of teaching and learning for middle and school leaders (Leong & Tan, 2014; Tan, 2016). To investigate Singapore's assessment background, a survey was conducted in 2014 (Tan, 2017) to explore the perception of teachers of the implementation of bite-sized assessment in their schools. This survey came after the Ministry of Education provided support to primary schools and teachers with access to consultation, website links, video recordings of formative-assessment-infused lessons, as well as organising networking sessions between primary schools (Tan et al., 2014). Despite substantial support from the Ministry, the findings from the survey showed that teachers in Singapore were unsure of the exact meaning of bite-sized assessment, and it was primarily used as preparation for high-stakes examinations rather than to support

learning and reduce examination stress. Instead of focusing on the actions required for bite-sized assessment to support and enhance learning, the teachers in the study seemed to see this as a policy imposed on their schools. The findings from this survey suggest that implementing formative assessment in Singapore's primary schools was indeed challenging despite the support provided by the Ministry.

In China, Yin and Buck (2015) embarked on a collaborative action research project with a Chinese classroom teacher to explore the potentials and challenges of integrating formative assessment into a Chinese high school science classroom. Particularly in China, the difficulty in implementing formative assessment practice is attributed to the Chinese Confucian culture where students regard the acquisition of essential knowledge as important and they look up to their teachers as the authority of this knowledge and accept their power distance from the teacher. This is a complete contrast to the Western ideology of formative assessment which sets the practice within socio-constructivist learning theory (Yin & Buck, 2015). Furthermore, the Chinese assessment system is highly dependent on high-stakes examinations as a means to determine future prospects for pupils, making the process of implementing formative assessment more challenging. The main aim of this action-research project was to examine if the Chinese learning culture inhibited the implementation of formative assessment in the classroom. The outcomes from this project will enrich the body of literature on the investigation of formative assessment practice in educational contexts that embodied Confucian cultural heritage such as Japan, Taiwan and Korea (Zeng, 1999).

The findings from this study revealed that generally, formative assessment can be integrated into the learning process because the high-stakes examination became a source of motivation for both teacher and students to enrich the classroom activities. The teacher and students were motivated to use formative assessment practices to achieve a deeper conceptual understanding they recognised as an outcome. However, the concern for getting the 'only one right answer' (Yin & Buck, 2015, p745) had caused students to passively rely on teacher's right answers. This perception of

getting the 'right answer' is also related to the Confucian tradition of emphasising the acquisition of knowledge and respect for the teacher's authority (Yin & Buck, 2015). Additionally, the competitiveness of the high-stakes nature of the examination had impeded the use of formative assessment. For example, due to the constraint of test time, students needed very high levels of proficiency in retrieving information and in thinking of possible problem-solving strategies. As a result, teachers perceived that they had to use direct teaching strategies to cover content quickly and to prepare students for the tests. Nonetheless, formative assessment was still relevant and useful in the classroom as a means to prepare students for the test since the students viewed that process as a form of learning. The study found that when the teacher and students spent more time on understanding, they needed less drill practice for test preparation. Moreover, the findings of the study also revealed aspects of formative assessment that did not work effectively. For example, the large class size (54 students) was a serious challenge for the teacher to use classroom questioning to elicit students' ideas and to provide individual feedback on students' written work. The short class period (40 minutes) also contributed to the limited opportunities for classroom formative activities. The hierarchical relationship between teacher and students also seemed to constrain the students from expressing their ideas. In fact, the students in this study indicated that they did not want to ask questions or respond to the teacher's questions in class because they would feel embarrassed if they had asked an easy question or given a wrong answer. In this case, formative assessment was not fully effective if compared to the Western context (Black and Wiliam, 1998a).

Another significant finding from the study was the value of promoting the adoption of formative assessment practice according to the context in which the learning operates. The authors acknowledged that Chinese students in this study lacked confidence to engage in oral forms of formative assessment with their teachers which was claimed to be a common practice in Western educational contexts. Alternatively, the teacher in this study provided them with writing tasks to allow the students to communicate their ideas. In doing the writing tasks, students' effort to focus on learning conceptions and the respect they have for their teachers made the formative assessment more

effective as they completed the tasks carefully and responded to teachers' feedback seriously. This finding can be used as a benchmark to implement formative assessment in Chinese high school classrooms (Yin & Buck, 2015), though the design and approach were relatively different from that in Western educational contexts.

Similar to the earlier action-research project, the implementation of assessment for learning in Thailand was intended to support performance in assessment for summative purposes. The 1990 national curriculum asserted that teaching and learning activities at any level of education must embed 'learning to think, to do and to solve problems and that teachers must deliver instruction so as to encourage the integration of learning to know and learning to act (Pitiyanuwat, 2007). Hence, the assessment system consisted of both national examinations and formative assessment practices in the classroom. Having this system in place, the Department of Curriculum and Instruction Development (CID) conducted a pilot study in 1994 to investigate progress in using formative assessment in the classroom. It was reported that there were some practical issues that needed attention, including providing professional training for teachers in their new roles in assessing as part of teaching, enhancing the collaboration between parents and schools and taking action to address large class size and teachers' workload.

On another note, a recent study in the Southeast Asia region on formative assessment practice was conducted in the Philippines (Cagasan et al., 2016), and the findings were generally positive. Earlier, other studies in the Asian region highlighted the struggle of implementing formative assessment practice in a high-stakes examination culture, but the formative assessment project in Philippines has suggested the potential for a more promising future in formative assessment reform in the Asian region. The aim of the formative assessment project was to explore the implementation of formative assessment in the Philippines. This project was conducted in two phases. In the first phase, teachers' formative assessment practice was labelled as formal. Yorke (2003) conceptualised formal formative assessment as assessment tasks that are planned ahead according to what is written in the curriculum; that is, students need to accomplish pre-identified tasks, and the teacher evaluates and provides feedback to the student. In the project, this was exemplified in

the ways in which teachers gave a short quiz at the end of the lesson, using a show of raised hands to questions asked as an indicator of students understanding the lesson, and in which they asked low-level questions in classroom discussions (Griffin et al., 2016). Most of the time, teacher-collected data on student performance were not used to plan instruction but were used mainly to calculate grades. Many teachers lacked flexibility in doing on-the-spot adjustments of their lesson and tended to stick to their lesson plan. There was also little evidence of students seeking formative feedback from their teacher. Small- and large-group activities were commonly used by teachers, with few teacher-student instructional dialogues occurring during a lesson. The findings from the second phase of the project identified improvements in practice, illustrated by the identification of four levels of increasing competence in formative assessment practices. This information, they argued, would provide ways for teachers to assess their current practice and identify the future direction of their teaching practice. Moreover, the progression gives teachers a means to calibrate their pedagogy and philosophy as each level mirrors more sophisticated understandings of how teaching and learning should happen. The researchers assumed that the improvement was an effect of the education policy document that advised teachers to implement formative assessment inside classrooms. The current policy describes the theory, purposes, parameters, processes and guidelines on classroom assessment. Despite the guidelines prepared by the Ministry, the researchers were well aware that assimilating new ideas may be stimulated by additional support and reinforcement of the process and expectations.

In another investigation, Wei had led a team of researchers (2018) to review studies on formative assessment practice in East Asia. From the review, four salient aspects of Asian educational contexts were identified as barriers to implementing formative assessment effectively. Some of these aspects were consistent with the findings from previous studies. First, high-stakes examinations had a major impact on teaching practices and reduced the use of formative assessment in the classroom. Second, some studies also highlighted the highly authoritarian nature of East Asian classrooms which generally accepted that teachers were the ultimate directors and decision-makers (Cagasan et al., 2016; Griffin et al., 2016; Lam, 2013). For example,

a small number of studies showed that students preferred teacher assessment to peer assessment (Bryant & Carless, 2010), and they sometimes became frustrated with discussions when they would rather be told the 'correct answer' (Yin & Buck, 2015) by the teachers, who were considered the 'experts' in the classroom. This was also exemplified in the research on questioning and feedback in Malaysian contexts that illustrated how teachers had the ultimate authority over knowledge in the classrooms. In the study, teachers were seen as providing the correct answers most of the time, leaving little space for dialogic interactions (Sardareh et al., 2014; Sardareh, 2016).

Additionally, the teachers' mindset, influenced by their own upbringing and beliefs, has also shaped their practice in the classroom. Some teachers believed that AfL is a good learning strategy for students but were constrained by institutional values and school culture (Yu, 2015), as well as pressure from parents (Hui et al., 2017; Ratnam-Lim & Tan, 2015). There was also the belief, on the part of both students and teachers, that grading and scoring were still a 'valued part of learning', not at all incompatible with AfL (Azis, 2015), but the motivation gained from test scores was an accepted way to make students responsible for improving their own learning (Brown et al., 2009; Bryant & Carless, 2010; Yin & Buck, 2015).

Based on the findings from these studies, it is clear that it was difficult to shift the teachers' mindset on examinations as they generally felt examinations were inherently fairer and more objective than AfL (Tong, 2011). Moreover, some teachers were unconvinced of the potential benefits of AfL (Koh et al., 2015; Rashid & Jaidin, 2014) in contrast to tried and tested practices (Leong, 2014; Tong, 2011). There were also teachers who perceived AfL as a 'Western construct' and perhaps, felt that it was not suitable in the Asian educational contexts (Bryant & Carless, 2010). Asian teachers also reported as having limited knowledge and competency of AfL (Sardareh, 2016; Sardareh et al., 2014; Yan & Cheng, 2015), and this limitation has also affected their belief and classroom practice. The implications of having a belief in the efficacy of examinations have been discussed in the Learning How to Learn project (James et al., 2007) in which teachers' beliefs have a significant impact on teachers' classroom practices especially if they operate in an examination-oriented learning system.

Nonetheless, it should be commended that there were instances where teachers searched for alternative ways to ensure that formative assessment was carried out despite the challenges in dealing with the pressure of external examinations (Lam, 2013; Leong, 2014). Butler and Lee (2010) claimed that formative and summative assessment should 'meet halfway', that was, through using summative for formative purposes, and vice versa, as well as limiting feedback to the process rather than the performance. In Brunei, teachers were already implementing BCATs (Brunei Common Assessment Tasks), which were 'formal, standardised and moderated assessment tasks that familiarised teachers and students with assessment for learning (AfL) best practices' (Ministry of Education Brunei Darussalam, 2013) and had both a formative and a summative component (Yatab & Shahrill, 2014).

Malaysian educational context

In the Malaysian educational context, similar patterns as observed in Asian counterparts can be seen in the way formative assessment is enacted in the classrooms. Generally, teachers are still learning to integrate formative assessment into their teaching practices. For example, in a study conducted in a secondary school in Malaysia, ten teachers were involved in semi structured interviews in which the findings suggested that teachers needed continuous support from policy makers to ensure that progress was made in assessing students throughout the teaching and learning process. It was suggested that ongoing training in context may best build a clear understanding of formative assessment and how it can be integrated into teaching and learning (Arumugham et al., 2017). In another secondary school, an investigation was conducted to identify the extent of teachers' understanding of formative assessment and their reported practices of providing feedback in a school-based assessment (SBA) environment. The findings suggested that there were differences between teachers' perceptions and practices. Initially, the teachers revealed a general lack of understanding between the purposes of formative and summative assessment which might explain why they found the implementation of SBA in their classrooms so challenging. However, the evidence emerging from

interviews reported that they practised various forms of feedback, some of which might be regarded as formative. This suggests that it is important to distinguish between teachers' explicit knowledge and their implicit understanding of formative and summative assessments in evaluating the effectiveness of integrating formative assessment in the classroom (Hasim et al., 2018). In another study that involved secondary school teachers (Veloo et al., 2016), the findings suggested that the effective implementation of SBA was still partial and required deepening of knowledge among teachers. This was reinforced by further evidence that compared the perception of teachers who had attended SBA-related trainings and those who had not. There was evidence to suggest that teachers who had received formal training on SBA perceived SBA more positively as compared to those who had not. Therefore, the authors asserted that teachers needed proper guidance and training to establish effective classroom assessment routines for SBA to be successfully implemented. In a recent study that investigated the assessment for learning (AfL) practices in secondary schools (Sathasivam, 2019), the results indicated that the teachers were able to identify three AfL strategies which were *Sharing Learning Targets*, *Engineering Good Classroom Discussions*, and *Peer Assessment*. Though they were able to identify these strategies clearly, the enacted AfL practices of these teachers were mostly at a fairly superficial level. This finding resonates with other studies in Malaysian secondary schools in which teachers do not have a clear understanding of how to enact formative assessment as a learning strategy to improve students' learning (Sathasivam et al., 2019).

The practice of formative assessment in primary schools in Malaysia is not any different from the situations in the secondary schools. In a study of English as a Second Language (ESL) classrooms, the findings suggested that the teachers' understanding of 'formative assessment' was somewhat vague. Mudin (2019) argued that they lacked comprehensive, profound understanding of the vital importance of formative assessment and its potential to facilitate learning. There were noticeable gaps, variations and confusions in their articulated understanding of formative assessment. However, the researchers observed that teachers were seen to incorporate elements of formative assessment in their practices although they were

not always consistent with their espoused understanding of key ideas in formative assessment. The author presented some of the factors that affected teachers' lack of understanding on formative assessments: conceptual constraints, continuous practice of traditional means of language assessment, lack of professional development, contextual constraints, teachers' beliefs and an examination-oriented culture. The findings of this study support the contention that there is a need to develop appropriate forms of formative assessment strategies that are more conducive to the Malaysian primary ESL contexts.

Despite the lack of formative assessment practices in primary and secondary schools, Singh et al., (2017) study on formative assessments in higher learning institutions seems to offer more promising progress than the enactment of formative assessments in schools. The researchers argued that the freedom given to the lecturers in exploring various assessment approaches played an important role in their having the opportunity to empower students' learning. Activities used by the lecturers included oral questioning and peer assessment for assessing students' presentations, correcting peer's errors and giving feedback to peers. Furthermore, the researchers suggested that the lecturers in this study also had positive mindsets which allowed them to explore different assessment practices rather than focusing on the normal practice of generating summative grades.

In short, echoing the success stories of formative assessment practice in the Western educational contexts, it could be argued that formative assessment practices can be successfully integrated in Malaysian classrooms if teachers are given the autonomy to manage lessons which can increase their sense of ownership to the change initiatives. Since the implementation of change adopts a top-down approach, the findings from a recent survey in Malaysia shows that the top-down approach is ineffective because teachers felt that the changes were imposed on them; hence, they did not feel a sense of ownership of the values of change (The Head Foundation, 2019, p4). Additionally, changes in classroom practices may also be more effective if lessons are not closely related to exams whereby the results are primarily used to measure students' performances for accountability purposes. Changing policy and

practice in Asian educational contexts including Malaysia is perhaps even more complex than Western educational contexts primarily because of the cultural differences that shape fundamental ideas of teaching and learning. Furthermore, a significant contributing factor to successful changes is the extent to which proposed changes are consistent with teachers' existing beliefs. The complexity of enacting educational change in exam-oriented contexts leads to the contentious debate of assessment purposes in education which will be discussed in the following section.

3.3.6 Contentious debate on the purposes of educational assessment

The impact of Black and Wiliam's (1998) work on the assessment field can be observed in the emergence of assessment reforms in international contexts (eg: Birenbaum et al., 2015; Tan, 2017; Valtin, 2002; Wagner and Valtin, 2003; Yin & Buck, 2015). These assessment reforms mainly revolve around discourses of empowering teachers' assessment and engaging students actively in the learning process. They also promote the use of formative assessment or assessment for learning in the classroom as a means to foster learning. In the large-scale projects in England and Europe, there were various factors that led to positive results which can be broadly categorised into two aspects: first, the projects had been able to establish a systemic support to develop a coherent understanding on the importance of formative assessment in classrooms. This included substantial support from the Ministry that was manifested through the preparation of teaching materials and resources as well as the initiative of transforming the school's learning culture to allow teachers to integrate the formative assessment practices in their classrooms. Second, teachers were given opportunities to engage actively in professional learning activities that allowed them to learn and understand the underlying principles of the policy ideas from their own and their colleagues' experiences. Teachers in the KMOFAP project (Black and Wiliam, 2003) for example, also received additional support and practical advice from the researchers to help them choose suitable pedagogical approaches to enhance the practice of formative assessment in their classrooms. This opportunity

for learning has indeed shaped their belief and attitude to support the change propositions.

However, similar provisions may not be happening in other educational contexts that undergo assessment reforms or educational change process, in a broader sense. There are educational contexts that are still largely bound to the use of high-stake exams, and the situations in these contexts have somewhat initiated the contentious debate on the purposes of assessment in education. Klenowski and Carter (2018) observed that for countries that aim to shift the focus of assessment from external examinations to formative assessments, the change ideas were driven by a desire to avoid the unintended consequences from external examinations or high-stakes testing. These consequences have occurred consistently over time with remarkable similarities between countries. For instance, Harlen (2010) in a systematic review of research on the impact of testing found that there were negative consequences on students' motivation for learning, which in the longer term, could be detrimental to future learning. The findings of the review included insights into how the introduction of national tests brought an increase in the use of other tests (Clarke et al., 2000) and that extrinsic motivation associated with tests led to superficial rather than sustained and substantive learning (Crooks, 1988). When these issues emerge, the proposition for assessment reforms that aim to use formative assessment to avoid the pressure from high-stakes testing has caused the teachers difficulty to balance their instructional practices to serve both purposes. This signifies that the contentious debate in assessment is central in exam-oriented educational contexts.

One of the prominent challenges to integrate formative assessment into classroom practices primarily because there is a transformation of teachers' and students' role in the classroom (Smith, 2016). This is especially pertinent in a Confucian learning culture where teachers have always been perceived as important in the classroom (Yang, Huang & Aldridge, 2002). Changing the practice in this context involves transformation in the role of both teachers and students in the classrooms which also require them to have a deeper understanding of the rationale and values of learning.

For example, a study by Huang and Asghar (2016) in Taiwan highlighted that many teachers felt that the new approaches to teaching were not compatible with Taiwanese cultural values (Baron & Chen, 2012). Furthermore, the highly competitive examination systems somewhat created a learning environment in which teaching and learning activities primarily focused on the preparation for the college entrance tests (Tsai and Kuo, 2008). The challenge deepens as students seem to also struggle to take on a more assertive role in the classroom as illustrated by the principles of formative assessment.

Realising that the challenge emerges from the exam-oriented system that dominates certain educational contexts, it is found that empowering teachers in high-stake, accountability contexts is to strengthen teachers' assessment for summative purposes. Klenowski and Carter (2016) asserted that the conflict can be reduced if school leaders can create a culture of inquiry where assessment evidence is used to enable and drive school improvement to promote equity and inclusion (Ainscow, 2010; Darling-Hammond et al., 2009; Klenowski & Wyatt-Smith, 2014; Peck & McDonald, 2014). Similarly, Harlen and Gardner (2010) addressed this issue in the light of managing the conflict of formative assessment in accountability contexts. They claimed that administering tests to students may not be a suitable method of evaluation in 21st century education where the skills of problem-solving, critical thinking, enterprise and citizenship are central to the curriculum. Therefore, they suggested that teachers' assessment should focus on the assessment of these skills as students are able to demonstrate these attributes when they are being assessed. Assessment by teachers can take evidence from regular activities, supplemented (if necessary) by evidence from specially devised tasks; that is, introduced specifically to provide opportunities for students to use the skills and understanding to be assessed (Harlen & Gardner, 2010). Furthermore, promoting teachers' assessment for summative purposes can widen the opportunity for students to participate in assessment by familiarising them with the success criteria. The criteria should indicate progression to allow students to reflect on their achievement as well as aspects that they need to achieve. Furthermore, they should also be made aware of the purpose of the assessment and how it can help them to recognise their strengths and where

they need to make more effort. This enables the process of arriving at a summative judgement to be used formatively by students and by teachers as feedback into planning (Harlen & Gardner, 2010). Another way to increase teachers' understanding in formative assessment is by encouraging them to engage in a professional learning community. It is believed that professional learning community is able to motivate teachers, deepen their understanding of the changes and enrich their pedagogical approaches. This idea came from researchers who believe in seeking help professionally to improve the processes of change in the classroom (eg: Pedder et al., 2005; Pedder, 2006; 2010; Pedder & MacBeath, 2008; Pedder & James, 2012). This idea also matches the recommendations obtained from the KMOFAP project in England (Black and Wiliam, 2005) whereby teachers' engagement in a professional learning community (PLC) was one of the contributing factors that resulted in the positive outcome of employing formative assessment strategies in their classrooms.

3.4 Theoretical framework: The theory of educational change process

Observing the ways in which various educational contexts integrate new policy ideas into their classroom teaching suggest that there are underlying principles that govern the changes. The principles of educational change process as described by Fullan in the series of his books (Fullan, 2003; 2004 & 2007) outlines three characteristics that underpin the educational change process. Essentially, he illustrates the key concepts in the following model:

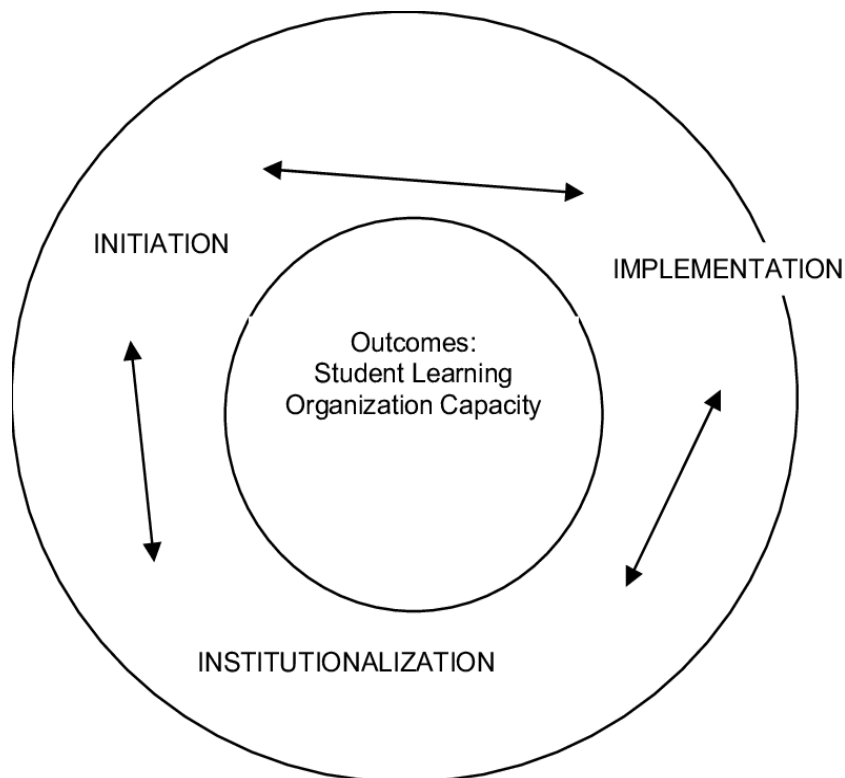


Figure 2: A simplified overview of the change process (Fullan, 2007)

The model of the change process illustrated above (Fullan, 2007) shows that there are three broad phases involved in a change process: initiation, implementation and institutionalisation. The initiation phase sets the beginning of change in which someone or some group initiates the change. Through the initiation phase, the direction of change moves to a phase of attempted use (implementation) which can be more or less effective. The process then moves to the phase of continuation or institutionalisation which is an extension of the implementation phase. The outcomes, depending on the objectives, can refer to several different types of results and can be perceived as the degree of school improvement in relation to the given criteria. This model presents only the general image of a much more detailed and complex change process. The two-way arrows imply that the change process is not a linear process but rather one in which events at one phase can feed back to alter decisions made at previous stages which then proceed to work their way through in a continuous interactive way. Among other things, Fullan asserts that people may not understand

what they are getting into when a so-called 'adoption' decision is made. Therefore, it is vital to keep an open mind about implementing innovative ideas in education because "what matters in a change process does not lie at the initiation phase but at the events that happen during the process of change" (Fullan, 2007, p.68).

Based on the philosophical ideas of a change process expressed by Fullan (2007), this model of change provides the theoretical framework that governs this study. In this study, the principles of change are used to interrogate the implementation process of the new Malaysian curriculum policy, KSSR, that highlights assessment reforms manifested through the attempt to introduce the practice of formative assessment / assessment for learning as a strategy in the classroom to foster learning. This framework was adopted as it has been influential in both Western and Asian educational contexts. A further advantage of using this framework is that Fullan's work goes beyond theory to begin to identify characteristics of positive outcomes of change. For example, in terms of teachers' behaviours in the classrooms and the factors that influence success, they are innovative in integrating formative assessment practices into their teaching activities, and they are given freedom to decide their classroom activities which elevate their engagement in the change process; they are not obliged to and constrained by other aspects of education that may disrupt the process. Examples such as these that link theory and practice provide a particularly useful frame of reference for this empirical study. The final chapters of this thesis reflect on the complexity of the change process.

Extending Fullan's idea on the complexity of the change process, there are two other conceptual framework that have influenced the theoretical framework for this study. First, Hayward's (2009) work on change processes at a national level is an important feature of this study. Based on the positive changes in the Scottish context, this study draws on strategies used to engage policy makers, researchers and practitioners in changing practices. In this aspect, Hayward (2009) as well as Leahy and William (2012) promote the use of a model of change that is based on the notion of 'dissemination as transformation'. Particularly, Hayward believes that disseminating successful strategies to a wider community of practice is indeed a complex business,

and if the complexities are ignored, is it likely to impact the sustainability of change. Primarily, Hayward & Spencer (2010) argued that the model of change that operates on the concept of 'dissemination as transmission' (Hayward & Spencer, 2010, p86) has significant drawbacks. It is related to the inconsistent messages that emerge between the policy intentions and the context in which the change process operates. Alternatively, Hayward (2009) proposed a model of change that promotes the concept of 'dissemination as transformation' (Hayward, 2009, p91). This model of change was developed from empirical findings from a large-scale national formative assessment project in Scotland. The *Assessment is for Learning* project was designed using the research evidence on assessment (eg: Black & Wiliam, 1998) and findings on what mattered in large-scale transformational change (Hayward et al., 2006). It drew on a research project that reviewed organisations as well as public and private sectors where transformational change was perceived to have taken place (Senge & Scharmer, 2001). Ultimately, the findings from this project suggest that the process of transformational change needs to include:

- engaging people in the process of change to develop practical knowledge that is useful in their everyday lives;
- fostering relationships and collaboration across organisations and researchers;
- creating opportunities for collective reflection; and
- leveraging progress in individual organisations through cross-institutional links to sustain transformative change.

This model emphasises that transformation is most likely to be successful emerge through a collaboration across the communities in creating new knowledge while recognising the complexity of that process. This complexity is asserted as 'knowledge creation is an intensely human, messy process of imagination, invention and learning from mistakes embedded in a web of human relationships' (Senge & Scharmer, 2001, p247). Acknowledging this complex process of change, Hayward and Spencer (2010) express that simplifying complex systems will not be an effective way of managing educational change. In fact, the research, policy and practice communities may have

to learn to live with complexity and to attempt to develop deeper insights into the nature of the complexities (ibid, p19).

The conceptual framework that underpins this study is further influenced by Hargreaves and Fink (2003) who theorise about the role of leadership in the educational change process. They argue that any theoretical framework for change must pay attention to the leadership environment in schools. In relation to the context of this study, the philosophical framework described by Fullan (2007), the interconnected nature of research, policy and practice outlined by Hayward (2009) and Hargreaves and Fink (2003) and the recognition of the complexity of the change process form the theoretical framework for the investigation of educational change, particularly assessment reforms, in Malaysian primary schools.

The following sections will discuss in detail the aspects that have been identified as levers that can affect the processes of change. They include:

1. the role of teachers' beliefs in facilitating instructional practices that can foster learning
2. the role of school leaders in building a school culture that supports the processes of change; and
3. the importance of students' voice in the change process.

Each of these features should not be viewed in isolation during the processes of change; in fact, their synergy, interaction and relationship give substantial effect to the phenomenon of change. Although each of the characters (ie: teachers, school leaders and students) influences the change process in its own way, the role of teachers is seemingly central as they are communicating policy ideas into practices (Harlen & Gardner, 2010; Tay, 2015). In this sense, the role of teacher is assumed to be an 'agent of change' (Fullan, 1993; Van Der Heijden, 2014) and, with that, they bear a huge responsibility to make changes happen. It has been argued that there are cases where teachers assumed that they have made changes in practice if they followed tips or strategies to make changes such as adopting new materials or altering their

teaching approach (Fullan, 2007). However, making physical changes without understanding the meaning underlying the changes will not attain the desired result. Therefore, teachers are strongly advised to understand clearly the meaning of change in their educational contexts. If they are unable to show their understanding of the policy, they may exhibit superficial characteristics of change. For example, one of the large-scale projects on assessment reform, assessment for learning (AfL) in England (Marshall and Drummond, 2006) suggests that this is a serious concern. In their study, they found that there were two types of teachers assuming changes in their classrooms: teachers who embraced the 'spirit' of AfL and teachers who conformed to the letter of AfL (Marshall & Drummond, 2006). Teachers who understood the meaning and purpose of developing students' autonomy through the integration of assessment for learning were able to demonstrate changes in their instructional strategies that fostered students' learning. This description refers to teachers who embraced the 'spirit' of AfL. In contrast, teachers who seemed to have made changes in their classroom practice but did not exhibit a deep understanding of their instructional practices were considered as conforming to the letter of AfL. This finding establishes the importance of teachers in the change process, and in order to do so, they need to believe and understand clearly of what the changes entail. Understanding a policy requires an interaction with various individuals, and this is not possible to be achieved without a proper infrastructure provided to them.

3.4.1 The role of teachers' belief in the processes of change

In order for teachers to attain a clear understanding on the meaning of change, there are studies that showed that teachers' beliefs play a major role in the process as beliefs have a strong impact on teaching and learning (Lovat & Smith, 1995; Handal et al., 2001). Fundamentally, a positive belief on the part of teachers can drive them to perceive the changes in a positive manner which motivates their readiness and willingness to engage with the new policy ideas. However, transforming teachers' beliefs is a challenging task. It requires an effective learning community that can drive changes that are specific to local contexts. As Fullan (2007) suggests, the process of transformation of behaviour has to begin from where the teachers are, which includes

understanding their existing educational beliefs and learning culture. Furthermore, to facilitate the transformation, there needs to be a whole community who transform their way of thinking and perception about the changes. This sits well with the socio-constructivist theory (Vygotsky, 1962) that situates the construction of knowledge through interaction with their culture and society. It also emphasises that the understanding of the social world is best achieved collectively by developing a shared understanding among members of the society.

Studies from various educational contexts have illustrated the impact of teachers' beliefs on facilitating teachers' understanding of the meaning of change and on how the relationship and interaction with individuals related to the change process have helped to facilitate positive outcomes of these changes (eg: Black and Wiliam, 2005; OECD, 2015; James et al., 2007). For example, a study in Israel (Levin & Wadmany, 2005) has suggested that teachers' educational beliefs, knowledge and classroom practice can be transformed if there is also a coherent change in other aspects related to teaching and learning including resources, learning environment as well as vision and mission of the reform. The finding of this study reflects the socio-constructivist theory (Vygotsky, 1962) which emphasises the transformation of teachers' educational beliefs through social interaction.

Additionally, Girardet (2018) reviewed a body of literature that studied the factors that constitute changes in teachers' beliefs. The review suggests that teachers' beliefs which are highly related to instructional practices can be established through a collaboration with other teachers such as a professional learning community. This collaborative project aims for teachers to reflect on teachers' prior beliefs, provides examples of innovative practices, allows them to experiment with new practices in their classroom and promotes reflection on practices in a collective environment. Similarly, Hadar and Brody (2018) who have investigated seven groups of professional learning community (PLC) in Israel suggested that change is an individual journey construct stimulated by learning in a community and negotiated through interaction with students. This finding supports the earlier finding presented by Opfer and Pedder

(2011) who described change as a collective responsibility. In the United States, a comparison study was adopted to examine the changes in teachers' beliefs related to teaching Mathematics in schools from two districts (Shirrell, Hopkins, & Spillane, 2018). Generally, changes in the beliefs of these Mathematics teachers were associated with formal professional development in both districts although the particular type of beliefs that changed differed in the two settings: Auburn Park and Twin Rivers. In Auburn Park, teachers' beliefs about the teacher's role in facilitating mathematics instruction became more reform-oriented among teachers who engaged in a great deal of formal professional development which affected changes in the whole district. Meanwhile, teachers in Twin Rivers received training from mathematics coaches and this interaction and collaboration improved teachers' beliefs even though it did not affect the entire district. Despite the differences, the findings from this study reinforce the notion that teachers' beliefs can be changed through social interaction. In another study by Liou, Canrinus and Daly (2019) in South California, a different but related idea on teachers' belief was presented. Their findings suggest that in order to encourage teachers' engagement with new curricula, schools and school leaders need to pay attention to understanding teachers' beliefs about whether they think they are able to do so, whether they perceive there are sufficient resources that support them in this endeavour, and the degree to which they believe doing so would make a positive impact on their teaching and student learning. Particularly, they highlighted on teachers' self-efficacy beliefs as the most influential among all belief constructs on their action.

3.4.2 The role of school leaders in the processes of change

Essentially, the role of school leaders in a change process is to create an environment conducive to change, particularly by shaping a school culture that promotes the change process. Schein (1985) recognised that the culture of an organisation consists of basic assumptions and beliefs that are shared by members of the organisation, and these beliefs operate in a 'taken-for-granted' fashion. Narrowing the scope to the setting in schools, Deal and Kennedy (1983) suggested that each school has a

different reality or mindset of school life that sets it apart from other schools, which they describe as school culture. Beare, Caldwell and Milikan (1989) who viewed culture as 'situationally unique' described school culture in ways similar to Deal and Kennedy (1983). Stoll (1998) added a further aspect of school culture as being the reality for those within a social organisation that gives them support and identity as well as creating a framework for occupational learning. The Hay Group (2004) developed the idea further, identifying the possession of a similar mindset among members of the community as the meaning of school culture. Additionally, Humphries and Burns (2015: 241) defined it as 'unwritten cultural norms, developed and reinforced by managers, teachers and students, which impact on teaching practice'. A common notion of school culture from all these views is that it consists of beliefs about education, and the construction of beliefs are contextually bound which sets them apart from other contexts. This belief is a powerful tool that shapes the instructional practices and the way teachers and students interact and behave.

Based on this concept of school culture, school leaders are perceived to lead the responsibility for shaping the school culture. As a leader, it is important to establish the mission and vision of the school as these key ideas are the framework which governs the development of school culture. Based on the understanding of what constitutes school culture, leading changes in schools should involve changes in the way teachers believe and behave, and it should be initiated by moving leaders to get a grass-root perspective on teachers' perceptions and assumptions about teaching and learning. The process of transforming teachers' belief to promote changes in classroom practice that can foster students' learning is arguably a collective responsibility among members of the school through engagement in professional learning community discourse. Fundamentally, teachers should not operate the changes independently; they need to actively interact with colleagues and school leaders to create a school culture that aims to lead changes effectively. The crucial step of the process is to adopt a leadership practice that can promote the culture of change.

The major influence on identifying suitable leadership practice is the context in which school leaders operate. The school context has an influence on leadership practice through the ways in which educational leadership and management (EDLM) interacts with various social aspects including institutional, economic, political and cultural contexts (Bajunid, 1996; Cheng, 1995; Dimmock & Walker, 2005; Hallinger & Bryant, 2013a, 2013b; Hallinger & Leithwood, 1996; Mertkan et al., 2016). Authors in a study conducted in Australia (Liddicoat, Scarino & Kohler, 2017) reaffirmed that curriculum change is made difficult because of structures, and these structures represent how things are done (ie: established culture). They also emphasised the notion of reflection as part of a change and innovation process. This reflection is not only important during the implementation process but should continue to include reflection about the context in which the change will be enacted.

Since the context of this study is set in a context of Asian cultural heritage, it is logical to review the body of literature focusing on these contexts. In China, Poole (2016) promoted the importance of considering local contexts in managing change especially in borrowed policy ideologies. Poole (2016) reviewed a range of literature to inform the process of incorporating formative assessment into the culture of learning in Shanghai, China. The outcome of the review revealed that the implementation and internalisation of formative assessment in China still remains largely problematic as many of the theories and practices borrowed from Western countries are included with little consideration paid to their compatibility with China's cultural and learning heritage (Liu & Feng, 2015). Therefore, Yin and Buck (2015) argued that the process of localisation needed to be clearly articulated in the policy documents so that teachers are able to play a fundamental role in changing school's culture of learning and teaching from the bottom-up. Hallinger (2017) reviewed EDLM practices in East Asia, particularly in Singapore, Malaysia, Taiwan, China and Vietnam. The results of the review showed that the role of school leaders or 'principals' as used in the article in these countries was not dominant and that school leaders submitted to the instructions of higher authorities. For example, principals had limited autonomy to develop their own curriculum because official curriculum frameworks are provided by the Ministries

of Education in these academic settings. Their role seems to be limited to monitoring the implementation. Additionally, principals had to ensure teaching quality and student learning; however, in Malaysia for example, the way they monitor the quality is not related to the classroom practice. For instance, The Ministry instructed school leaders to have a 'daily walk-around check' as a symbol of monitoring the quality of teaching and learning rather than being involved in classroom practices. Furthermore, the Asian culture of collectivism (Dimmock & Walker, 1998; 2000) seems to hinder the growth of professional learning community practice. For example, in Vietnam, principals would avoid conflicts with teachers and parents which may indicate that discussion in professional development needs to be free from conflicts. Principals in these Asian countries also found that 'distributed leadership' is challenging in a hierarchical educational system and culture. They continued to struggle to find the right balance between unitary decision making and teacher involvement in decisions that affect teaching and learning. In brief, the study concluded that school leaders in Asian region are facing areas of difficulty in managing change due to the cultural characteristics embedded in their educational system.

This difference becomes apparent through comparison with Western academic contexts which have played a central role in the global educational change phenomenon. Primarily, Western academic goals commonly seek to develop students who are holistic, critical and independent, whereas in Asian academic contexts, learning for examinations largely takes over the educational discourse even though in reality, many Western societies are similarly influenced by the impact of high-stakes examinations (Gardner et al., 2008). Secondly, an instructional leadership approach that empowers the role of school leaders in schools is found difficult to adopt in Asian educational environments. In the instructional leadership model designed by Hallinger and Murphy (1985), one of the components that determines instructional leadership is a school's vision and mission as well as curriculum coordination. These aspects of the leadership practice are beyond the authority of school leaders in Asian contexts. This is influenced by the policy development process in Asian countries that is centralised and mandated. In relation to that, it is also challenging for school leaders to adopt a

distributed leadership because of the rigid hierarchy and bureaucracy of the administrative structure in these Asian countries where they still practice a top-down enterprise (Hallinger, 2011) in the process of educational change.

From these studies, it is understood that the context in which school leaders operate plays a significant role that has a direct impact on the leadership practice in which the school culture sits. Similar to the approach suggested in changing teachers' belief in the processes of change, changing a school culture should not be the sole responsibility of school leaders. The local governance in which the curriculum change is initiated also contributes significantly to transforming the school culture. In Malaysia for example, the model of change is a top-down enterprise, and this approach to change limits the engagement of school leaders in the change process because they are given limited authority in managing the curriculum change (Hallinger & Walker, 2017). Therefore, paying attention to the cultural contexts in which school leaders operate should be a major priority in facilitating the processes of change. This reinforces Fullan's (2007) suggestion that the reality of change should be examined *from the point of view of people within the role* (p155), and this should become a starting point to construct a practical theory of the meaning and results of change attempts.

3.4.3 The importance of students' voice in the processes of change

The earlier sections have focused on the elements that could improve teachers' belief and its relationship with students' learning. It was highlighted that leadership practice was also related to the construction of teachers' belief as these features are fundamentally contextually bound. Furthermore, the literature also reflects a learning process among teachers and school leaders that sits well with the socio-constructivist theory in which social interaction is central to the discussion. Building on this idea, this section will focus on the importance of students' voice in driving a change process that aims to empower the role of students in the learning process. Students need to take

an active role than being at the receiving end of the implementation structure as, in Malaysia, has traditionally been the case.

Generally, encouraging students' engagement in the processes of change is now believed to be crucial in fostering learning (Hayward, 2011; 2013). Fullan (2007) described two features of students' engagement in the change process: reconstituting classroom culture and reconstituting school culture. In order to transform these, students need to understand the learning objective and need to be given space to share their thinking, e.g., their preferred classroom activities to challenge their thinking, or ways to encourage focused attention to complete tasks. Responding to this argument, Hayward (2011) investigated the perception of young learners and explored the significance of listening to their voices. In this study, she explored young people's understanding of two main areas of learning: what mattered in learning and how the approaches to learning in their classroom experiences related to these understandings. The findings of this study revealed that children emphasised the importance of their engagement in making decisions about the content of the curriculum. The young people also stressed the importance of listening and being listened to. In addition, they welcomed the idea of consultation (sharing feedback) and choice (making decisions about learning activities with teachers), and interaction in this context that changed teacher-pupil relationship. It is also important to note that learners in the study welcomed teachers' explanations, but most of the discussion of what mattered in supporting their learning was focused on community activities, group tasks, peer-support and peer-assessment.

Fullan (2007) reinforced this finding by expressing that children need to be part of the solution because they come from diverse background. Involving students in constructing their own meaning and learning is fundamentally essential as they get to learn more and become driven to go further. Taking on the idea that students become more active learners when they are involved in the planning of the lesson, a study in Israel (Levin & Wadmany, 2005) demonstrated that when students led the learning process, teachers' belief in students' capabilities of making changes also became

apparent. In this study, technology for learning purposes was used to drive students to take the lead in the classroom. They assumed the role of tutors to their peers and teachers in operating and communicating with computers. Therefore, teachers gained confidence in students' ability to become self-regulated learners whose voice in the teaching process should be heard. This study further supports the social constructivist theory that knowledge construction is the result of social interaction between members of the society.

In Singapore, Akshir (2019) examined the implementation of Singapore's curriculum policy named, 'Thinking Students, Learning Nation' (TSLN) through the prism of students' voice. The education system in Singapore has long included students' voice in several aspects of education such as students' engagement in community projects, students' participation in research and students' collaboration with their peers and teachers through feedback discourse in the classroom (Jackson, 2005). However, students' involvement as a manifestation of an inclusion principle seems to be virtually absent. The author emphasised that it was this dimension of students' participation that was transformative and critical to educational policy and change in Singapore as part of the 21st century education and citizenship. The study suggested ways in which students' voice can be integrated effectively amidst the hierarchical government structure. First, a ministerial consideration to include meaningful student voices using critical dialogue and consultation with other stakeholders in educational policy and change can be the first step to provide such opportunity for students. These students may form students' councils that can act as a medium to engage others in such interaction. Second, student representatives could participate in their school or teacher reviews or discussions of curriculum and assessment matters in the various subject areas. At a strategic level, students can be invited to participate in discussions of future ministerial educational initiatives to transform the way students' voices have traditionally been operated. What matters in this process, as emphasised in the study, is that students' participation in the policy development process should be genuine and not symbolic or tokenistic as observed happening in England and Australia (Fielding, 2006; Lundy, 2007). Mitra (2018) addressed the risk of using students' voice

in a symbolic or tokenistic manner. Ideally, students' voice can have a major impact on shaping active learning and can help with teachers' instructional practices, but if it is poorly designed and tokenistic, students may be disempowered and have reduced self-concept when participating in student voice activities. She suggested that the conflict of power play happened due to the institutionalised roles of teachers and students in the schools that contradicted much of a constructive adult-youth partnership. Adults and young people often returned to deep-seated traditions in teachers' and students' roles, even when they intentionally tried to foster new types of relationships (Mitra, 2005). Fielding (2004) added that many student voice efforts were problematic because schools co-opted student voices through a process of 'managerialism' rather than learning from them. In the end, 'surface compliance' (Rudduck & Fielding, 2006) emerges with the dominant discourse being driven by governance and representational rights (Fielding, 2001).

From the findings in these studies, there are two salient findings when incorporating students' voices in the change process. First, it can be a powerful tool to help teachers design instructional practices that are relevant to students and motivate them to engage in the learning process. Second, the inclusion of students' voice must not be a form of symbolism or be tokenistic as it can demotivate students from participating in the process and weaken their role as learners. In the context of Malaysia, the role of students in the processes of change is as the beneficiaries of policy, and the efforts to include them remain scarce, even considering that the curriculum enactment is in its third wave of implementation plan (Ministry of Education, 2012). This is exemplified from a recent study that examined the issues and challenges in managing curriculum change in Malaysian primary schools (Paramisam & Ratnavidel, 2019). The finding suggested that the role of students remained insignificant as there was no evidence to exhibit any investigation involving students; instead, the investigation of curriculum change still largely focused on the struggle of teachers in the process.

Chapter Summary

In this chapter, we have learnt that the educational change process in Malaysia is driven by the globalised educational policy as an effect of the benchmarking practice of international assessment such as PISA. Generally, the analysis of PISA data has induced policymakers in various educational contexts to embark on educational change that is benchmarked against international standards. Nonetheless, there are also countries that remain participative in PISA for symbolic purposes. In this case, they want to stay competitive on the international stage as represented by the ranking system. One example illustrating the ways in which an idea for an educational change can become a globalised phenomenon is observed in the way formative assessment has become central to policy and has developed the perceptions of effective practice internationally.

This has led to the increased significance of formative assessment as a means to foster learning. Essentially, the seminal work of Black and William (1998) triggered other large and small-scale studies that explored its effectiveness in the classrooms. In large-scale projects based in England and Europe, the outcomes from these projects outlined a set of characteristics that are perceived to make formative assessment practice successful. They include teachers' knowledge about the change, teachers' beliefs that can affect their practices as well as a coherent and functional system to drive changes effectively (Black and William, 2005; OECD, 2005 and James et al., 2007). The implementation of formative assessment in the Western education system seems to fit comfortably with the socio-constructivist learning (Vygotsky, 1962) theory that underpins the formative assessment practice and is more culturally relevant than in the Asian counterparts. In Malaysian educational context, the investigation on educational change processes in the past, particularly on assessment reforms have discovered two broad findings. First, cascading approach to policy implementation has been found to be an ineffective strategy to deliver desired information because teachers have difficulty to understand the policy ideas clearly. The implication is that teachers are not motivated to enact changes. The cascading

approach has also been found to cause a weak feedback loop as there was no dialogic interaction between educational leaders and teachers to discuss on the process of change in their educational contexts. This has further made teachers feel disconnected with the intended ideas of the educational change process. Another common finding is related to teachers' pedagogical beliefs and their relationship with students' academic performance. It is found that their beliefs do not reflect their instructional practices which can give impact to students' academic performance. There are some Malaysian teachers who generally believe that they are facilitators who can guide students to learn independently; there is also another group of teachers who do not give positive response to the curriculum ideas that focus on building learner's autonomy in the classroom. However, the findings from their classroom practices revealed that they have attempted to create a classroom that is more student-centred. Nonetheless, majority of Malaysian teachers still practise a teacher-centred learning and exam-oriented learning despite using the new curriculum policy which is supposed to build an autonomous learning environment in Malaysian classrooms.

In fact, observations on the way and which formative assessments have been conducted in several secondary school and primary school contexts have shown that teachers are still struggling to use them in the classrooms. In fact, most of them are still lacking the knowledge to effectively employ formative assessment for learning purposes. Two primary factors that contribute to these limitations are the top-down policy implementation approach and the use of exam results for accountability purposes. Nonetheless, in the higher learning contexts, the findings are more promising because lecturers have the freedom to explore teaching practices suitable to their students including the assessment practices. This finding reinforces the idea that if teachers are given freedom to explore and learn the ideas of change, their beliefs and teaching practices would also be equally affected.

Despite the positive outcome in the higher learning contexts, a general finding in the studies situated in both Western and Asian educational contexts indicates a major limitation in implementing formative assessment in a classroom that is examination oriented. There are two strategies have been identified to manage this conflict which are empowering teachers' assessment for summative purposes and increasing teachers' knowledge about formative assessment through professional learning community practice. The complexity of integrating formative assessment in the classroom suggests that the educational change process is indeed complex. This inherently aligns with the theoretical framework described by Fullan (2007) that sits on the notion that the complexity of change emerges during the phase of implementation. It is in this phase that developing the meaning of the change ideas is prominent and can affect the effectiveness of the change process.

Essentially, the educational change process is a people-related phenomenon for each and every individual, (teacher, learner, parent, policy maker and researcher) because it involves interaction with people from diverse backgrounds and social status; the process of change in education is indeed complex. Situating the change process in the perspective of social constructivist theory (Vygotsky, 1962) further underlines that knowledge development is socially constructed. The literature clearly highlights the importance of the teachers' role in translating a policy document into classroom practices and their role as agents of change (Fullan, 1993; Gamlem et al., 2017; Priestley and Miller, 2012). However, teachers' capacity to enact the policy and make changes relies largely on their belief in their capacity to lead changes in the classroom (Fullan 1993; Hargreaves 2004). Their belief can be developed through interaction and engagement with the change process as manifested in the construct of professional learning communities. Establishing an effective professional learning programme involves the active role of school leaders who are leading the change process at the school level. There are leadership practices that have been proven to foster successful change practice in schools (eg: Hallinger and Murphy, 1985; Hallinger, 2011); however, deciding on the leadership practice that is relevant in a particular school depends primarily on the local context which is governed by the

notion of school culture. What has been proven successful in one educational context may not be suitable in another context due to the social and cultural differences (Hallinger, 2010). Furthermore, in a hierarchy of the change process, students' voice is often not included; however, as the global movement of education reform is to encourage the development of students who are knowledgeable, critical and independent learners, their role should become more active and engaged within the change process. The importance of empowering students' voice is important in the impact it has on teachers' instructional practices, whereby if teachers collaborate with students to create a lesson plan it is more likely to be of interest and of relevance to them. Thus, schooling needs to operate in a way that connects students in relevant, engaging and worthwhile experiences that promote meaningful learning. In creating such a conducive learning environment, the organisational system has to provide opportunities for students to express their thoughts and share their ideas. Most importantly, this act of inclusion should not be symbolic or tokenistic which could suppress students' motivation to learn and engage in the process.

Looking at past studies, it seems that formative assessment practices among teachers in schools remain inconsistent. The reason for this may, at least in part, relate to the way in which change ideas have been and are being implemented. While there is some evidence to inform our understanding of the trajectory of assessment reforms in Malaysian schools, many questions remain, and further studies need to be carried out to deepen and enrich the body of knowledge on educational change process in the Malaysian education that is culturally diverse. Hence, initiating a nation-wide educational change process in this context is particularly challenging. Furthermore, existing studies did not look specifically into the different types of schools and did not present the viewpoints from various stakeholders involved in the curriculum change process. Therefore, in this study, I investigate the way in which KSSR curriculum policy, particularly focusing on the assessment practices are being enacted in primary school classrooms in urban and sub-urban areas. This study also seeks to investigate the views of policy makers, school leaders, teachers and students to build and to

deepen understanding of this complex change process by exploring the challenges they experience during the processes of educational change in Malaysia.

4 Method and Methodology

Overview

In the previous chapters, I have described the foundations of this study which include the history of Malaysian education system and the establishment of the new curriculum policy. Generally, the main objective of this study is to investigate the relationship between policy and practice in Malaysian schools. In this chapter, I will explain the methodological approaches that have been used to gather research data in investigating the processes of change in the Malaysian context.

Principal Research Question:

What factors influence the enactment of the recently developed Malaysian curriculum framework in teachers' classrooms?

Sub-questions

1. What are the policy intentions of the recent proposals for curriculum development in Malaysia KSSR curriculum policy?
2. How is it intended the policy to be enacted in schools?
3. What relationship exists between policy intention and policy enactment, especially in terms of the formative assessment practice, in Malaysian primary schools?

There are six sections in this chapter that encompasses the theoretical framework of the research design, the process of selection of participants, the data collection process and the data analysis approach. The first section entails the research paradigm which discusses the ontological, epistemological and methodological considerations of this study. The second section describes the processes of identifying the sites of the study and the multilayer procedures to obtaining access to these sites. When access has been granted, the fieldwork commences with an explanation of selecting the participants in Section 3. Generally, the participants were selected using convenience sampling method.

Section 4 of this chapter encapsulates the processes of data collection. Careful consideration of ethics in researching with different groups of participants, especially the children, has been central during the process. There were also adjustments made to aspects of data collection to address the values and traditions of the research context. In Section 5, a description of the data analysis process is presented which highlights the use of a deductive approach to analyse teaching observation and curriculum policy data sets. For the interview data sets, an inductive approach is employed to reflect the process of meaning-making from the emerging themes generated during the analysis process. The process of data analysis for both approaches is also included to illustrate the generation of codes and themes of this study. Lastly, in Section 6 provides consideration of the question of researcher reflexivity as I was struggling to distinguish my roles within an insider/outsider dichotomy during the research process. In the end, I decided to acknowledge that these aspects were not easily distinguishable as I move from one role to the other fluidly, and this seems to be a common practice in qualitative studies (Breen, 2007; Dickerson et al., 2018; Corbin, Dwyer & Buckle, 2018).

4.1 Research paradigm

4.1.1 Ontological, epistemological, and methodological considerations of this study

In research, the world views (Creswell, 2018) or research paradigm (Denzin and Lincoln, 2005) shape the ontological and epistemological considerations of the research which are the key factors in determining the methods that the researchers opt for in their study. Ontological considerations in research constitute 'the nature of reality' that the researchers perceive. There are two ontological perspectives that researchers may adopt: objectivism or constructionism.

Objectivism is a way of viewing the social world as an 'independent reality'. To these positivists, the world exists and is knowable; hence, researchers discover knowledge about a social phenomenon using quantitative methods and the data presentation adopts statistical descriptions. Statistical descriptions are built based on the figures which contain information that depicts the situation.

On the other hand, researchers who take an interpretivist view believe that the social world is a human construct in which meaning and reality are socially constructed (Mutch, 2009). This also suggests that reality is a product of social processes. In seeking understanding of a social phenomenon, researchers who perceive reality as a social element conduct research that involves investigation, interpretation and description of social realities. The reports of their findings are presented descriptively using words (Mutch, 2009).

In the context of this study, the social phenomenon that is being studied is the process of curriculum change in Malaysian primary schools. The overall purpose of this study is to investigate the enactment process of the new curriculum policy in Malaysian schools. As this process involves people, the way they understand and interpret the meaning of changes depends largely on their beliefs about the change. These beliefs are constructed based on economic, political and cultural values in which the change operates, and affect their behaviours in a changed situation (Dickerson et al., 2018). Based on the understanding that their beliefs about the processes of change are socially constructed, the ontological perspective of this study mirrors constructionism more than objectivism.

This study has been designed within the constructionism perspective, and this has also informed its epistemological consideration. Epistemology is a philosophical element that underpins the construction of knowledge. The construction of knowledge can be viewed from two perspectives: positivism or interpretivism. From the perspective of positivist researchers, understanding new knowledge involves scientific explanation, supported with figures and statistics. Neuman (2003) described it as an

organised method for combining deductive logic with precise empirical observations of individual behaviour to discover or confirm a set of laws.

From the standpoint of interpretivist-constructivist researchers, the world is constructed, interpreted and experienced by people in their interactions with one another and a wider system (Neuman, 2003). The context of this study suits this model of epistemology because the understanding of people about a policy depends on their experiences of undergoing the processes of policy development, policy implementation and policy enactment. Each person who experiences these specific processes develops a different set of knowledge and perceptions about the curriculum policy which consolidates the idea that subjective meanings of individuals' experiences are highly likely to be contextually bound. Exploring the knowledge of people about the policy and how this knowledge affects the processes of change is one of the key aspects that inform policy-in-practice in Malaysia.

Building on the constructivist ontological and interpretivist epistemological orientations of this study, the methodological considerations are orientated to qualitative research methods. This reflects the nature of this study that aims to understand the complexities of the world through participants' experiences (Tuli, 2011). Merriman (1998) assumes that qualitative research methods explore meaning through participants' experiences and that this meaning is mediated through the researcher's own perceptions. Therefore, to investigate the processes of change in Malaysia, I have incorporated policy document analysis, interviews with policy makers, teachers and students, as well as classroom observation into the process of data gathering for this study. Data gathered using these methods provides information that illuminates the experiences of participants including the processes of policy development and policy enactment.

4.1.2 Qualitative research methodology

In the previous section, I have presented the ontological and epistemological considerations of this study which are governed by the constructivist-interpretivist perspective grounded in qualitative research methods. In social science research, until the early 1980s, quantitative research methods were employed because the findings were perceived as valid or displayed high quality (Sechrest and Sidani, 1995). Even though researchers using quantitative methods produced reliable and rigorous data, they have also been criticised largely because the results did not connect the research to the real-world environment. Findings from quantitative research normally do not emphasise contextual values; hence, the outcomes from the research were not able to reflect on the complexities of the social world and the issues of humankind. Taking on this view, undertaking qualitative research has gained in popularity in many fields of study, particularly in the social sciences.

There are multiple interpretations of qualitative research methods in social sciences. Among others, Strauss and Corbin (2018) perceived it as an inductive research process that allows researchers to explore meanings and insights in a given situation. Creswell (2013) identified qualitative research as studying social meaning in a natural setting whereby the data analysis is generated through inductive and deductive approaches as a means to establish a set of patterns or themes (p44). Similarly, Denzin and Lincoln (2005) viewed it as a multi-method, interpretive, naturalistic approach to seek understanding of a social phenomenon. From these multiple interpretations, there are common key ideas that emerge. These researchers conceptualise qualitative research methods as means to understand a social phenomenon from people's experiences, and that understanding is achieved through direct interaction between the researchers and the participants. Hence, in a study that seeks to understand a social phenomenon from the experiences of people, qualitative methods give access to such investigation. Particularly, the processes of curriculum change in Malaysia can be understood better as we gain insights of people's experiences and their social interaction that informs their perception of the change

process. In order to establish rigour and provide dynamics to the investigation, I have adopted multiple methods to unravel the phenomenon. From these methods of gathering data, I present the data descriptively to reflect the qualitative feature of the research design.

Employing a qualitative research design seems to be timely in Malaysia. The literature related to school-based assessment in the Malaysian context over the past 10 years has revealed a high preference for adopting quantitative approaches, most commonly using questionnaires as the primary tool to gather information (Md Ghazali et al., 2016; Majid, 2011; Othman, Md Salleh & Mohd Norani 2013; Salmiah et al., 2013). The advantage of using surveys is that the population of the sample is wide which enables the findings to be generalised into a larger context. Furthermore, gathering information from surveys is time efficient (Denscombe, 2014) because information can be gathered from various people in a short time. Furthermore, these previous studies generally focused on exploring teachers' readiness to implement school-based assessment and to gain insights into the knowledge of teachers about school-based assessment. Studies that adopt qualitative methods, particularly semi-structured interviews, are few (Norsamsinar, Rengasamy, Mat Jizat, Norasibah & Ab Wahid, 2016; Malakolunthu and Hoon, 2010).

Furthermore, the majority of past studies about school-based assessment practices in Malaysian schools were focused on lower secondary level students in various parts of Malaysia (Nair et al., 2014; Salmiah et al., 2013; Majid, 2011; Malakolunthu & Hoon, 2010). The few studies that were conducted in primary schools were limited to two places which were Kelantan and Kedah (Md Ghazali et al. 2016) and only one study involved a large-scale school participation (Ikhsan, Md Salleh, & Mohd Norani, 2013). This has resulted in a lack of information about school-based assessment practices in primary schools, especially ones that deeply investigate the phenomenon. In a more recent context, Paramasivam et al., (2018) have explored the issues and challenges experienced in the management of curriculum change in four primary schools in Malaysia. This study focused on the implementation of History as a subject that was

newly introduced to Year 4 primary students in the new curriculum, KSSR. The authors designed their study using qualitative methods which involved document analysis, interviews with teachers and teaching observations.

Reviewing the literature has further enhanced the significance of this study. Primarily, this study investigates the broad aspects that represent the processes of curriculum change. It includes observing teachers' teaching and assessment practices and interviewing key people in the process, especially gaining insights into the practice of policy thinking and policy making as well as exploring students' perceptions about the teaching and learning practices in the classroom. The findings from this study will contribute to the body of literature about educational change in Malaysia as it provides information about the underlying processes of policy thinking, teachers' beliefs about the change and their instructional practices that illustrate the policy-in-practice in the classrooms.

This study also establishes data triangulation as I explore the phenomenon through multiple lenses. For example, analysing the policy document builds fundamental understanding about the objective and underlying principles that guide the policy makers while developing the policy. Interviews with policy makers are aimed at building connections between the published policy documents and the experiences of policy makers in the process. Furthermore, interviews with teachers contain information about their perception of the policy as well as their teaching practices. Building on these perceptions, the outcome from classroom observations provides further understanding of their teaching practices in the classroom. Interviews with head teachers and students inform us of their perceived roles and responsibilities during the enactment process. Applying these methods is essentially a way of creating triangulation of data analysis which develops a dynamic understanding of the situation from multiple perspectives. Synthesising data from these methods helps to illustrate the participants' experiences that represent the processes of change in Malaysia.

Additionally, I also became interested in investigating the processes of change in two schools within the same district. The initial plan was to identify one school from each of two categories, urban and rural, but this was not possible. The school that was initially identified as an urban school later turned out to be a sub-urban school as the State Education Department revised the school's category. Nonetheless, investigating change processes in two schools, regardless of their location, is vital to drawing a better understanding of the phenomenon as each school is different. Understanding this phenomenon in multiple contexts allows an analysis of the common issues and concerns raised by the participants as they undergo the enactment process in their schools using a standard policy document across Malaysia. Therefore, this study is framed in a case study approach which adopts a phenomenological perspective.

4.1.3 Case study with a phenomenological perspective

Generally, a case study research design is used to understand a social phenomenon or activity that happens in a particular field by exploring the experiences of people within that context. Specifically, Sturman (1997) situated case study as a general term for the exploration of an individual, group or phenomenon. Kemmis (1980, pp 119-120) defined it as a combination of cognitive and cultural processes that involve unravelling the truth of the phenomenon through the collective thoughts of the researcher gathered from the overall process of fieldwork including participant observation, interviews and document analysis. Yin (1994) also presented a similar concept of a case study which is an empirical enquiry of a real-life context, as opposed to the contrived contexts of experiments or surveys. He further added that case studies rely on not only a single method of data collection but involve multiple sources of evidence which need to be brought together to achieve triangulation. Similar to Yin, Creswell (2009) defined case study as an exploration of an in-depth programme, an event, an activity, a process, or one or more individuals. The structure of a case study should be the problem, the context, the issues, and the lessons learned (Creswell, 2014). Hence, it is a comprehensive description of an individual case and its analysis (Mesec, 1998).

The meanings of case study gathered from several authors have generated a common conceptualisation among them which reflects an in-depth investigation of a social phenomenon. The investigation of the phenomenon is contextually bound as it involves an analysis of people's experiences, and there should be multiple methods involved in studying the phenomenon. Hence, selecting two Malaysian primary schools as the case study to investigate the curriculum change process seems relatable and relevant to reflect the key ideas of a case study research design of this investigation. Particularly, this study intends to deepen the investigation by employing multiple methods involving various stakeholders in the process of change which can illuminate the culture and context that are meaningful in developing understanding of the change process.

Since the curriculum policy is a nation-wide movement, studying the processes of change in a single school may not be sufficient to create a general conclusion about the phenomenon. This is the limitation of a case study as acknowledged by other researchers. In contrast to experimental or survey research which tends to generalise the findings to a larger context, the outcome from a case study does not permit this. Generalisation is an important aspect of social science research as Flyvbjerg (2006) claims that 'social science is about generalising' (p. 219). However, it is not possible to make generalisations from case study findings as they are often contextually relevant (Mills, Durepos & Wiebe, 2010). Hence, I conducted the investigation on the change process in two primary schools to indicate that the findings can be used to represent the phenomenon in a wider context. Moreover, observing the case in two schools can build a stronger understanding that can determine whether the implemented policy is effective throughout the entire scope of its use. This includes sites that have different cultural influences. The cultural differences that arise from the different contexts will illuminate problematic areas during the policy enactment process. The knowledge obtained from this study can be used to inform the Ministry about the change process that is experienced by schools in sub-urban and rural areas, and how the processes have affected the teaching and learning experiences within

these schools. The Ministry could then extend the investigations in other schools in Malaysia to further examine how they have enacted the curriculum policy. The findings from these other contexts can guide the Ministry to map out relevant strategies to address the educational change processes in Malaysian schools.

From the earlier section, we learn that choosing case study as the research design is driven by the desire to understand the phenomenon in-depth, recognising that cultural contexts have substantial implications for unravelling the phenomenon. The strategy to dig deeper into the phenomenon is approached using a phenomenology lens to capture the lived experiences of people. The philosophical principle of phenomenology is primarily aimed at describing the essence of a phenomenon by exploring it from the perspective of those who have experienced it (Van Manen, 2017). There are two philosophical traditions that determine the phenomenology research design which are transcendental (descriptive) and hermeneutic (interpretive). Historians have credited Edmund Husserl with defining phenomenology in the 20th century (Kafie, 2011). Essentially, he emphasised that in exploring the lived experiences of people, the researcher's subjectivity should not bias data analysis and interpretations. This is referred to as the transcendental stage which requires transcendence from the natural attitude of everyday life through *epoche*, also called the process of *bracketing*. This is the process through which the researchers set aside previous understandings, past knowledge, and assumptions about the phenomenon of interest. The analysis of the findings are discussed from the emerging themes, and the description should not contain researcher's preconceived ideas about the situation (Naubauer, 2019).

Hermeneutic phenomenology, on the other hand, originates from the work of Martin Heidegger. While Husserl was interested in studying a phenomenon in a way that situates the researcher as playing the role of attending, perceiving, recalling and thinking about the world (Lavery, 2003), Heidegger is interested in human beings as actors in the world; therefore, he focuses on the relationship between an individual and his / her *lifeworld*. The term *lifeworld* is described as 'individuals' realities that are invariably influenced by the world in which they live (Lopez & Willis, 2004). Simply put,

Heidegger's philosophical construct of phenomenology is grounded in the notion that the 'reality' as embraced by individuals is defined by the context in which they live; individual's conscious experience of a phenomenon is not separate from the world, nor from the individual's personal history (Lopez & Willis, 2004).

Out of these two schools of thought on phenomenology, the approach of this research reflects the hermeneutic tradition because the analysis of the participants' experiences is connected to their contextual background such as the school culture, the meaning of education and assessment, as well as their perceived role in the classrooms and in the change process, generally. These are important aspects that shape their behaviour towards the curriculum change processes in their schools.

Another research design that supports observation of people's lived experience in an investigation of a social phenomenon is ethnography. Ethnographic observation involves deeply studying the behaviours, values and interactions among the members of a group (Creswell, 2014). Leininger (1985) defined it as a systematic process of observing, detailing, describing, documenting and analysing the life ways or particular patterns of a culture in order to grasp the life ways or patterns of the people in their familiar environment. It helps researchers to elucidate the situation, uncovering practices, and developing cultural awareness and sensitivity. It mainly uses the concept of culture as a lens through which to interpret results. This study is not framed in the perspective of ethnographic research due to practical issues, particularly time and financial support. In an ethnographic study, the researcher has to stay at the right place and time to conduct the research. Dooremalen (2017) argued that doing research in this context is an uncertain situation. His argument was based on his reviews on three ethnographic studies which highlighted that the researched event may happen at unexpected time; hence, the researchers have to stay at the research site for an uncertain period of time. This also suggests that the researchers must be able to support themselves financially during this uncertain time to ensure the sustainability of the data gathering process. For these two reasons, an ethnographic approach is not suitable for this study as I had neither time nor funds to stay long in

the schools. Furthermore, Dooremalen (2017) had also shared his thought on doing research that explored the experiences of people during a crisis, and he claimed that understanding the events may not be grounded within the space and time of the actual events. Other materials might more suitably provide such information; for instance, interviews, discourse analysis and surveys are some of the options which can build a comprehensive picture of the meaning-making dynamics of a social phenomenon.

In the Malaysian context, adopting phenomenology to investigate curriculum change is not new. There are studies (eg: Sanitah, Dalilah Syazanah & Abdul Rahim, 2017; Attaran & Yishuai, 2015) that adopted a phenomenology framework to represent the participants' feelings, experiences and perceptions which are specific to the context of their research. In this study, I aim to explore the enactment processes in the participating schools by observing teachers in their classrooms. Besides, I also wanted to examine their perceptions, experiences and cultural values as they were working in the processes of enacting the curriculum. Hence, adopting phenomenology in this study is relevant as it facilitates the process of building an in-depth exploration of the processes of change in Malaysian schools.

4.2 Site selection

4.2.1 Selection of schools

As part of the procedure to investigate the processes of change in Malaysian primary schools, the identification of research sites is an important aspect. I had to consider carefully how to identify the schools that were suitable to support investigation of the enactment practices of the new curriculum policy. The identification of the schools is based on the following aspects:

- **Standard national-type schools**

Chapter 2 of this thesis includes a section that elucidates the economic factors that initiated the curriculum change process in Malaysia. NKRA (National Key Results Area) is the economic plan that identifies six areas for national achievement that focuses on developing people's needs (Ministry of Education, 2013) in which education is listed as the third NKRA, and it is aimed at providing wider access to quality and affordable education (ibid) in Malaysia. As part of the initiative to achieve the goal by 2012, the Ministry of Education identified 100 effective schools that were recognised as High Performing School (HPS). The initiative was in line with '1 Malaysia: People first, Achievement Preferred', a motto that represents the NKRA framework. On 25 January 2010, the MOE announced a list of 20 HPS schools, adding 32 more schools to the list in 2011 and another 39 schools in 2012. In 2013, another 24 HPS were identified which totalled 115 High Performing Schools by the end of 2013 (Ministry of Education, 2013). The Ministry continued to add more schools to the list, and by the end of 2018, the total number of HPS in Malaysia was 135 for both primary and secondary schools (apps melaka.moe.gov.my, 2018).

High Performing Schools (HPS) is a brand to categorise schools that show an excellent record in terms of school management and the academic performance of the students. In Malaysia, the main purpose of identifying these schools is to serve as a benchmark in terms of educational excellence which can also function as a model for other schools in the country (MOE, 2013). These HPS have outstanding characteristics that set them apart from other schools in terms of leadership quality, academic achievement, organisational structure, school culture, and learning environment (Hussein, 2008 and Alimuddin, 2006). The school leaders in these schools also have stronger influence over the organisational structure and achievement in these schools; hence, the school leaders should be able to demonstrate great leadership knowledge and skills.

The proportion of HPS out of the total number of national schools in Malaysia is relatively low compared to the number of national schools in Malaysia. This suggests that the great majority of schools in Malaysia do not exhibit outstanding leadership quality or academic achievement. They also do not have the authority to decide on the curriculum change process as they need to oblige to the Ministry's directives. Since most schools in Malaysia are not affiliated to the High Performing Schools branding, selecting schools from this category can give a fair representation of the curriculum change process in Malaysia.

- **Urban-rural type of schools**

There are 14 states in Malaysia, 12 in the Peninsular area and 2 others in East Malaysia. When identifying the schools for this study, I had to remove East Malaysian schools from the options for practicality reasons. The cost of travelling, transportation and accommodation in these states was quite substantial, and I was not supported with a financial grant to conduct the research. Therefore, identifying schools from the Peninsular areas seemed wise and practical.

The schools are situated in Region X that had approximately 800 schools in 2017 (MOE, 2017). The population in this region was 2.5 million. The selected schools are situated in the capital city of the region. These schools are represented as School A and School B in this thesis to protect their identity and confidentiality.

Rural schools, as perceived by Mahoit (2005), seem to always lack the following aspects compared to urban-type of schools. They include:

- high quality teachers,
- effective school leaders,
- well-equipped facilities,
- adequate internet and ICT infrastructures, and
- adequate instructional supplies.

Furthermore, it was argued that there is a relationship between school location in developing countries and lower academic achievement in these schools (Mohd Burhan, 2005; Webster & Fisher, 2000 and Young, 1998). In relation to the earlier argument, this may be related to a lack of educational resources such as facilities, instructional materials, teacher quality, and teacher supply in those schools, which affects teacher effectiveness (Levira, 2000; Stephens, 1991 and Vegas, 2007). Furthermore, there are studies that claimed that urban schools have better physical resources, represented by instructional materials and facilities, than the rural schools. For example, in a study by UNESCO in developing countries (2008), physical resources seemed to be relatively lacking in rural schools compared to urban schools. Furthermore, physical resources were found to be significant contributing factors to school effectiveness in the Malaysian context (Charil, 1997). Based on these arguments, I was interested to compare the phenomenon of curriculum change in Malaysian urban and rural schools. However, the research by Othman and Muijs (2013) concluded that in Malaysia, physical resources were distributed quite fairly to all urban/rural types of schools; hence, there was not much difference in terms of physical resources in these types of schools.

On the other hand, School B, which was previously categorised as urban school, had been assigned to a sub-urban school category at the time this study was conducted. This information was disclosed in an informal interview with the head teacher at the initial stage of the fieldwork. Since Othman and Muijs (2013) concluded that the location was not a major issue in the investigation of a curriculum change, I shifted my attention to school culture which was a prominent feature in a school regardless of the urban-rural category. Arends (2009) and Schoen (2013) both identified school culture as a key feature in observing the processes of educational change. In the view of Arends (2009), school culture represents the beliefs, values and history of the school, whilst Schoen (2013) framed school culture in four dimensions which are: professional orientation of the school staff, the structure of the school organisation, the quality of learning environments and student-centred focus. Hence, the case study of exploring the change process in Malaysian context is not to compare urban-rural types of schools, but to treat each individual school as an institution that is represented by its

unique school culture that has a more significant impact on the curriculum change process.

Research practicality considerations

As part of the procedure to investigate the lived experiences of people undergoing the curriculum change process, I employed two primary methods to collect data – a interviews and classroom observations. These methods were employed in both participating schools and had to be completed within four months. I had to be careful when selecting the schools because I had to consider the logistics and the time factor. Therefore, the primary reason for choosing schools in the capital city was generally for practical reasons. Both schools were located near the place I was staying during the data collection process; hence, the travelling to both schools was convenient. In this case, convenience sampling of the schools was employed due to the cost and geographic factors and reducing the complexity in these aspects improved the data collection process (Lavrakas, 2008).

Based on these aspects of considerations, I identified the two schools in this study from a list of schools prepared by the District Education Offices. The information in the list includes the details of the schools within the district, particularly the categorisation of urban and rural type of schools. Additionally, the contact details of the schools such as the address and the phone number are also provided in the list. There were more schools in the urban category compared to the rural category which made choosing the rural school relatively easy. In total, there were five rural schools in the district, but four of them were far from the place I was staying during the fieldwork. Therefore, due to the limitation, I selected School A as it was convenient for me to travel to, and based on this decision, I searched for nearby schools from the urban-type category. I further refined my selection to exclude High-Performing Schools, and from the remaining list, I selected School B primarily, due to the convenience factor too.

4.2.2 Obtaining access to schools

Before the study could be conducted in schools, the Ethical Review Committee at the University of Glasgow had to grant permission to conduct the study in Malaysia (Application No: 400160186I (Appendix A). At the local level, the Economic Planning Unit (EPU) of the Prime Minister's Office also granted me permission (Appendix B) to conduct this study in Malaysian primary schools. As a Malaysian citizen who wished to undertake a research study in Malaysian organisations including schools, I needed to get approval from four different government departments before I was given access to approach the head teachers of the schools. The departments involved were:

- Economic Planning Unit (EPU) of the Prime Minister's Office
- Ministry of Education
- State Education Department
- District Education Offices

Obtaining permission from the Prime Minister's office was required to ensure that the topic of the research did not contain racial, ethnic or political elements that could be offensive to certain groups of people. Most importantly, the EPU department helped to liaise with other government departments such as the Ministry of Education, and this was very helpful for researchers in managing the bureaucracy in Malaysia.

As part of the procedure, I first submitted my research proposal and a description of the tools that were to be used for data collection. This was to prove that the procedures for carrying out the research had complied with the guidelines issued by the Malaysian government. Successful applicants are given a Researcher Pass, and this pass must be carried by the researcher as a proof of identity while visiting various government departments or while being at the research site.

Obtaining access to schools became possible with the letter from the EPU. As mentioned earlier, the EPU would liaise with other government departments to inform them of this study, and to seek their cooperation to prepare a consent letter to allow this research to be undertaken in the proposed research sites. Being a civil servant

myself, I was fully aware of these procedures and was prepared to face difficult circumstances. For example, after I received a pass from the EPU department and the Ministry of Education, I still had to obtain additional permission from the State Education Department and District Education Offices before I could visit the schools (research sites). With the permission letter from the EPU department, procedures to obtain an approval letter from the State Education offices were easy. I received the letter in less than a week even though I had to regularly check with the officer in charge of the status of my application so as not to delay the data collection process.

After getting clearance from the respective government offices, I visited the schools to meet the head teachers. At the start of the meeting, I handed them the permission letters from the various government departments to show that the relevant government authorities had been informed. I explained to them about my research and my plans for data collection in their schools and sought their willingness to participate in this study. As the school leaders, they agreed to participate in this research and were willing to cooperate as much as possible. The only concern they raised was regarding their identity and the confidentiality of the information they shared. Since this research is a study of government policy and their participation and responses in this study might risk their position as educators, they wanted their identity to be protected. I assured them that the identities of participants would be anonymised and that the schools would not be able to be identified.

- **Characteristics of School A**

School A is a rural-type school that encompasses Year 1 – Year 6 students in a single session. The school operates on a single session which begins at 7.45 am and ends at 1.30 pm. The number of students in each classroom is between 30 – 35 students, and this exceeds the average class size reported by the Ministry (Malaysian Educational Statistics, 2018). In 2017, the average size class in primary schools was recorded as 27. The arrangement of students' seating is standard across the schools where they are seated in rows of tables facing the teacher. The classrooms are

equipped with basic infrastructure such as ceiling fans (the number depending on the class size), white fluorescent lights, windows, wooden tables and chairs, whiteboard and cupboards for storage. On the walls, there are soft boards that display students' work, notes or motivational stories/quotes and decorative items.

The emphasis on using technology in the classroom is greater with the new curriculum in which, for each subject, there are topics that are integrated with computer technology. Hence, the school is equipped with two computer labs to be shared by all students in the school. This makes learning using computers a challenge. Therefore, the head teacher allows students to use the lab during their recess time to explore computer-based activities or to search for information using the internet.

The school also has a library that is located above the Main Office. The library can only be accessed by students in the presence of a teacher or the librarian. They are not allowed to visit the library for personal reasons. In the library, there is a television with access to a subscription educational channel, and the books are largely children's story books.

The school also has a canteen with two stalls; one sells Malay foods including traditional cakes and snacks while the other stall sells drinks. In the dining area, there are ten long tables with benches arranged across the canteen area for students to enjoy their food while teachers dine in a special room at the side of the canteen. Students should not hang out in the canteen during class time, and it is an offence if they are caught doing it. There is a field for sports activities, and that field is usually used during Physical Education (PE) class and during Sports Day. A summary of the characteristics is presented in the following table:

Table 3: Characteristics of School A

Characteristics	Details
Number of pupils	800 pupils
Number of teachers	70 teachers
Number of classes	32 classes (Year 1 – Year 6)
Socioeconomic background	NA
Ethnicity	Mix – Malay, Malay Aborigines, Chinese and Indian

- **Characteristics of School B**

School B is a sub-urban type of school which is a relatively newly built school. The building is well-maintained and looks polished compared to School A. The school compound is large, and there is also a pre-school within the school compound for children in the surrounding area. The school operates in a single session from 7.45 am until 1.30 pm which involves Year 1 through Year 6 students.

In each classroom, there is a maximum of 35 students which is similar to School A, in that it exceeds the average reported by the Ministry. The seating arrangement is also arranged in rows facing forward the teacher. The classrooms are equipped basic amenities with a whiteboard, at least one ceiling fan (depending on the class size), windows, white fluorescent lights, wooden chairs and tables and cupboard for storage. On the walls, there are soft boards that students can use to exhibit their decorative items or to display their best projects or educational notes.

There are two computer labs in the school, similar to School A, and they also need be shared among students in the school. In this school, the school's management prepares a timetable to arrange the time for teachers to use the computer lab. This strategy can avoid dispute among teachers and ensure that students receive a fair chance to learn a lesson using computers. In each computer lab, there are approximately 40 computers available; this number of computers is sufficient to allow students to have a personal machine to use. However, there are a few computers that

are not functioning well; hence, some students have to share a computer while doing the online activities.

There is a library located in the school compound, but it is not open to students to use independently. Mainly, students can visit the library with the presence of teachers which is similar to the situation in School A.

The school has a spacious field that is used for sports activities during Physical Education (PE) class or the annual Sports Day event. In addition, there is also a basketball court within the school compound which is also used to play badminton and netball.

The canteen is a large area with many long desks and benches. There is only one food stall that sells Malay foods including traditional cakes, snacks and drinks. Students are not allowed to eat and drink at the canteen during school hours except during their recess time. A summary of the characteristics is presented in the following table:

Table 4: Characteristics of School B

Characteristics	Details
Number of pupils	413 pupils
Number of teachers	41 teachers
Number of classes	18 classes (Year 1 – Year 6)
Socioeconomic background	Middle-income average
Ethnicity	Mix – Malay, Chinese and Indian

Based on the information that characterises the schools, the presence of Malay Aborigines ethnicity in School A is the only different aspect of social differences observed in this study. Other aspects such as gender, class and age are similar between the two schools despite one is in an urban area and the one is in a rural area.

4.3 Selection of participants

The participants in this study are policymakers, head teachers, teachers and students. Policymakers, head teachers and students are involved in the interviews while the teachers are participants in the interviews as well as class observations. There was basically no selection process for head teachers, but they had the option to not participate in the interview. If they declined, I would approach other teachers at the managerial level. In the context of this study, both head teachers agreed to be interviewed, but they wished to remain anonymous.

As mentioned earlier, the selection of participants differed across the different groups. Data obtained from these groups of participants were gathered using qualitative methods, namely interviews and teaching observations. It is important to clearly explain this process, as the participants' role in this study is to provide information that conceptualises the findings of this study. If this process is not dealt with carefully, the data obtained from these participants may lose its validity. Therefore, in the next section, I will explain the details of the processes of participant selection in this study.

4.3.1 Policy makers

Policy makers in this study constitute government officers from the Ministry of Education who are largely involved in the process of policy thinking and policy development. The process of selecting policy makers in this context adopted the snowball sampling strategy. First, I approached one education officer through recommendation from one of the teachers in the school. In our phone conversation, I explained to him the purpose of recruiting him for this study and the information I sought for. He declined because he was not an expert in curriculum policy making, but he quickly recommended another officer. I set an appointment to meet this officer, and during the meeting she verbally agreed to participate in this study. I set another appointment for the interview as she needed time to read the interview questions, and at the end of the meeting, she recommended her colleague whom she claimed to be

experienced in the aspect of curriculum development. I phoned her colleague to set a meeting date to discuss about her participation in the study. During the meeting a week later, she agreed to participate in the study.

The advantage of snowball sampling or chain sampling is that it allows for tracing networks and relationships by asking respondents for contacts to people they know (Barglowski, 2018). The disadvantage of this sampling strategy is that I might not get the right person who can give rich information about the topic as Barglowski (2018) states, this strategy 'minimises the probability of accessing people who are not connected to the units of entry and if not well reflected, it might be prone to an ethnic lens' (p.166). In the context of this study, the snowball sampling had benefitted me because the line of network had directed me to the right people who could give insights into KSSR curriculum policy, and they were not selected through an ethnic lens. Therefore, the information these policy makers shared through this sampling strategy provided knowledge on the processes of policy thinking and policy development in Malaysia.

Informed consent from the officers in Ministry of Education Malaysia

These officers participated in this study as participants in the interview sessions. I gained access to interview these officers through a formal request that was addressed to the Director of Curriculum Development Department of the Ministry of Education Malaysia. At this stage, I submitted a brief description of the study as well as the themes of the interview questions to allow the Director to identify the appropriate person to be my participant. After obtaining the contact information of the selected officers, I phoned them to ask whether they would be willing to be part of this study. In the phone conversation, I described my research to them, particularly its purpose, intended uses and the kind of participation I was seeking from them. After receiving a verbal agreement, we agreed an appointment for the interview, and I sent the questions electronically for them to review and prepare.

On the day of the interview, I engaged them in brainstorming the potential risks for their involvement. During the meeting, I assured them that the information they shared would be used for this research only and their personal information would be anonymised in the thesis. I also provided assurance that if there was any part of the research that they did not want to share, I would respect it and omit it from the thesis. Then, I gave them information sheet where they could read the details and consent form (Appendix F) which they signed and returned to me before I began the interview session.

4.3.2 Teachers

Teachers in this study were purposively selected to give insights about their experiences undergoing a curriculum change process, and their experiences are shared through interviews and class observations. This selection process adopted the purposeful sampling technique as it allows for identification and selection of information-rich cases for the most effective use of limited resources (Patton, 2002). This involves identifying and selecting individuals or groups of individuals that are especially knowledgeable about or experienced with a phenomenon of interest. In addition to knowledge and experience, Spradley (1979) notes the importance of availability and willingness to participate and the ability to communicate experiences and opinions in an articulate, expressive and reflective manner. For these purposes, teachers should be recruited in this study as they are involved in the processes of change and are playing the role of translating the curriculum into practice.

Essentially, the data sets obtained from these two methods would be analysed to illuminate the relationship between policy and practice which is the central theme of investigation in this study. In order to achieve that, I chose teachers who are teaching the core subjects, Malay Language, English, Mathematics and Science, to Year 5. The Year 5 cohort was selected because they would sit the major exit examination in the following year, the Primary School Achievement Test (UPSR). It could have been a better option if I could observe teachers teaching the Year 6 cohort since the aim of

this study is to explore assessment reforms. However, during the process of obtaining permission from the Economic Planning Unit (EPU) at the Prime Minister's Office, it was made clear that teachers and students who are preparing for national exams should not be involved in a research project. In the discussion with the head teachers in the participating schools, they too agreed with the directives from the EPU. They were reluctant to allow both Year 6 teachers and students to be involved in other projects than their studies. Therefore, the Year 5 cohort students and teachers teaching them were selected. Despite the limitation, observing their instructional practices without the exam pressure can inform us on their teaching practices as they explore the new curriculum content and the assessment practices.

The participation of teachers in this study was also needed to seek their insights and perceptions about the new curriculum policy. This information can tell us about their views and understanding of the curriculum, their beliefs and their perceptions of their instructional practices. In my quest to recruit the teachers, I listed down the criteria for selection and presented them to the head teachers of the schools. I wanted teachers who were:

- Teaching the core subjects (either Malay Language, English, Mathematics or Science) to Year 5 cohorts, regardless of the gender, age and teaching experience, and
- Willing to participate in this research.

With these broad specifications, the head teachers helped to identify them from their database. During the selection process, the head teachers considered the following aspects before making the decision. The teachers were:

- not due for maternity leave or other long-term official leave,
- not tied to other non-teaching responsibilities that would affect their teaching schedules, and
- highly likely to cooperate and interact with the researcher.

After careful deliberation, each of the head teachers identified four teachers on the grounds that they were able to cooperate effectively and contribute to the process of information gathering during the fieldwork. Table 1 below contains the details of the teachers involved in this study.

Table 5: Teacher's details

Name	School	Age range	Gender	Years of experience	Teaching subject
Nora	A	30 – 40 years old	Female	8 years	Malay Language
Ian	A	35 – 45 years old	Male	10 years	Mathematics
Pearl	A	45 – 55 years old	Female	25 years	English
Peter	A	35 – 45 years old	Male	11 years	Science
Shirley	B	45 – 55 years old	Female	30 years	Science
Nelly	B	30 – 40 years old	Female	17 years	English
Rachel	B	35 – 45 years old	Female	14 years	Malay Language
Flora	B	30 – 40 years old	Female	10 years	Mathematics

In this case, I did not exercise freedom in the selection of teachers. This situation can be attributed to the administrative structure of the schools in which the head teachers play the role of gate keepers in their schools. As gate keepers, the head teachers have control in terms of access to communicate with their staff and students. In Malaysian schools, this procedure is quite common because of the hierarchical structure in its

administrative structure. This type of structure can be recognised in seven Asian school systems, Bangladesh, Malaysia, Nepal, Pakistan, the Philippines, South Korea, and Sri Lanka. In Malaysia, they discovered that the head teachers have the main responsibility in schools (p.44) to manage the staff in the school. In this organisational structure, the members of staff recognise head teachers' decisions as important and authoritative.

This situation relates to the argument raised by Freeman (2000). He argued that selection of participants is an essential area of the data collection process as the selection choices frame 'who' and 'what' matters as data and it also constructs the meaning of the data. Furthermore, the power to select participants also reflects the sociocultural milieu in which the research is conducted. It informs us about many aspects of the culture including social and political relationships (Freeman, 2000). From this argument, the selection process of the teachers in this study has shed a light on the cultural context in Malaysia which is hierarchical, and this cultural behaviour can also be observed in other parts of the participant selection process. The involvement of head teachers in the decision to select the participants symbolised their agreement to grant access for this study to be conducted in their schools, and they had to ensure that the participants could be highly cooperative during the fieldwork process.

Despite the limitation on getting full freedom to select the teachers as participants, I acknowledge that this process of selection has its advantages. Primarily, this kind of selection process is convenient for the researcher. Since the school structure is hierarchical whereby the head teachers are the gatekeepers, it may be difficult to approach teachers personally without getting the initial permission from the head teachers. Furthermore, if the research is going to be conducted within the school compound, the teachers are not able to make the decision on their own and need the head teachers' consent. Rather than going through an iterative process, it seems wise for the head teachers to identify suitable teachers and allow them to decide their willingness to participate in the study.

Regardless of the initial identification process, teachers cannot be forced to participate in the study. They can decline to participate without the risk of jeopardising their position in the schools. During the personal meeting with the teachers, I explained the broad aims of this study and their role as participants if they participated in this study. I also assured them of the confidentiality of shared information as well as their identity. Then, I allowed them one week to decide if they wanted to participate, and if they decided to decline, they did not have to provide a reason and their identity would still be protected. After a week, all of the proposed teachers agreed to participate in this research. However, I should note that their decision could have been influenced by the cultural value in the workplace whereby teachers normally respect a selection made by the head teachers and that could have been a contributing factor in their final decision-making.

After collecting and reviewing their consent forms, I continued to negotiate the timetable for classroom observations and interviews. During the discussion, I had to consider a few factors that could have affected the procedures especially the travelling to and from both schools if I wanted to do the observations concurrently. Furthermore, teachers in School B requested to start the observation in September instead of August because they wanted to complete the pending tests and exams. As a result, I completed the observations in School A in August while in School B, the observation started in September.

As for the interview, the teachers agreed to allocate an hour to answer the interview questions, and they preferred it to be done in the Teachers' Room. They also addressed their concerns that all research-related matters should be discussed during school hours and within the school compound. This measure was taken to ensure that their participation in this research did not affect their daily routine.

4.3.3 Students

Participation of students in this study was primarily in interviews to obtain their insights on the instructional practices of their teachers especially on the aspects of formative assessment practices. Furthermore, the interviews also sought to discover the role of students in the classroom as perceived by them.

Initially, students were also supposed to be indirectly involved in the video recording that was planned to record teacher's instructional practices. Since they might be exposed in the recording, there were ethical concerns that were considered, and which became a major challenge to proceeding with the plan. The issue mainly affected students who were not given consent by their parents/guardians to be recorded in the video. Technically, in that situation, these students should not be present in the video recording; therefore, they had to be relocated to another class or moved to another area in the class. However, taking this approach might cause discomfort for these students during the recorded lesson. They could also feel isolated through not participating in the study. Therefore, the plan was improvised, and the alternative plan is described in the section on observation methods in this chapter.

The students were purposefully selected to participate in semi-structured interviews within this study. Similar to the selection of teachers, the selection of students was based on gatekeepers' recommendations; in this case teachers were the gatekeepers. On a general rule of selecting student participants, all students in the participating classrooms had an equal opportunity to be selected as long as they were present throughout the observation period. I wanted to interview at least four students from each class regardless of their ethnicity, social background, gender and academic performance. There were no special criteria of selection as I believed each student had the cognitive ability to evaluate the classroom activities and articulate their thoughts about their experiences which was the aim of the interviews with students. With the help of the participating teachers, I distributed the consent form to all students. I explained the aim of the study and their role during the interview. I also

introduced safeguard measures to protect the information they would be sharing and to illustrate the procedures of the interviews. For example, I would interview them individually and in private to ensure privacy and to protect the confidentiality of information that was being shared. I would also use an audio recording device which I showed to them during the meeting. The purpose of being explicit with the students was to ensure that they understood clearly the implications of their participation. Students then were given a few days to decide if they wanted to participate. If they agreed, I handed them the consent form for their parents to sign before I continued with the interviews. Together with the consent forms, I also attached a written description that elucidated the aims of the study, the procedures of the interviews and the role of their children in the study. They were given one week to consider before returning the form to their children. All forms were returned to the participating teachers. I analysed the informed consent that was given and submitted the names of those who were granted permission to the teachers. From the list, the teachers identified which students whom they thought suitable to participate in the interviews. The teachers then gave me a list of names, and I approached these students again to ask for their assent to participate in this study. In total, I had 13 names, and among them, there was one student who personally approached me to be interviewed. After checking her consent form from her parents, I allowed her to participate. Other than her, the selection of the student participants was made by the teachers through their nomination of those whom they perceived as communicatively confident and competent. Table 6 below contains the details of the students involved in this study.

Table 6: Student details

Name	Age (years old)	School/Class	
		School	Class
Zach	11	School A	Class 2
Nancy	11	School A	Class 2
Sheila	11	School A	Class 2
Tom	11	School A	Class 2
Raymond	11	School A	Class 4
Diana	11	School A	Class 4

Dan	11	School A	Class 4
Hannah	11	School A	Class 4
Durran	11	School B	Class 1
Fay	11	School B	Class 1
Katie	11	School B	Class 1
Sue	11	School B	Class 1
Tina	11	School B	Class 1

The whole procedure was presented to the head teachers, and I addressed the need to have another teacher to be present during the interview. The head teachers were not very keen with the proposal because teachers had other commitments to focus on. After some deliberation, we agreed to conduct the interview in a room next to the Teacher's Room.

I designed the interview individually because in the context of this study, it was the best method to gain insights from the students about their learning experiences. Even though group interviews or focus groups among students in this age group (11 years old) could provide rich data according to researchers that advocated the use of focus groups with children. They claimed that these children were adept at conveying their thoughts and feeling to one another (DeHart et al., 2004). At this age, they were also able to recognise the importance of shared values and social understanding (Damon et al., 2008; DeHart et al., 2004; Feldman, 2011) which were useful in a group discussion. However, in the context of this study, the topic of the interview was not suitable for discussions. The students might feel uncomfortable sharing their thoughts in groups, especially describing their learning experiences in the class. A study by Griffin, Lehman and Opitz (2016) has illuminated the benefits of individual interviews which were relatable to this study. They suggested that in individual interviews, individual interpretation is not affected by the group interpretation and sharing thinking about certain topics is easier in a non-group setting.

Furthermore, I wanted to encourage students to articulate their thoughts, and I felt that individual interviews helped to achieve this goal better than focus group. This belief was supported by Heary and Hennessy (2012) who have compared the richness of data gathering between interviews and focus groups among children. They found out that individual interviews produced significantly more relevant and unique ideas, though focus groups gave rise to greater elaboration of ideas. Most importantly, I was concerned with the confidentiality of information they shared since they were making comments about their teachers' instructional practices. A group interview might expose them to risks of being judged by their peers for disclosing teachers' practices in the classroom. This might further jeopardise their social relationships with their peers. Hence, despite the richness of data I might obtain from a focus group, I decided to continue with interviewing students individually to protect the confidentiality of information shared by the participants.

At the beginning of the interview, I checked again if the students still wanted to participate and reminded them of their rights to withdraw from this study at any time. They agreed to participate and even agreed to be audio-recorded during the interview. Since I was taking away their break time, I provided them food that was bought from the school canteen to ensure that they could eat while participating in this study. The food was bought at the school canteen to avoid bringing in foods from outside and risking my position as a researcher through issues of food safety. The food was distributed to the students at the beginning of the interview, but I let them decide when to consume it. The interview was scheduled to be about 15-20 minutes for each student which apparently fit the timing of the recess. The interview was conducted in a quiet room near the Teacher's Room to protect the information shared by the students and, at the same time, to ensure that the teachers were within reach in the case of emergency.

At the end of the interview session, I gave each student a small notebook and a pencil as tokens of appreciation for being a participant in this study. They were not informed in advance that they would be given these gifts including the food so that this was not perceived as an incentive to participate which could likely affect their consent (Bushin, 2007; Mahon et al., 1996 and Alderson & Morrow, 2011). Furthermore, since I did not require their participation further after being interviewed, this act of giving gifts should not be considered as a violation of ethical concerns about involuntary participation in further study as Sime (2008) did. She acknowledged that giving participants gift vouchers in her study might indicate that the participants could have felt obliged to participate in the subsequent stages of the study.

In conclusion, the decision to involve children in this study is highly relevant as getting insights from this population enhances the dynamics of the investigation. The hierarchical structure of organisation in Malaysian classroom and the careful consideration given to obtaining informed consent and students' assent illustrated the complexity of researching with students. This was also found to be true in a study by Flewitt (2005). In her study, she described the layers of process of obtaining consent from the children's parents that included face-to-face discussion, deliberation process between parents and their children and a written letter explaining the research aims and data collection procedures. Since it is a complex process and I was pressed for time, I acknowledge the limitation of my approach in working with children. Compared to Flewitt's study which took a year to complete, I did not prepare students psychologically to be involved in the interviews due to time constraints. Flewitt in her study made home visits to the parents' house and asked the parents to communicate with their children to check if they were willing to participate in the study (2005). In this study, I was not able to take these extensive measures, but I made sure that the process of obtaining consent and assent was still done carefully and all essential aspects of researching with children were taken seriously.

4.3.4 Classrooms for observation

In School A, there were four classrooms in the Year 5 cohort with 20-30 students in each classroom. The four classrooms were distinguished by the competence level of the students, ranging from 'excellent', through 'good' and 'average' to 'poor'. The students were streamed in these classrooms based on their examination results in the previous year. The head teacher assigned me to two classrooms for observations from the 'good' and 'average' groups of students. Class 2, designated the 'good' class, was selected for Malay Language and English observation whilst Class 4, designated the 'poor' one, was for Mathematics and Science. Class 2 consisted of 29 students and Class 4 had 30 students. The same method of streaming students into classrooms was also observed in School B. There were five classrooms for the Year 5 cohort in that school with about 30-35 students in each classroom. I was assigned the same classroom to observe all four subjects since all four teachers that the head teacher had identified were teaching the class. The class consisted of 28 students, and they were among the excellent students in their cohort based on their examination results.

4.4 Data collection

4.4.1 Policy document analysis

The purpose of curriculum document analysis in this study is to seek understanding on the background, framework and processes of change in schools which would inform the relationship between the policy and the enactment practices. The primary document that was used to obtain details for this purpose is the Malaysian Education Blueprint 2013 – 2025 (Ministry of Education Malaysia, 2013). This Blueprint describes the events that led to the construction of KSSR curriculum policy and the strategies to implement the curriculum in Malaysian primary schools. It gives an account of the events that led to the conceptualisation of the policy framework and the roadmaps that chart the path of its implementation which includes the transformation strategies for every stakeholders in the change process – the Ministry, teachers, school leaders,

students, as well as parents. These details are described over eight chapters in the Blueprint, and the description illustrates the role each stakeholder should play in this curriculum change process.

Over the course of ten years of its implementation, there have been subsequent reports that provide updates on the progress of the policy. These reports are the outcome of the Ministry's effort to consistently evaluate its progress through research and report it annually; the latest annual report was published in 2018 (www.padu.edu.my). These reports, though they contain updated information on the progress of the curriculum change, are not the primary sources in the analysis because the purpose of policy document analysis in this study is to seek knowledge about the policy thinking prior to its implementation. Most importantly, the analysis is to understand the framework of the policy to inform its enactment practice in schools. It is hoped that the analysis can build the understanding of the relationship between policy and practice in a curriculum change phenomenon. Instead, these annual reports have been used as references to support other developments in this thesis.

Analysing a curriculum policy is common in the investigation of policy-in-practice across diverse educational background. For example, in Timor Leste, Shah and Quinn (2016) analysed the government's policy and planning documents that set out educational goals for the country which was learner-centred teaching practice. The information gathered from these documents was then used to study the relationship between policy and practice which showed that the educational goal specified in the policy was not fully reflected in practice. Another study in England also showed that there were constraints on fully supporting the key changes in the policy such as timelines, budget and the lack of collaborative efforts among practitioners (Palikara et al., 2019). In Maldives, Di Biase (2019) provided suggestions to improve the relationship between policy and practice. One of them was to strengthen the professional development practice for teachers to gain access to the new ideas in the policy. From these studies, there is a similarity observed in the enactment of curriculum policy. The knowledge about the curriculum policy obtained from the policy

analysis was used to analyse the classroom practices. The use of policy analysis in this manner reflects the sampling approach. Miller and Alvarado (2005) argued that researching with documents had specific strategies of sampling; in this study, the document analysis is structured for comprehensiveness rather than representativeness (Jardanova, 2000). The use of document analysis for this purpose is also observed in other studies (eg: Di Biase, 2019; Palikara et.al., 2017 and Shah & Quinn, 2016). Since the use of document analysis is to shape an understanding about the topic of study, researchers were encouraged to purposefully select the most information-rich and appropriate sources in relation to the goals of the research (Howeel & Prevenir, 2001; Jordonova, 2000). In this study, the process of identifying the document that entails the curriculum change process was convenient because there is the Blueprint (MOE, 2013) that contains the relevant information that builds an understanding about the curriculum change process in Malaysia.

Other than dealing with the issue of sampling, the policy continued to be analysed critically to acknowledge the influence of cultural values in the policy development process. This is to account for the concerns expressed by Hammersley and Atkinson (1995) as well as those of Atkinson and Coffey (2003) that reminded researchers to investigate how the document was produced, how it was used in daily interactions and how it was circulated to make the document a reliable source of data in the research. This concern stays relevant in the recent practice of policy analysis in which Peers (2018) asserted that a policy should be conceptualised in relation with the historico-political structure or institution through which it is generated. He further expressed that a policy, represented by a range of different kinds of documents, is a form of cultural practice that is historically mutable and unstable (p.215). Therefore, he conceptualised a policy document as a text that is shaped by its broader cultural context.

Acknowledging that the policy is a representation of a broader cultural context and taking the information as a representation of truth may affect the quality of data. For example, the publication of the Malaysian Education Blueprint 2013-2025 was to inform the public about the plans for educational transformation in Malaysia. This is

an informative document that gives meaningful information not just to educational practitioners, but also to the public. Due to these reasons, there could possibly be areas or topics in the Blueprint that were written for political and social interests. To ensure the validity of the analysis, I analysed the policy document along with other sources of data such as interviews or surveys. This measure was taken in response to the suggestion made by Atkinson and Coffey (2011) that encouraged researchers to practise triangulation of data sets to improve the validity of the conceptualisation of the findings. For this reason, I have arranged for interviews with two educational officers from the Ministry of Education to share their experiences of developing the curriculum policy that can shed a light on the practices of policy development in Malaysia.

4.4.2 Classroom observation

The objective of classroom observation in this study was to observe the instructional practices of the participating teachers in their classrooms and evaluate how far these aligned with the principles of the teaching and learning process in the new curriculum policy. There are 12 principles in the new curriculum policy that inform the teachers' role in the classroom. They are:

1. Selecting teaching strategies that can enhance students' learning;
2. Understanding students' learning strategies to assist them in choosing a suitable learning strategy;
3. Preparing a conducive and relevant learning environment;
4. Encouraging students' active participation;
5. Providing opportunity for students to explore their potential;
6. Training students to acquire learning and thinking skills;
7. Assisting students to achieve the required mastery standard;
8. Facilitating students to search for information from various sources;
9. Facilitating students to explore various ways of problem-solving and decision-making;
10. Practising formative assessment;

11. Encouraging patriotic and unity mindset; and
12. Encouraging good values behaviours.

Source - KSSR Guidebook: Ministry of Education, 2016

From these principles, the new curriculum policy focuses on two aspects: pedagogy and assessment. The pedagogical aspect underscores learning styles that encourage student-centred learning and the assessment aspect highlights assessment for learning that is represented by the school-based assessment practices. There are aspects of these teaching and learning principles that represent the formative assessment concept as outlined by Western researchers. For example, the role that teachers should play is to incorporate teaching and learning activities that can inform learning, and that information should be used to plan for subsequent teaching and learning activities. Ultimately, the role of students in the classroom should be centre and front with the role of teachers in facilitating the students to empower their learning process.

- **Using observation in qualitative research**

The distinctive feature of observation as a research process is that it offers an investigator the opportunity to gather first-hand, 'live' data *in situ* from naturally occurring social situations, rather than, for example, reported data (Wellington, 2015, p247) and second-hand accounts (Creswell, 2012, p213). Observation also provides rich contextual information, enables first-hand data to be collected, reveals mundane routines and activities, and can offer an opportunity for documenting those aspects of life worlds that are verbal, non-verbal and physical (Clark et.al., 2009). Other than examining teachers' teaching practices, the purpose of observation in this study is to make a comparison between the teachers' perceived teaching practices and claimed beliefs. This aspect of observation is vital to substantially support reflections on the relationship between teachers' beliefs and teaching behaviours. Robson (2002) has emphasised that 'what people do may differ from what they say they do, and observation provides a reality check' (p310).

Studies of curriculum change processes have largely adopted observation as one of their methods to illuminate the way curriculum policy is translated into practice (Di Biase, 2019; Palikara et.al., 2017 and Shah & Quinn, 2016). In these studies, using observation as a method has enabled the authors to gather information that demonstrated policy-in-practice in classrooms in diverse backgrounds. This understanding aligns with the phenomenological perspective that situates observation as a method of building understanding of the lived experiences of people. Van Manen (1990) promoted the use of observation in research processes as a means of entering the world of the researched participants. The degree to which the researchers immersed themselves in the researched setting can determine the depth of their understanding of the social and contextual background of the participants. Cohen, Manion and Morrison (2018) presented a well-known classification of researcher roles in observation, which lie on a continuum:



Figure 3: Classification of researcher roles in observation

The roles of observers in this continuum are characterised by the degree of detachment they display which emphasises their ‘overt’ or ‘covert’ role during the observation. The role of researchers as complete observer indicates that the researchers only observe and are detached from the researched group; on the other hand, the role of researchers as a complete participant signifies that they become member of the group and could grasp ‘insider knowledge’ as much as possible (Cohen, Manion and Morrison, 2018).

As a researcher in this study, I play the role of observer-as-participant as I disclosed my identity as a researcher and I might sometimes participate a little through interaction with teacher or students, or peripherally in the group activities, since I stayed in the classroom while the lesson was being conducted. Particularly, I avoided interaction with the teachers because I did not want to interrupt their teaching routines, and I wanted to make them feel as comfortable as possible even though they were aware that I came to observe their lesson. I also restricted myself from interacting with the students to avoid disrupting the lesson which could affect their focus. There were times that the teachers encouraged my participation in their activity, but I kept it minimal to maintain my role as observer in the study. However, compared to covert observation in which researchers could obtain rich information by being apparently part of the researched group, overt observation offers more limited access to information and people due to the transparency of my role as a researcher (Cohen, Manion and Morrison, 2018). This issue is addressed by incorporating triangulation in the study which allows for data cross-checking using different research methods.

In classroom-based studies, video observation is an increasingly popular method of analysing teaching and learning because the video can capture both the teachers' and students' perspectives concurrently (Fischer et al., 2018). Klette and Blikstad-Balas (2018) advocated the use of video observation to help decompose teaching practices into smaller entities and to allow the researcher to analyse the same segment of recorded teaching with different analytical foci (Bilkstad-Balas & Sorvik, 2015; Jewitt, 2012). Most importantly, video observation gives the researcher a flexibility to revisit and review the teaching practices to improve interpretation and strengthen understanding of the teaching behaviours.

Acknowledging the potential benefit of obtaining a rich data from the video observations, I initially planned to video record the class observation to be rigorous during the process of analysis. However, the ethical considerations and technical difficulty affected the plan. The ethical issues were related to the students who did not agree to be recorded. It could become an issue to separate them from their other

classmates without making them feel uncomfortable or anxious about not participating in the study. Furthermore, setting up the camera for every lesson and the possibility of requiring an assistant to do that have increased the difficulty since I was a lone researcher during the fieldwork. In light of these concerns, Coleman (2000) reminded researchers to consider wisely whether video recording should be employed since it is likely to influence the behaviour of the participants and jeopardise the validity of the findings. On that note, I became concerned about disturbing the routine of the lesson, and I might be observing a pre-rehearsed lesson which could affect the quality of the data. Therefore, omitting the video recording procedure seemed relevant and practical in this study. Alternatively, I used an observation protocol form and wrote down as many details as possible. This shows that there was an alternative to recording the details of the observation other than a video recording.

- **The framework of the observation protocol form**

The observation form was designed based on underlying knowledge of formative assessment. From the perspective of Black and Wiliam (1998a), through a review of literature on the effectiveness of formative assessment to foster learning, formative assessment is a framework that encompasses all those activities undertaken by teachers and/or students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged (p1). Klenowski (2009), integrating the recurrent themes of assessment for learning from various authors, defined it as a part of everyday practice by students, teachers and peers that seeks, reflects upon, responds to information from dialogue, demonstration and observation in ways that enhance ongoing learning. Building on the emerging theme of formative assessment or assessment for learning that should be used to inform learning, Yin and Buck (2015) had also defined formative assessment as any planned or spontaneous pedagogy strategy used to elicit students' conceptual development and use the elicited information to inform subsequent teaching and learning (p.722). For example, a teacher might use classroom work and homework to engage students in generating extended responses (Black and Wiliam, 1998s). These tasks could be:

classroom questioning and discussions (Chin, 2006), responding to extended-response questions (Nieswandt & Bellomo, 2009) and curriculum-embedded formative assessment tasks such as prediction–observation–explanation activities and reflection lessons (Furtak and Ruiz-Primo, 2008).

Fundamentally, we learn that the key ideas of formative assessment consist of teaching and learning activities as tools to track students' learning progress through various tasks, and that this knowledge is used to inform the next step of teaching. Black (2015) also proposed some broad activities to realise this such as peer and self-assessment, collaborative work and interactive dialogue. From these ideas, the relationship between assessment and learning stands out. This relationship between formative assessment and learning has been promoted by Dwyer (1998) as he highlighted the fundamental principles of assessment design which should draw upon 'fitness for purpose' and ensure that the mode of assessment should impact positively on teaching and learning.

Fundamentally, the objectives of the observation were to examine in what ways teachers have incorporated formative assessment strategies in their teaching. As well as examining the formative assessment strategies, I also observed to what extent these teachers applied the strategies in their instructional practices. I also recorded the chronological teaching and learning activities to be used as references during the analysis process. To support analysis from the observation plan, the observation method adopted a structured observation protocol with predetermined observation categories that had been worked out in advance (Cohen, Manion and Morrison, 2018). These categories were devised from key ideas of formative assessment strategies such as direct feedback and self and peer-assessment that enabled the process of feedback and reflection. In the classroom, these strategies became the focal points of the observation, and there was a remarks column next to each strategy to record my reflection as I was carrying out the observation and to reflect on my position in a hermeneutic phenomenology study. This reflection is vital to show that I was aware

that my observation could have been influenced by my personal beliefs about classroom teaching. A copy of this observation sheet is available in Appendix D.

In conclusion, employing observation as one of the research methods in this study has revealed the lived experiences of the teachers as they enact the curriculum policy in their classrooms. Earlier, I have also discussed the significance of using observation as a research process to answer the research questions including its advantages and disadvantages. In the following section, I will elucidate the purpose of employing semi-structured interviews to explore the insights of the participants in this study. These two research methods are closely linked because the interviews were employed to obtain insights from the participants about curriculum change which supported their instructional behaviours in the classroom.

4.4.3 Semi-structured interviews

In this study, semi-structured interviews were conducted with four different groups of participants who were involved in the processes of change of the curriculum. They were:

- Two officers from the Curriculum Development Department (CDD) from Ministry of Education Malaysia
- The head teachers from the participating schools
- Eight teachers from the participating schools
- 13 students from the participating schools

Employing semi-structured interviews in this study is an important research process as it is the medium to explore the participants' perceptions on curriculum change process. Silverman (2011) perceived the use of interviews in research as a representation of reality from each participant's position which was governed by several factors including cultural values. It also gives glimpses into the meaning of life as experienced by the participants (Cohen, Manion and Morrison, 2018). As did Rapley (2004), he perceived interviews as social encounters where speakers

collaborated in producing retrospective (and prospective) accounts or versions of their past actions, experiences, feelings and thoughts.

These authors viewed interviews as a way to articulate the experiences and personal thoughts of the participants in a social situation. Using their views to inform the purpose of interviews seems appropriate and relevant in this study. In this study, interviews are the medium to elicit the participants' personal experiences and thoughts about the changes in the curriculum that constitute their perception of the changes and challenges they face during the enactment process. The thinking process could reveal their beliefs about this curriculum change which could be used to analyse their instructional practices in the classroom. While interviews with teachers could provide such information, interviews with officers from the Ministry of Education provide a different orientation about the curriculum change process in Malaysia. As officers who participated in the policy thinking process, the information obtained from them could illuminate the process of policy making and implementation as well as provide access to their thoughts about the policy enactment.

The structure of the interview adopted a semi-structured format. As suggested by Yin (1994) and Creswell (2003), this format of interviewing helped to focus on certain aspects of interest that were relevant and important in the study. However, unstructured parts of the interviews were also allowed to collect any unanticipated data that were deemed relevant and significant to conceptualise the findings of this study. Furthermore, the interaction between one data set and another is a measure to provide rigour in understanding the meaning of the data through triangulation (Denzin and Lincoln, 1998:4). In this study, triangulation involved examining the participants' beliefs and experiences of the curriculum change and their subsequent engagement in the change process from more than one perspective (Boeije, 2010; Denscombe, 2007). Mainly, the interviews and observations provided two ways of understanding and interpreting their experiences which contributed to the verification of their accounts and the validity of the research.

A study in Scottish primary schools established triangulation through employing different methods as a way to create an in-depth study. In the study, the data generated through the observations was used to initiate discussions in both the semi-structured interviews and planning conversations, the other two methods employed in the study (Carse, 2015). This approach to triangulation can also be observed in this study. The interviews with the teachers and students were conducted after teaching observations had completed. This was to allow for an opportunity to seek for an explanation on any emerging concerns during the observations.

In the context of Malaysia, adopting different methods in a study for triangulation has been commonly practised. For example, Chiew, Mohd Hasani and Lim (2016) conducted a study to investigate the adoption of a teaching model from Japan in Malaysian classrooms. In order to obtain an in-depth understanding about the lesson conducted, they interviewed participants individually with semi-structured and open-ended questions to obtain their views and reflections about their experience. In another study, the researchers submitted the observational and reflective notes for verification by the participants (Charanjit, Othman, Napisah, Rafeah and Kurotol Aini, 2017). This measure was taken to ensure that the researchers' interpretations reflected the observed behaviours of the lecturers.

In short, employing different methods in a study will validate the different sets of data that have been collected and demonstrate the rigour of the data collection process required to conceptualise the findings of the study. In the following section, I will describe the purpose of interviewing different participants for this study and the themes of the questions in the interviews. These questions consist of topics of investigation, and they are unique to different groups of participants. Besides these general questions, during the interviews, there were other questions that were constructed to probe for deeper insights depending on suitability.

There are four groups of participants in the interviews. Each of them has a specific role in the educational change process; hence, obtaining their insights will enrich the conceptualisation of the findings in this study.

4.4.4 Interviews with the officers from the Ministry of Education Malaysia

The interviews with these officers have provided information on the processes of educational policy making in Malaysia. The officers also shared their perceptions of the implementation and enactment process in schools. Two officers who participated in the interviews. Ava is an officer in the Research Unit of the Curriculum Development Department that is responsible for educational research that investigates and explores various issues in the Malaysian educational field. Particularly, this department is responsible for providing the hard data to facilitate the decision-making process for policy-related matters. On the other hand, Isabelle is an officer who is engaged in the process of modernising the curriculum. Interviewing her has given this study a deeper insight into the thinking process of the curriculum policy and also the approaches used by the Ministry to disseminate the curriculum policy to the community of practice.

Prior to the interview session, I emailed them the questions for reviewing purposes. It was also to comply with the ethical guidelines to avoid having questions that might be sensitive to the participants. By taking this precaution measure, it was hoped that I could minimise discomfort during the interview sessions. Furthermore, there might be questions that were unclear and needed clarification before the interview session. Table 7 presents the themes that have been used to construct the questions for the interviews. The questions constructed for each individual were related to their area of expertise.

Table 7: A list of themes used during the interviews with officers from the Ministry of Education Malaysia

Isabella	Ava
<ol style="list-style-type: none"> 1. Personal and career background. 2. The processes of educational policymaking in Malaysia, particularly the newly developed KSSR curriculum. <ul style="list-style-type: none"> - The main factor(s) in developing KSSR curriculum policy. - The framework of KSSR curriculum design. 3. The process of implementation and dissemination of the curriculum policy to the community of practice. 4. The perception of the officer in the Ministry of Education of the enactment process of KSSR in schools. <ul style="list-style-type: none"> - The challenges during the enactment process of KSSR policy in schools. - The perception of the officer on the role of teachers' assessment in the classroom. 	<ol style="list-style-type: none"> 1. Personal and career background. 2. The role of research in the process of policymaking in Malaysia. 3. The framework of KSSR curriculum design. 4. The perception of the officer in the Ministry of Education on the enactment process of KSSR in schools. <ul style="list-style-type: none"> - The perception of the officer of the role of teachers in the process of policy enactment in schools. - The perception of the officers of teachers' assessment in the classroom. - The perception of the officer of the effectiveness of teachers' training.

- **Interviews with the head teachers**

Interviews with the head teachers allowed me to gain a deeper understanding of their perception of the curriculum framework as well as their perceptions about the changes in the curriculum. Besides, they also shared their role in leading the curriculum change process in their schools. They also expressed their concerns about the implications of the curriculum policy for teachers and students especially in matters related to assessment. Their insights and thoughts have built an understanding of the school culture and the leadership approach they adopted while leading the educational change process in their schools.

The following themes have been used to construct the questions for the interviews.

- Personal background and working experience
 - Knowledge of the KSSR curriculum policy framework
 - Knowledge and perception of the dissemination of the curriculum to schools
 - Perception of the process of policy enactment in schools
 - The role of head teachers in engaging parents in the curriculum matters
 - Knowledge and perception of teachers' training activities in schools and at the district level
 - The role of school inspectors in schools
 - Hopes and wishes for the future of KSSR curriculum in schools
- **Interviews with the teachers**

The interviews with the teachers allowed for a discovery of teachers' knowledge and their perceptions of the curriculum policy, especially their views on classroom assessments. Getting access to their understanding and perception in these aspects is especially important in this study, for it is used to address the relationship between their perception and teaching practices. This includes identifying the extent to which they felt they were able to make changes in their instructional strategies to reflect the curriculum aim and to what extent they were assisting students in becoming independent learners. There were also questions that were designed to seek for clarification on topics or issues that were identified during the classroom observations.

The following themes have been used to construct the questions for the interviews.

- Personal background and working experience
- Knowledge of the KSSR curriculum policy framework
- Perception of the process of policy enactment in schools
- Perception of teachers' teaching practices that reflect the curriculum content
- Challenges and concerns related to engaging students actively in the learning activities and to developing independent learners
- Knowledge of the employment of formative assessment strategies in the classroom

- Their perception of classroom assessment and their ways of integrating it into the lesson
- Their perception of teachers' training at the district and school level
- **Interview with the students**

The interviews with the students informed me of their learning experiences in response to the instructional strategies employed by their teachers. Through their responses, I could develop an understanding of what they perceived as important in the learning process. Understanding this aspect helped me to analyse the relationship between their perceptions of the instructional strategies employed by the teachers and their willingness to participate in the classroom activities.

Prior to the actual interview session, I carried out a mock interview session with two participants to identify issues that might arise during the interviews. From the mock session, I found that interacting with children and eliciting information from them was challenging for three reasons:

1. They have a short attention span,
2. They could not understand complex questions. The questions had to be short and clear. If I wanted elaboration, I must prompt them to encourage elaborated responses; and
3. They needed illustrative examples to understand technical terms in the question.

To overcome the challenges, I decided to prepare the interview guide in a PowerPoint presentation. The slides enabled me to stay focused during the interview and especially helpful when I needed to show the children pictures or illustrations. These images helped them to understand the questions especially when technical terms were used such as self-assessment, formative and summative feedback and success criteria. It was important to ensure they understood the questions to draw correct responses from them. During the actual interview sessions, I found that the PowerPoint slide presentation improved the interview session greatly. The students were responsive and seemed confident in giving their responses.

In the literature of studies that involves children, researchers have devised various strategies to ensure optimum participation from children and to ensure that ethical considerations have been properly observed. For example, using structured activities to encourage children's participation during the interview was suggested (Formonsiho and Araujo, 2006). Besides encouraging children's participation in interviews, these activities also can prevent boredom and increase interest (Formonsiho and Araujo, 2006; Irwin & Johnson, 2005). In one study located in Scotland, the researchers employed an arts-based methodology that consisted of fine arts, videography, role-play and informal conversations with children to engage with a multimodal definition of voice through artistic expression (Blaisdell et.al., 2018). In another study, the researchers used interactive non-fiction narration (INN) to seek informed consent from young children which incorporated visual and interactive features about the research (Mayne, Howitt & Rennie, 2016). In the context of this study, I have used a strategy similar to INN (Mayne, Howitt and Rennie, 2016) which was a PowerPoint Presentation that consisted of visuals to improve the clarity of the questions as well as to maintain focus during the interview.

Additionally, it was argued that the language to use when communicating with children should be clear and simple. This is to facilitate their comprehension and empower their voices (Fargas-Malet et.al., 2010; Punch, 2002). In this study, I allowed the students to choose their preferred language to express their ideas better. The options were either Malay or English language, and all participants chose to interact in Malay Language except for one participant who wanted to use English language. Besides giving them the option to speak in their preferred language, the questions were also made shorter and clearer to help the participants improve their understanding.

Another issue of concern when researching with children is the adult-children relationship that can cause power disparity (Clacherty & Donald, 2007; Porter et al., 2010 and Young & Barrett, 2001). In most cultures, adults are accorded authority over children and are thus dominant (Einarsdottir, 2017). In this study, the role of adults in

this manner can be observed during the selection of the student participants. The teachers acted as the gatekeepers in recruiting the participants (Coyne, 2010a, p. 452). This situation can be an example to show that in the context of Malaysian classrooms, adults have authority over children, and the implication for the selection of participants was that the gatekeepers could exclude those who were willing to participate and able to make decisions for themselves. In this sense, the role of gatekeepers may in some instances deny children the opportunities to express their views (Coyne, 2010a, p.452).

Building from that situation and being an adult researcher in this context, I was aware of my dominant relationship over the participants and therefore, I took measures to minimise the power disparity. First, I employed semi-structured interviews and asked mostly open-ended questions to allow for exploration of their thinking processes and reasonings. There were some closed questions, but I devised open-ended questions from their responses to encourage them to justify their responses. Employing the appropriate dialogic method such as open-ended/semi-structured interviews can provide children with a certain amount of control over the direction of the discussion. In this form of interaction, the researchers allow children to contribute to the research agenda and discuss their reasoning behind their thinking or actions (Graham & Fitzgerald, 2010; Harcourt, 2011). Giving students closed questions may make them feel like being tested; hence, Araujo (2006) contested the use of directive questions in interviews with children.

Secondly, I conducted the interview in a private space in their school within the school time. The nature of this study is classroom-based research; hence, conducting the interview at home is not a natural environment for the participants, which is an essential aspect to minimise the power disparity between adult researchers and children. It was argued that there is a sense of security when the research is conducted within the children's natural environment such as their homes or schools (Formosinho & Araujo, 2006; Griffin et al., 2014). Furthermore, the location of the research also determines the extent to which their privacy (Mauthner, 1997) and confidentiality

(Barker & Weller, 2003) are protected. Valentine (1999) argued that in both locations, home or schools, it is difficult to find a private space where it is safe for children to be interviewed without being overheard or interrupted. Kellet and Ding (2004) specifically claimed that it was difficult to locate a private space in schools. Despite these challenges expressed by other researchers, in the context of this study, I managed to secure a private room to conduct the interview with the participants. With the assurance from the head teachers that the interview would not be interrupted, I successfully conducted each interview without interruption.

Thirdly, I also gradually built a rapport with the students during the observation period to establish trust. Building rapport is an important aspect to build a trusting relationship and minimising power differentials in researching with children (Danby et al., 2011; Griffin et al., 2014; Leeson, 2013). Two of the strategies suggested by researchers that have been practised in this study are using small talk before the interview (Fargas-Malet et al., 2010; Griffin et al., 2014) and interaction with children a few times before the interview to build a rapport with trust (Leeson, 2013). In the latter, the transition from being a stranger in the classroom seemed to move fluidly as the students felt comfortable interacting with me after consistently seeing me in their classrooms during the observation period.

All these measures were implemented carefully to ensure that the data obtained from the participants are valid. With the observation of these aspects, I believe that the data gathered from these students are valid and can be used to represent their thoughts and perceptions on the topic. These measures have facilitated minimising the power differentials that potentially exist between adult and children in research with children. In conclusion, this study has employed three methods for data collection, policy document analysis, classroom observations and semi-structured interviews. For each of these methods, the purposes of employing them have been clearly described including the reasons for analysing them for triangulation purposes. All these methods were employed to investigate the relationship between policy and practice qualitatively. This allows for the analysis of the social phenomenon to be viewed using

the social and cultural lens as the participants demonstrated their behaviours in the classroom or expressed their thoughts in the interviews. The data collected then needed to be analysed and interpreted in a comprehensive meaning-making process. This process of data analysis adopts the thematic approach which is useful for interpreting the data and categorise them into units of meaningful events.

4.5 Data analysis

4.5.1 Thematic analysis

This method of data analysis was used for all data obtained from the three methods, policy document analysis, interview transcripts, and observation notes. I analysed the data from these methods thematically using procedures proposed by Braun and Clarke (2006). They defined thematic analysis as a method of identifying, analysing and reporting patterns in the data. It involves organising, describing, and interpreting data and allows for an interpretation of various aspects of the research topic (Boyatzis, 1998). Van Manen's approach to the analysis extended beyond Braun and Clarke (2006) in that he proposed to attend to four guides for reflection which were temporality (time), spatiality (space), embodiment (physical or emotional presence) and intersubjectivity (relationships with others). Acknowledging this, I exercised deep reflexivity by following Van Manen's concept of reflection to interpret and understand the meanings of the experiences expressed by the participants during the interviews. The process of thematic content analysis that I have adopted reflected the Braun and Clarke's recursive six-phase process:

1. Become familiar with the data
2. Generate initial code
3. Search for themes
4. Review the themes
5. Define the theme
6. Produce the report

During the process of analysing the transcripts, I did not follow the order in a rigid manner; instead, I went back and forth between one step and another to ensure that I had not exhausted the details that could be used to contribute to the findings of this study. The following sections consist of detailed explanation on the process of carrying out a thematic content analysis for each of the methods used in this study through two approaches, inductive and deductive.

4.5.1.1 Deductive approach: Complete analysis of the observation notes and curriculum policy analysis

Content analysis is a research method for that enables researchers to make replicable and valid inferences from data to their context, with the purpose of providing knowledge, new insights, a representation of facts and a practical guide to action (Krippendorff, 1980). The aim of a content analysis method is to obtain a condensed and broad description of the phenomenon, and the outcome of the analysis is presented in the forms of concepts or categories describing the phenomenon. There are two approaches to a content analysis: inductive and deductive. The purpose of the study determines which approach would be appropriate. Generally, if the study is exploratory in nature, the inductive approach is recommended where the categories are formulated from the data (Lauri & Kyngas, 2005). On the other hand, deductive content analysis is used when the structure of the analysis is operationalized on the basis of previous knowledge (Kyngas & Vanhanen, 1999). An approach based on inductive data moves from the specific to the general (Chinn & Kramer, 1999) while a deductive approach is based on an earlier theory or model; hence the analysis moves from the general to the specific (Burns & Grove, 2005).

In the context of this study, the deductive approach is adopted to substantiate the theoretical framework that governs this study which is the theory of change (Fullan, 2007). There are three phases in the model of change which are initiation, implementation and institutionalisation (refer to Chapter 3 for details). Among these three phases, Fullan (2007) emphasises that 'the events that happen during the

process of change' are the most significant aspects that determine the success of the change process. Hence, the deductive approach employed for the analysis of policy document and observation notes are able to elicit information that can inform the extent to which success has been achieved in Malaysian classrooms.

This part of the analysis related to two sources of evidence in this study: the observation notes and curriculum policy analysis. Both were analysed using a deductive thematic analysis procedure. Since the study sought to identify key aspects of policy and to examine specific behaviours amongst teachers, approaching the thematic analysis in this manner was most appropriate. For the curriculum policy, the analysis was guided by specific questions to search for information in the policy document. They were established based on the desire to explore the development of curriculum policy in Malaysia which encompass the aspects of intent, implementation and enactment. These questions help to generate the themes to reflect the processes of curriculum change that constitute policy thinking, policy implementation and policy enactment. The questions are as follow:

- What influenced the KSSR curriculum policy thinking?
 - How has the international benchmarking practice affected the policy ideas?
 - What was the aim of the new curriculum policy?
 - What was the curriculum framework?
- What strategies did the government employ to implement the curriculum policy?
- What strategies did the government employ to transform teachers, school leaders and the Ministry in supporting the change process?

On the other hand, the analysis of the observation notes was aimed at examining teachers' teaching practices based on predetermined strategies of formative assessment practice. The information produced by both of these methods was analysed using the thematic analysis process outlined by Braun and Clarke (2006). The observation was structured and focused since there were specific behaviours that I wanted to study. Therefore, the observation sheet was designed using a rating scale

(Yes/No) to indicate the occurrence of practice. During observation, I indicated my analysis of the classroom practices in the observation worksheet by circling 'Yes' or 'No' in the sheet (refer to the Appendix D for an example of analysis). Additionally, there was a column labelled 'Remarks' to record my thoughts or to describe the classroom activities that I found interesting while I was doing the observation. This includes notes of incidents and events that occurred as well as initial thoughts regarding the teachers' practices.

After I completed the classroom observations, I gathered the observation sheets and began the process of reading and understanding the text as a strategy of familiarisation (Braun and Clarke, 2006). Meanwhile, I also started to identify the patterns which were identified by coding the reports according to the themes of several formative assessment practices as suggested by various researchers (eg: Black, 2015; Yin and Buck, 2015; Chin, 2006). These suggested activities became the overarching framework to assist the thematic analysis of the classroom observation data (Bryman, 2012).

4.5.1.2 Inductive approach: Analysis of the interview transcripts

After I completed the interview sessions with all participants, I listened to the 24 audio recordings and transcribed the interviews verbatim which consisted of transcriptions using a mix of Malay and English language. Generally, all participants, except for students, have spoken using a mix of Malay Language and English language. Students spoke in Malay except for one participant. Then, the transcriptions were translated into English, ensuring that the translated transcription was close in meaning to the original transcription. The transcriptions were translated to English to increase the accessibility of the findings to international readers. The translated transcriptions needed to be reviewed to check accuracy of meaning, so I submitted them to a language teacher. The reviewer was a certified language teacher who was competent in written and spoken forms of both languages, Malay and English. She is a Malaysian who graduated from a local university in Malaysia in TESL and has obtained a master's

degree in Applied Linguistics (English). She is currently working as a language teacher in one of the prominent universities in Malaysia and is regularly appointed to translate academic texts and official documents at her workplace. Her academic and career background made her a suitable candidate to review the translated transcriptions.

Using the translated transcription, I familiarised myself with the data by iteratively reading and reflecting across transcriptions from the same group of participants. This is a practice to become immersed in the data and to help the initial process of identifying ideas and possible patterns as researchers become familiar with all aspects of the data (Braun and Clarke, 2006). I also coded the transcriptions in an organised manner to ease the process of identifying emerging themes. For example, I coded the transcriptions for the teachers before I coded the transcriptions of the students. During the process of coding, I underlined and highlighted phrases and words that were relevant to the research questions. I also wrote notes on a separate piece of paper to indicate potential patterns in the data based on my interpretation. I repeated the same process with other sets of transcriptions until everything was coded. Then, I generated a list of codes to formulate initial themes before I redefined and reorganised them onto the formulated themes. I also reviewed the themes to ensure that they represented the experiences expressed by the participants and each theme was clearly distinguishable (Van Manen, 2017; Braun and Clarke, 2006).

Initially, I used NVivo software to help me organise the coding into structured and meaningful themes. However, it became inconvenient as the software did not facilitate the analysis process. I spent more time learning and managing the software than organising my data for the analysis. Hence, for practicality purposes, I switched to using a Microsoft Excel spreadsheet to organise the codes and generate the themes and reviewed them several times before I started writing up. An example of the way the codes were grouped into themes and then developed is displayed in the Appendix E. Nonetheless, in the following section, I will describe the process of data analysis that which includes the detailed explanation on the process of generating codes and themes for each of the methods employed in this study.

4.5.2 The process of data analysis

There are two approaches to analyse the data in this study: deductive and inductive approach. The following section describes the detailed processes of employing the approaches to the different sets of data: policy document, interview transcriptions and observation notes.

4.5.2.1 Deductive approach

- **Policy document**

The analysis of the policy document, or known in Malaysia as the Blueprint is based on a set of questions that can help to elicit information from the Blueprint (refer to pg 160 of this thesis for reference). The following steps further describe the process of analysis following the identification of relevant chapters in the Blueprint that are appropriate in this study. The selected chapters are:

- 1 - Context and approach
- 2 – Vision and aspirations
- 3 – Current performance
- 4 – Student learning
- 5 – Teachers and School leaders
- 6 – Ministry transformation

Chapters 1 – 3 focus on issues related to the quality of education in Malaysia and are the central focus of discussion. These issues derive from the growing practice of benchmarking to an international standard which indicates that there is a global practice in the world regarding the conceptualisation of quality in education. Generally, the presentation of information in these chapters legitimise the reasons for the Ministry to develop a new curriculum policy.

Chapter 4 presents the aspects of change in the new curriculum policy as desired by the Ministry. It is within this parameter that the intention to integrate formative assessment into the classroom is expressed along with other characteristics that are deemed important to improve the quality of education in Malaysia.

Chapters 5 and 6 outline the strategies to empower the role of teachers, school leaders and the middle-layer government in facilitating the processes of educational change in Malaysia.

The questions that were developed earlier serve as the categorisation matrix in which all the data are reviewed for content and coded for correspondence with or exemplification of the identified categories (Polit & Beck, 2004). The following table contains the examples that illustrate how themes are established based on initial codes that were generated from the raw data.

Table 8: Examples illustrating the themes for policy document analysis

Guiding Question	Evidence	Page number	Subcategory	Main category
What influenced the KSSR curriculum policy thinking?	<i>The education system has also consistently produced students and schools that are comparable to the best internationally. This is evidenced not only by the number of students that have successfully gained entry into top-tier universities abroad, but also by the number</i>	Chapter 1: Pg 53 / 1: 4	International comparison of students' academic performance	Background of the educational change in Malaysia

	<p><i>of awards that Malaysian schools and students have won at the international level.</i></p>			
	<p><i>...the changing and increasingly competitive national and international landscape requires a rethink of where Malaysia stands today, and where the nation needs to move forward. Further, there are indicators that the system needs to be more competitive in today's changing world. Out of 74 countries participating in PISA 2009+, Malaysia performed in the bottom third for Reading, Mathematics, and Science.</i></p>	<p>Chapter 1: Pg 55 / 1: 4</p>	<p>Participation in international assessment</p>	

At the end of this first stage of the analysis, I generated six themes that are summarised and defined in the following table:

Table 9: Summary of policy document analysis codes and their respective meanings

Theme	Meaning
The background of the educational change in Malaysia	The events that illustrate the trend of measuring Malaysian quality of education to an international standard through various means especially international assessments.
The quality of students	The characteristics, defined by the Ministry of Education, of good quality students that are outlined in the new curriculum policy.
The role of assessment in education	The practices that measure the quality of education such as administering national examinations and participating in international assessments (TIMSS and PISA).
The new curriculum and assessment design	The framework that illustrates the connection between curriculum and assessment in the new curriculum policy.
The roadmap	The milestones set by the Ministry that chart the progress in improving the quality of education in Malaysia.
The transformation of teachers, school leaders and the Ministry	The strategies developed by the Ministry to transform the roles and responsibilities of teachers, school leaders as well as the Ministry in facilitating the educational change process in Malaysia.

- Classroom observation protocol

The analysis of the classroom observation is based on the records in the observation protocol forms. In the observation protocol, formative assessment strategies that included learning objectives, success criteria, questioning, feedback, self-assessment and peer-assessment practices are the aspects of observation. During the analysis, I compared the prevalence of practices across the data set of both schools. Since the strategies are structured, only aspects that fit the matrix of analysis are chosen from the data (Patton, 1990 & Sandelowski, 1993; 1995). The following table presents the examples of practices in use in classrooms teaching the Malay Language subject in both participating schools.

Table 10: Examples of classroom observation analysis for School A

Subject: Malay Language (School A)							
Dates of the observation	Topic	Learning objectives	Success Criteria	Questioning	Feedback	Self - assessment	Peer - assessment
21/08/2017	Reading and comprehension	X	X	closed-questions	informs the correct answers	X	teacher provides the correct answers and students check their friends' answers
22/08/2017	Reading and comprehension	verbally expressed	X	closed-questions; ask further questions to get elaborated responses	informs the correct answers	X	X
23/08/2017	Writing using pictures as prompts	verbally expressed	X	closed-questions; ask further questions to get elaborated responses	informs the correct answers	X	X

Table 11: Examples of classroom observation analysis for School B

Subject: Malay Language (School B)							
Dates of the observation	Topic	Learning objectives	Success Criteria	Questioning	Feedback	Self - assessment	Peer - assessment
28/09/2017	Writing a review	written on the board	X	prompted to gather ideas for the writing activity	informs the correct answers	X	X
29/09/2017	Grammar: Active and passive verbs	written on the board	X	prompted to gather ideas for the writing activity	informs the correct answers	X	X
03/10/2017	Writing a template	written on the board	X	closed-questions	informs the correct answers	X	X

After comparing the records of observation across 42 sessions, I then developed codes that represent the teachers' behaviour. For example, in the aspects of self-assessment and peer-assessment, I code the behaviour as 'teacher-oriented self and peer-assessment practice'. Moreover, teachers seemed to ask short questions to inculcate critical thinking skills. In this case, this behaviour is coded as 'asking questions to inculcate critical thinking skills'. From the codes, I developed themes to represent the teachers' teaching practices, and at the end of the analysis, I generated four themes. Each theme is described in the following table.

Table 12: A summary of classroom observation analysis and their respective meanings

Theme	Meaning
Exhibiting teacher-oriented teaching practice	The teaching activities that promote teacher-oriented learning.
Promoting student-centred learning	The teaching activities that demonstrate the engagement of students in student-oriented activities.
Giving feedback	The strategies of giving feedback throughout the lesson.
Sharing learning objectives and success criteria	The effectiveness of sharing learning objectives and success criteria as part of the formative assessment strategies to foster learning.

4.5.2.2 Inductive approach

Interviews

The analysis of the interview transcriptions was undertaken inductively. As stated earlier, a common set of questions was used for each of the interviewee group, but the follow-up questions developed during the interviews varied as they depended on the responses expressed by the interviewees. Echoing the processes of an inductive approach, I applied three stages of generating the themes. First, I read the transcriptions thoroughly and while reading, I wrote notes and headings at the margins to reflect the aspects of the content. This refers to the open coding stage (Burnard, 1991, 1996 & Hsieh and Shannon, 2005). Then, I grouped the lists of codes under higher order headings to create categories (McCain, 1988 and Burnard, 1991). The higher order headings were developed based on my personal interpretation as to which codes to be placed in the same category (Dey, 1993). The final stage I undertook was abstraction. This process involved formulating a general description of the research topic through generating categories or themes (Robson, 1993; Burnard, 1996; and Polit & Beck, 2004). It was within this stage that I developed the themes used for the presentation of the interview findings. The following table presents the example of interview analysis of the head teacher from School A.

Table 13: Transcript samples

The script of the interview		Open coding	Theme (1 st)	Abstraction / Reviewed theme (2 nd)
Interviewer (I):	Okay. Firstly, can you share your experience? Tell me about yourself, your experience as a head teacher, how long have you been in this school and how long have you been in the school management?			
Respondent (R):	Okay. I <u>became a teacher</u> on the <u>1st January 1991</u> .	beginning of teaching career	Career background: teacher	Career background
Interviewer (I):	Okay.			
Respondent (R):	I've been in the <u>education field</u> for <u>26 years</u> .	- area of expertise - years of experience	Career background: teaching	
Interviewer (I):	Okay.			
Respondent (R):	I've <u>become a head teacher</u> for 5 years. Before this I was in <u>Sekolah Kebangsaan Padang Gajah</u> , Taiping for 3 years. Then in January 2016, I <u>was transferred to SK Pasukan Polis Hutan</u> and I have been serving here until now.	- beginning of school leadership - list of schools as the school leader	Career background: school leader	
Interviewer (I):	Okay. So, you've been a head teacher for 5 years?			
Respondent (R):	If we look carefully in KSSR policy, it promotes a learning process that is more flexible.	KSSR promotes flexible learning process	Perception of the teaching framework of the curriculum	Perception of the aim of the curriculum

Each of the interview data set undertook the same process, and the meaning of the final themes of each data set is defined in the following tables.

- Policy makers

Table 14: Summary of interview codes and their respective meanings for policy makers

Theme	Meaning
The process of policy thinking, policy making and policy implementation of KSSR	The presentation of the policy makers' perception on the decision-making process of the development and implementation plans of the new curriculum policy.
The role of teachers during the process of policy enactment	The presentation of the policy makers' perception on the role and responsibilities of teachers in enacting the policy into practices.

- Head teachers

Table 15: Summary of interview codes and their respective meanings for head teachers

Theme	Meaning
The implementation and enactment process of KSSR	The presentation of the head teachers' perception on the new curriculum policy which includes their understanding of the changes in the curriculum policy as well as their expectations of the changes represented by the teachers' behaviours.
The role of head teachers in the processes of change	The description of the head teachers' perception on their roles and responsibilities in leading the change process in their schools.

- Teachers

Table 16: Summary of interview codes and their respective meanings for Teachers

Theme	Meaning
The understanding of teachers about KSSR curriculum policy	The presentation of teachers' understanding on the new curriculum policy, KSSR
The perception of teachers on the school-based assessments policy	The presentation of teachers' knowledge about school-based assessment framework which highlights their knowledge and understanding about the new curriculum policy.
The perception of teachers on their teaching practices	The presentation of teachers' perceptions of their teaching practices.

- Students

Table 17: Summary of interview codes and their respective meanings for students

Theme	Meaning
Students' perception on learning intentions and success criteria in the classroom	The presentation of students' perception on the importance of informing them of the learning intentions and success criteria of a particular lesson.
Students' perception on the questioning technique employed in the classroom	The presentation of students' preferred types of questioning technique in the classroom as well as the justifications of their preference.
Students' perceptions of peer and self-assessment practice in the classroom	The presentation of students' perceptions of peer and self- assessment practice as knowing their belief about these practices can generate understanding of their perceived role in the classroom.
Students' perception on feedback-giving practice in the classroom	The presentation of students' perception on the feedback giving practices in the classroom.
Students' perception on the role of teachers in the classrooms	The presentation of students' perception on the role of teachers in the classroom.

4.6 Positionality and reflexivity

Earlier, it was acknowledged that the design of this study is one based on hermeneutic phenomenology that promotes the notion of individual's realities should be viewed as a social construction process (Lopez & Willis, 2000). This means that as a researcher, I develop the understanding of the lived experiences of the participants by reflecting their lifeworld or the world as they reflectively experience it (Bynum & Varpio, 2018). Being in this position, my reflection of the subject matter, participants, context, and process (Etherington, 2004) might influence the way I interpret their experiences. To avoid biased judgement, Lopez and Willis (2004) advised that researchers working in this tradition should openly acknowledge their preconceptions and reflect on how their subjectivity is part of the analysis process. Therefore, I will reflect on my personal and career history and the way these experiences have developed my thinking and judgement of the research process.

I am a language teacher and have had several years of teaching experience in Malaysian schools. Growing up, I attended public primary and secondary schools in Malaysia and I grew up in a family of teachers. This contextual and cultural values of teaching and teachers are embedded in my life and have affected my perspective about the structure of education system in Malaysia. Particularly, I have predetermined ideas about the processes of educational change in Malaysia, and this has become a conflict as I struggled to develop a neutral perspective when I was analysing the sets of data.

From a positive standpoint, my career background has helped me to understand the culture and manner of doing research in schools. For example, I was able to establish rapport with the teachers in the school as I could initiate a conversation with them comfortably without making the situation awkward. I also understand basic rules in schools; the lack of understanding of these rules could have made me become a nuisance in the school. For example, I knew that the Teacher's Office was strictly for staff members and to gain access there I had to be accompanied by one of the staff

members. I also knew to a certain extent that teachers felt uncomfortable during the observation, so I tried to control my behaviours and reactions to avoid being offensive to them. I was also comfortable acknowledging that certain space is prohibited and most of the instructions regarding the school matters should be communicated by the head teachers. These sets of knowledge were beneficial to me because I was able to conduct the study without interrupting the teachers and making them uncomfortable. It was also convenient for me because I did not easily feel challenged if I had to make an adjustment to the research process following the head teacher's order.

However, being an insider in this research has somewhat affected my role as a researcher. For instance, I sometimes found myself losing the struggle to stay neutral in schools especially when dealing with situations involving the teachers. Witnessing them struggling between teaching and other responsibilities in schools made me aware of the hard job of a teacher. Additionally, listening to their concerns about students' academic performance and parents' expectations about education in school, I became more understanding of the limitations they experience in implementing the curriculum policy effectively. Furthermore, being a teacher myself, I understand the pressure and limitations of working in a system that is as highly centralised and bureaucratic as in Malaysia and this made me develop a deep sense of empathy towards them.

I also realised that I was not able, in certain situations, to stay objective and was sometimes overwhelmed with my personal feelings. As a researcher, I had the opportunity to gain knowledge about the topic of this study and to take part in discussing the issues around it. Based on that knowledge and experience, I tended to judge the teachers' actions because I had developed predetermined ideas of teachers' instructional practices based from my existing knowledge even before the actual encounters. However, I worked hard to remain open-minded while evaluating participants' responses to minimise prejudices in my interpretations. Furthermore, the constant interaction with my supervisors greatly helped me to adjust my interpretation from being too biased, defensive and emotional.

This conflict of being an insider or outsider in qualitative research is commonly discussed and the solution offered by past researchers is to view it as a spectrum instead of seeing it as a binary. For example, a researcher can fluidly move from insider to outsider during the research process. and this duality has implications for co-construction of situated knowledge. As qualitative researchers, the stories and experiences shared by the participants are close to us and it was difficult to choose between one role over the other. 'The intimacy of qualitative research no longer allows us to remain true outsiders to the experience under study and, because of our role as researchers, it does not qualify us as complete insiders. We now occupy the space between, with the costs and benefits this status affords' (Dwyer, 2009, p. 61).

In one study, (Breen, 2007) examined her experience of this dual position in her doctoral research process. She addressed the advantages and disadvantages of being between insider and outsider. Her 'insider' position granted her access to the subject matter and participants, but not being directly linked to the issue personally (being an outsider) enabled her to interpret the situation objectively. In the context of this study, I too view my role in the insider-outsider spectrum. There are advantages of being an insider which largely contributed to the ease of adapting and adjusting myself in the school environment while the drawback of it is the heightened empathic feeling that I developed with the participants. I decided to embrace this relationship and continued working hard to be open-minded by accepting feedback and suggestions to ensure that the data analysis was not greatly affected. To this end, I acknowledge that my reflection of these issues does not fully eliminate the fact that these embedded values and beliefs will inevitably influence the research process (Etherington, 2004).

Chapter Summary

The main objective of this study is to investigate the relationship between policy and practice in the enactment process of a new curriculum policy in Malaysia. The investigation has adopted an interpretative approach whereby the understanding of the policy development and policy enactment was analysed from the lived experiences of the participants. The construction of knowledge about the policy and its enactment process was developed using three methods which were curriculum policy analysis, teaching observations and interviews.

The primary document that provided the details about the curriculum development and the plans for implementation was the Malaysian Education Blueprint 2013 – 2025 (Ministry of Education Malaysia, 2013). This document was analysed critically to acknowledge the construction of this document was contextual and culturally bound (Peers, 2018). The knowledge gathered from this document was used to build a framework to observe teachers in their classroom as a way to examine the nature of policy-in-practice. The data gathered from these methods have developed preliminaries findings to the phenomenon of educational change in a part of Malaysian schools.

These findings were triangulated with data gathered from interviews with different groups of participants – policy makers, head teachers, teachers and students from two national primary schools in Malaysia. The data obtained from the interview process has supported deeper reflection and understanding of the phenomenon as experienced by these individuals. These processes of data gathering have contributed to a rich conceptualisation of findings and illustrated the rigorous approach of the research process.

Primarily, the selection of participants adopted convenience sampling procedures for practical reasons. However, ethical considerations were closely observed to ensure that the data gathered can be used to conceptualise the research questions of this study. Furthermore, there were instances where the participants were not selected by the researcher in conforming to a governmental structure that is bureaucratic and highly centralised. Nonetheless, there were advantages that have been acknowledged and this should not jeopardise the findings of this study.

The sets of data were analysed using thematic analysis. The data obtained from teaching observations and curriculum policy analysis was analysed deductively because there were predetermined ideas that governed the analysis process while the data gathered from the interviews was analysed using an inductive approach. The meaning-making of this process came from the emerging themes and the analysis was further triangulated by making cross-analysis between the policy document and the teaching observations. There were also examples that illustrated the generation of codes, and for each of the data sets, a table that presented the summary of codes and their meaning were also included.

Lastly, the reflection on the researcher's position and how it can influence the data analysis was discussed. It was concluded that it was a challenge to decide on the role of researchers, either insider or outsider in qualitative research, because these roles can fluidly move from one to another depending on the situation. It was sufficient to acknowledge that, in this study, being aware of how the insider knowledge can influence the research process and getting constant feedback and suggestions should enable the researcher to present the data interpretations objectively.

5 Policy Document Analysis

Overview

In this chapter, I will present the analysis of the policy document that includes the background, and strategies of implementing the new Malaysian National Curriculum for Primary Schools, KSSR. The primary source for the analysis is the Malaysian Education Blueprint 2013-2025 which is a document that was published based on deep and comprehensive research into the Malaysian education system and that presents the plans to translate the curriculum policy into practice. The Blueprint contains details of areas that need improvement and strategies that have been identified to address those issues and gaps. Additionally, the Blueprint also seeks to identify, highlight, and understand good practices and successes that exist within the education system today for replication and emulation.

Based on the information embedded in this policy document, it is primarily used in this study as a reference to explore the factors for the development of KSSR curriculum policy that subsumes information on policy intentions and the process of policy enactment from the perspective of the Ministry which is operating the process of policy making in Malaysia. As mentioned in Chapter 5 of this thesis, this document is also used for triangulation purposes since the information in the Blueprint can be used to highlight the differences between what the government aspires to and the reality on the ground.

The chapters in the Blueprint reflect two domains of the educational reform: the first presents the background to the policy development which includes the framework for the educational change and the second domain seeks to present the strategies employed by the Ministry for the implementation of the policy to the community of practice. Chapters 1, 2 and 3 of the Blueprint encompass the details on the background of the curriculum policy while Chapters 4 until 6 consist of the plans to improve the quality of students, teachers, school leaders and the Ministry. I conclude this chapter by presenting an analysis that links the information in this chapter to the literature.

5.1 The background to educational change in Malaysia

The opening chapter of the Blueprint describes the historical background and the development of the Malaysian education system since the time of British occupation (details on this can be found in Chapter 2 of this thesis). Since then, there have been phases of major and minor changes, and with each change, education in Malaysia has developed to correspond to the economic, political and societal growth. LINUS (Literacy and Numeracy Screening programme) is an example of a programme that was introduced for the economic growth which aims to ensure that all students achieve basic numeracy and literacy after the first three years of primary schooling (The Blueprint, p242). This first phase of this programme was recorded as a success when a significant improvement in Malay Language literacy and numeracy was recorded (The Blueprint, p264). Another innovation made to the education system as a response to advances in Science and Technology was the introduction of The Teaching Science and Mathematics in English policy (referred to as PPSMI in the Blueprint). However, the implementation of this policy received criticism. Particularly, this policy was perceived as challenging to the students and, from a political point of view, it was a threat to the Nationalists who claimed that the influence of Malay Language as the national language would be reduced if the English language dominated the teaching of Science and Mathematics in Malaysian schools.

As a result, the policy had to be revamped and rebranded as a school-based programme. This programme, called Dual Language Programme, increases students' contact hours in the English language classroom through the teaching of Science and Mathematics. Unlike PPSMI policy which was mandated by the Ministry, with the DLP, schools could choose whether or not to participate in the programme. The decision to opt in or out was linked to criteria specified by the Ministry of Education. The criteria for selection included having sufficient capacity, linked to teachers' qualifications, having enough classrooms to conduct DLP, having clear plans for the DLP implementation by school leaders, having agreement from parents, and evidence of students' performance in Malay Language based on the previous year's national examination results (UPSR and SPM) (MOE, 2018).

DLP is an example that demonstrates the Malaysian's government's continued effort to improve the quality of education in Malaysia. Besides, the introduction of the DLP also indicates that there is a strong political influence in Malaysian education field. For example, the decision to introduce the Dual Language Programme (DLP) signifies that the government is pragmatic and perhaps realistic as it gives an opportunity for certain schools to implement it if the programme is deemed suitable in their contexts. However, the centralised organisational structure in Malaysia has limited the power of the school leaders to make the decision. In the case of DLP, the ultimate decision for implementation depends on the standard list of criteria that the schools must fulfil and the deliberation process that the school leaders must undergo with the State Education Department. This reflects the way Malaysian education system operates and it offers insights into the way educational change is initiated and implemented in Malaysian classrooms.

The next section includes evidence of Malaysian students' achievement on the international stage to introduce the perception of the Malaysian's government on the quality of education in Malaysia.

5.1.1 Malaysians' achievements at an international level

From the Malaysian government's point of view, Malaysian students can be comparable to an international standard when they are able to showcase their competence and skills at an international level. Success is measured by the number of student enrolments into top-tier universities abroad as well as by the number of awards that Malaysian schools and students have won at the international level. An example taken from the Blueprint was recorded in July 2011. An astronomical performance by a Form 4 student in the 52nd International Mathematical Olympiad, Netherlands, led to the student being awarded the first gold medal for Malaysia (Ministry of Education, 2013, p.54). Such achievement was perceived to mark a great milestone for Malaysia as it was seen as a good example to demonstrate that Malaysia

has a high-quality education system when one of the students was able to win at an international competition.

A second achievement that is recorded is the Malaysian team gold medal in the category of education inventions in 'The Invention and New Product Exposition, USA' (Ministry of Education, 2013, p.54). Besides that, there were also achievements recorded in various sports, academic and non-academic competitions worldwide. Winning these competitions, according to the government, is one way of showing that Malaysian students have the knowledge and skills to compete with other students from around the world.

The Blueprint recognises, however, that beyond these important achievements, the changing and increasingly competitive national and international landscape required a rethink of where Malaysia stands and where the nation needs to move forward. There are indicators that the system needs to be more competitive in today's changing world. For instance, out of 74 countries participating in PISA 2009+, Malaysia performed in the bottom third for Reading, Mathematics, and Science, and the average Malaysian student's performance in all three areas was below both the international and OECD averages. This statistic worries the Government because PISA is an assessment of students' higher-order thinking skills and their ability to solve problems in a real-world setting. Lacking in these skills indicates that the Malaysian education systems needs to be more competitive to stay relevant on an international stage.

5.2 The implications of large-scale international assessment to education in Malaysia

In Chapter 2 of this thesis, I explained that the assessment framework in Malaysia is highly examination oriented which is represented by the three major national examinations that students in Malaysia have to undergo at different phases of their schooling period. One examination is taken at the end of primary school, one in the middle of secondary schools and the final one is at the end of secondary school. These

examinations are high stakes as the results are used to inform students' academic futures. Later chapters in this thesis will show that, from the classroom observations in this study, these national examinations seem to impact the teaching and learning process significantly. Teaching to the test is commonly practised in the classroom and perhaps it is not difficult to understand why teachers focus on it since the examination results are meaningful not just for the students but for the teachers as well. This is exemplified by the practice of comparing results across schools and the use of results in determining the rank of the schools. All these factors have influenced the way teachers design their lessons.

Based on the analysis of national examination reports, the performance of students in the three national examinations is fairly consistent and even improving. This analysis derives from two common measures that have been used to assess outcomes which are Schools' Grade Point Average (GPS) and the percentage of students achieving pass and excellent grades. However, this good record is not reflected in the data of TIMSS and PISA. As explained in Chapter 3 of this thesis, the data from these large-scale international assessments have driven many educational systems to propose changes to their curriculum; similarly, it has also driven the Malaysian government to follow the trend of other educational contexts. This trend exemplifies a practice of adopting global education policy as an initiative to align the educational quality to an international standard due to the phenomenon of PISA shock.

In the context of Malaysia, the proposals for educational transformation emerged after the provision of results from TIMSS 2007 and PISA 2009+. Malaysia's participation in TIMSS since the early 1990s began well, but by the TIMSS 2007 cycle, achievement had slipped. TIMSS assesses students' proficiency across three different types of cognitive skills: knowledge recall, the application of knowledge in solving problems, and the ability to justify their decisions while working through problems. From the analysis of the TIMSS 2007 cycle, it was found that Malaysian students did not perform well in any of these three dimensions. They were able to show understanding in basic Mathematics and Science concepts, but they generally struggled to apply this

knowledge effectively. Only 2-3% of Malaysian students were able to perform at the highest benchmark level such as complex problem-solving questions. From the analysis, it can be inferred that Malaysian students were not able to respond to cognitive questions well and this led to the poor level of students' performance in TIMSS.

Similarly, the evaluation of students' performance in these assessments can also be observed in PISA. Malaysia first participated in the PISA assessment in its 2009+ exercise. However, the results were shocking to the Malaysian government because out of 74 countries participating in PISA that year, Malaysia was ranked in the bottom third for Reading, Mathematics and Science, which was well below both the international and OECD average in all three areas. In fact, Malaysia's performance was at least 100 points below that of regional peers such as Singapore, Japan, South Korea and Hong Kong in all three areas.

In an attempt to understand the relatively poor performance of Malaysian students in PISA, two factors were identified. The first factor referred to the lack of knowledge competence as compared to its regional peers such as Singapore, South Korea, Hong Kong and Shanghai. The comparison of scores between Malaysian students and students from those countries showed that their students had better knowledge competence as if they had more years of schooling than Malaysian students (The Blueprint, p25). In the comparison, almost 60% of Malaysian students displayed an inability to meet the minimum benchmarks in Mathematics. 44% and 43% of students did not meet minimum proficiency levels in Reading and Science respectively. From these statistics, it became clear that Malaysian students had performed poorly in Mathematics as compared to Science and Reading in PISA 2009+ cycle. A second reason offered to explain of poor performance was related to the different aim of the examinations (The Blueprint, p82). While PISA sought to examine application of knowledge and skills in real-life situations, the examination format in Malaysian's national exams was focusing on content knowledge.

5.2.1.1 Implications of TIMSS and PISA data for the Malaysian education field

The Ministry felt pressure to transform the curriculum primarily due to what was perceived to be the shocking outcome of Malaysia's performance in PISA 2009+ as well as TIMSS 2007. Despite positive results at local level, Malaysian students have fared quite poorly when they are assessed at an international standard. The drive to be globally competitive and evidence, mainly in the context of international assessment, that Malaysia was not has become a major driver for the Malaysian government to change its education policy to one they consider is suitable, marketable, comparable and relevant for the 21st century. Hence the Ministry introduced KSSR, a new curriculum policy for primary schools in 2011 and KSSM, a new curriculum policy for secondary schools that has been implemented in 2007. These curriculum documents include approaches to learning that are designed to improve the perceived shortcomings in the academic performance of Malaysian students locally as well as globally.

Following the 'PISA shock' experience from the PISA 2009+ cycle, the Malaysian Government aimed to improve its quality of education and set a target to be in the top third of countries in these assessments within 15 years. 15 years was deemed appropriate and relevant based on the success of other educational contexts that have been able to transform their education system over periods of time from a minimum of 6 years to as much as 20 years. Here, the Blueprint makes reference to Boston, Ontario and Armenia as examples of educational contexts that needed six years to make improvements in their education system whilst countries in Asian region such as Singapore and South Korea took longer with change happening over decades.

5.2.1.2 Financial commitment to improve the quality of education in Malaysia

In line with its aspiration and determination to improve the quality of education in Malaysia, the government has allocated high expenditure for educational purposes. The report in the Blueprint shows that as early as the 1980s, Malaysia's expenditure on primary and secondary education as a percentage of GDP was the highest in East

Asia. In 2011, during the implementation of the new educational policy, Malaysia's expenditure on education was at 3.8% of GDP higher than the OECD average of 3.4%. The amount allocated was RM37 billion (for operations and development), and this amount represented 16% of the total 2012 federal budget. This was recorded as the single largest share among ministries. This large sum of money allocated for education was a government indicator to show its determination to improve the education system in Malaysia for the 21st century. In the Blueprint, a major portion of the money has been invested in building additional infrastructure, particularly in rural areas and the interior of two regions in the East Malaysia and increasing the size of the teaching force to enable the expansion of access to education. This spending has led to almost universal access to primary education and significant improvement in access to secondary education. However, there remain large areas for improvement in moving forward, particularly with regard to quality, regarding which the Ministry acknowledges that higher levels of spending are not necessarily correlated with better outcomes (The Blueprint, p98).

For example, analyses of the relationship between the budget allocation and students' performance can be compared between Malaysia and other countries. The data indicates that Malaysia's performance is behind other countries that have similar or lower levels of expenditure per student, such as Thailand, Chile, and Armenia. The report acknowledges that the Malaysian education system may not be allocating funds towards the factors that have the highest impact on student outcomes, such as the training and continuous upskilling of teachers. The report concludes that Malaysia's expenditure levels should be maintained but the efficiency and effectiveness of how funds are allocated and spent should be reviewed.

The report further makes reference to top-performing countries based on PISA data such as Singapore, South Korea and Shanghai and emphasises that these countries have allocated more expenditure on their students as compared to Malaysia. From one perspective, this could suggest that these countries have possibly spent the budget on education in areas that have helped to produce high-quality students as

measured in PISA. However, there could be various factors that have led students from these countries to perform well in PISA. In short, the allocation of funds on education should be focused on aspects that can improve the quality of students' performance; allocating a funds without proper evidence to focus planning does not guarantee quality in education.

5.2.1.3 Identifying the quality of students for the 21st century education

5.2.1.3.1 The broad aims of developing quality students in the KSSR curriculum framework

Building on the importance of a national and standardised education in Malaysia, the Malaysian government has developed a framework that outlines the philosophy of education in Malaysia in 1993. This framework, known as National Education Philosophy (NEP: refer to Chapter 2 of this thesis for details), remains relevant until the present time and has guided the development of KSSR framework (The Blueprint, p103), the newly developed curriculum policy. The curriculum framework has identified six attributes for students which have been aligned with the NEP. They are knowledge, thinking skills, leadership skills, bilingual proficiency, ethics and spirituality, and national identity. The next section provides a description of each of the components.

Knowledge

For the knowledge component, one of the aims of KSSR curriculum policy was to ensure that all students are fully literate and numerate. The Ministry has launched LINUS programme 2.0 where students who were falling behind were grouped together during the relevant classes and taught according to their needs. Teachers working with such students have received targeted training to ensure that they are equipped with the best strategies to help students catch up and transition back to the mainstream curriculum (The Blueprint, p107). The LINUS 2.0 programme also has included improvements for English literacy along with Malay Language literacy and numeracy (ibid). Besides, the new Ministry curriculum includes core subjects which are Malay Language, English, Mathematics, Science and History. The policy requires both the acquisition of knowledge in these subjects and the application of knowledge.

Thinking skills

In addition, in the new education policy, thinking skills are perceived as critical based on the reports from PISA that show that Malaysian students lack this skill. Obtaining an optimum level of thinking skills means that students need to possess a spirit of inquiry and learn how to continue acquiring knowledge throughout their lives, to be able to connect different pieces of knowledge, and to create knowledge. Additionally, the Ministry has also identified two other thinking skills, problem solving and reasoning skills, as well as learning capacity skill, that should be developed by Malaysian students.

Leadership skills

Other qualities that have been identified in the Blueprint as key characteristics of a good quality student include leadership skills. From the perspective of policy developers, developing leadership skills among Malaysian students involves four-sub skills which are entrepreneurship, resilience, emotional intelligence and strong communication skills. Fundamentally, students need to show that they are strong, committed, resilient and hardworking learners who always challenge themselves to solve the problems presented to them. They should also be able to effectively work in groups, influence others positively and articulate their thoughts confidently.

These skills need to be developed among Malaysian students to create individuals who are knowledgeable and skilful for local and international markets. The skills are outlined in the syllabus and teachers should nurture them in their classroom activities. Strategies to develop them should depend on the learning context.

Being bilingual

One of the impacts of globalisation is that it has widened the need to collaborate and communicate not just with, but also with people from other countries if students are to be prepared for an international marketplace. Therefore, the Ministry encourages students of all ethnicities and communities to learn at least three languages (Malay Language, English language, and one of the leading global languages such as Mandarin, Tamil or Arabic). The choice of languages indicates where the Government identifies its main markets. In the Blueprint, the Ministry makes references to

neighbouring Asian education systems such as China, South Korea and Singapore as these countries have focused on developing students who are proficient in their national language and the English language to maximise their employability in the global workforce. Based on the development observed in these countries, the Ministry recognises the importance of developing a similar employee value proposition to strengthen the country's position in the global economy.

The aspiration of the education system is to create students that are at least operationally proficient in both Malay Language and English and students were encouraged to learn an additional language. The Ministry proposes strategies to promote this, and the leading strategy is the LINUS 2.0 programme. While in general LINUS is a programme that evaluates students' literacy and numeracy skills, LINUS 2.0 has a specific focus. The main objective is to ensure that students at Level 1 acquire basic literacy in Malay Language, English language and numeracy after the first three years of primary education. Students who have yet to master the basic literacy and numeracy skills are given intervention activities to ensure they can learn together with their peers (MOE, 2018).

In the Blueprint, the rationale for being bilingual is not made clear other than making references to Asian top-performing countries who have highlighted the importance of being bilingual in their contexts. Malaysia's aspiration of benchmarking its curriculum content to an international standard is clear. What is less clear is consideration of the importance of that particular development in the local context; what seems to matter is that Malaysia follows the improvements that have been implemented in top-performing countries.

Ethics and spirituality

Another aspect that is given attention to the development of quality students is instilling the values of ethics and spirituality. In the Blueprint, the Ministry emphasises that having strong ethical values can prepare students to rise to future challenges, where they could resolve conflicts and employ sound judgement during critical moments. As Malaysian students, embracing a strong religious faith and belief is also believed to

shape their foundation for living, and they should also show confidence to do the right thing for the nation and their lives in general should reflect their sense of integrity and civic responsibility.

This is indeed an interesting aspect to highlight in KSSR curriculum framework because this policy is developed based on references to top-performing countries in PISA. However, many top performing countries in PISA do not have a strong faith culture. For example, Singapore, outlines its desired outcome of education in four broad aims: to develop a confident person, a self-directed learner, an active contributor and a concerned citizen (moe.gov.sg, 2009). These aims do not make explicit reference to the need of inculcating strong faith as one of the objectives of education. Yet, Singapore is more developed and has a better economic and education standard than Malaysia. Finland too, does not include strong faith as one of the educational objectives. In Finland, the general objective of basic education is to support the pupil's growth towards humane and ethically responsible membership of society and to provide them with the knowledge and skills needed in life (UNESCO, 2013a).

Based on these examples, it is worth exploring to unravel why Malaysia puts an emphasis on the aspect of religious faith if it is not addressed in other top performing countries in the world. The most logical explanation can be attributed to its unique societal background and its historical development. Being a nation that was colonised by different nationalities, Malaysia struggled to establish its identity as a nation after it became independent. The education system at that time was segregated according to ethnic groups and differences between these groups have caused tension. This led to the construction of a standardised curriculum which was intended to establish unity in the society. The differences that exist among the ethnic groups have motivated the government to inculcate the sense of respect in the society and teach them to embrace the differences.

National identity

The last characteristic of developing quality students in Malaysia outlined in the Blueprint (p31) is inculcating the sense of national identity to address the complex issues of living in a multi-racial society in Malaysia. Achieving a sense of respect in the context of multiculturalism requires a strong sense of inclusiveness that is acquired through learning to understand and tolerate differences, to accept and respect others as well as to live together and embrace the diversity within the Malaysian community. Besides, establishing national identity requires students to understand Malaysia's history, develop shared experiences in and out of school, and build shared aspirations for Malaysia's future.

In Chapter 2 of this thesis, we learned that Malaysia's education structure was once segregated according to ethnic groups. This situation caused various racial issues, and the most serious was the racial riot incident in 1969. The leading reason for the proposition to build a centralised and standardised educational system was to bridge the differences between the different ethnic groups in order to avoid a similar racial dispute again. Hence, it is highly important to include the value of national identity in the curriculum to inculcate a sense of respect and tolerance among young people as they continue living in a multi-cultural society.

5.3 The implementation of the curriculum policy

The strategy of the Ministry in implementing the policy involved outlining the role and responsibilities of individuals involved at every step of the process (The Blueprint, p23). The first step was to understand the basic framework of KSSR curriculum policy.

5.3.1 Curriculum framework

Earlier, we learned that the Ministry aspired to have the curriculum and assessment in Malaysian education to be aligned with international benchmarks as a way to ensure Malaysian students could obtain relevant knowledge and skills for the 21st century education. Moreover, the objective of the curriculum was to address the intellectual,

spiritual, emotional and physical dimensions of students as embedded in the National Philosophy of Education (NPE) (MOE, 1993). To achieve these goals, the Ministry was committed to ensure that the curriculum did not only contain powerful ideas for improvement, but that these ideas would also be translated into practice in the classrooms.

One of the proposals to manage this was to strengthen the role of SISC+ (Special Improvement Specialist Coach), a role that was introduced by the Ministry, to guide teachers in the enactment process of translating the policy into practice. The concern with the establishment of SISC+ role was there could potentially be a power relation issue between the teachers and the coach as these coaches were appointed by the government, and the top-down approach to the implementation was still practised (The Blueprint, p106). This situation might further widen the gap among the three dimensions of the curriculum that the Ministry wished to improve.

5.3.2 Dimensions of the curriculum

The Ministry has identified three dimensions of the curriculum (The Blueprint, p103) to reinforce the way a curriculum document should be processed and understood. The three dimensions of curriculum are written curriculum, taught curriculum and examined curriculum (Ministry of Education, 2013).

- **Written curriculum**

The written curriculum encompasses the sets of knowledge, skills and values that form the content of the curriculum. They are organised accordingly to form the content of what is to be taught by the teachers in their classrooms. The development of the written curriculum refers to a wide range of benchmarks from top-performing education systems to ensure that the knowledge and skills expected of students at different ages correspond with international standards. For example, an additional skill that students should master on top of literacy and numeracy is reasoning skill. Elements of creativity, innovation and entrepreneurship are also added to the curriculum framework. This

additional set of skills is highlighted in the framework of KSSR curriculum to address the areas for improvements in response to the PISA data, particularly the PISA 2009+ cycle that drives the Malaysian government to modernise its curriculum framework.

Besides academic content, the curriculum also pays attention to inculcating elements of spirituality, artistic and sporting ability as a way to develop the child holistically. Programmes and initiatives to develop these components are present both during formal class time as well as through a variety of after-school co-curricular activities. For instance, *1 Murid 1 Sukan* (translated as *1 Pupil 1 Sport*) is a programme that encourages students to play at least one sport at school. The emphasis on building and producing students with academic and non-academic competence are in line with the NEP which forms the guiding principles of education in Malaysia.

- **Taught curriculum**

The taught curriculum is the central focus of this study that observes the way written policy is translated into classroom teaching. The taught curriculum refers to the activities that demonstrate the ways in which the teachers and students engage in processes of acquiring knowledge, developing skills and inculcating values in the classroom. It is an essential part of analysing curriculum change in Malaysia because the analysis of past implementations of various education policies in Malaysian schools had shown that the curriculum had not always been brought to life in the classroom, for two main reasons. First, the skills and content that teachers perceived would go untested in the National Examinations were often omitted from the lesson plans to place emphasis on content that was more frequently tested (The Blueprint, p104). In relation to this, the process of benchmarking the curriculum content to international standards is unlikely to improve the choices teachers make in their classrooms as there is no clear connection between the two. Second, the UNESCO review reported that there was little evidence that teachers understood the implications for classroom practice in regard to the fundamental concepts of the curriculum such as integrated learning, holistic education, creativity, and innovation (Ministry of Education, 2013).

The issues addressed by the Ministry become the areas of investigation in this study. It seems timely to embark on an investigation that examines the relationship between teachers' knowledge and understanding of the policy and their teaching practices since Malaysia is in the process of enacting a new curriculum policy. Furthermore, in the Blueprint report, it was found that the Ministry was greatly concerned with the enactment of KSSR curriculum in the classrooms because teachers needed to manage complex lesson delivery skills as the lesson plans and materials needed to be adjusted according to the new syllabus. Furthermore, the implementation of formative assessment in the classroom was also challenging for teachers as they had to ensure that the information about students' mastery level was addressed accordingly. It seemed that teachers had to acquire a set of skills that allowed them to manage interactive lessons for a diverse background and still maintain the interaction between written, taught and examined curriculum.

- **Examined curriculum**

The examined curriculum is the third dimension of the curriculum besides the written and taught curriculum. In Malaysia, national examinations are assessments that are fully organised and administered by the Examination Board. They encompass UPSR, PT3 and SPM. The content of the tested items in these examinations is closely related to some aspects of the curriculum content. Based on the results from these examinations, students are awarded with certificates given by the Examination Board that record their achievement in the examinations.

The challenge is that these examinations do not seem to test the full range of skills that the education system aspires to produce. The analysis of results from PISA data showed that Malaysian students were unable to respond to higher-order thinking skills in the examinations (The Blueprint, pp80-83). Therefore, the Ministry plans to include more questions of higher-order thinking skills (HOTS) such as application, analysis, synthesis and evaluation in local examinations and to also include other forms of

assessment in KSSR curriculum policy. The former plan has been in practice since 2014 (PADU MOE, 2014). Starting that year, students who sat for public examinations answered questions that incorporated the element of HOTS. Across all examination papers, 20% of questions tested analytical, application and reasoning skills. This action reflects the Ministry's commitment to shift from rote learning to the application of reasoning, critical and creative thinking in problem solving (PADU MOE, 2014).

Besides national examinations, there are four other types of assessment in KSSR curriculum framework that are school based (The Blueprint, p105). The purpose of incorporating these assessments in the curriculum is to consolidate the Ministry's general objective of evaluating students beyond their academic capacity as part of its strategy to produce students who are capable in both academic and non-academic aspects. They are:

1. School assessment

This assessment consists of written tests that assess subject learning. The test questions and marking schemes are developed, administered, scored, and reported by teachers based on guidance from the Examination Syndicate. The report is to inform students, parents and external organisations of the mastery level of the students. School assessment practices of both assessment for learning and assessment of learning can be represented in a variety of forms, tests, field work, portfolios, coursework, field study, assignments, homework and many others. Besides functioning as a report to record students' mastery level, the data is also used by teachers to reconstruct their lessons to help students improve their learning.

2. Central assessment

Central assessment consists of a set of standard guidelines, rules, instruments and data analysis methods prepared by the Examination Board whilst schools are responsible in administering and evaluating students' response as well as preparing reports. This is a summative assessment that is determined by the Examination Board. The results are submitted to the Examination Board for moderation and analysis which

then returns this to schools for record keeping. Some of the examples of such assessment are ULBS (School-Based Verbal Test), PEKA (School-Based Science Assessment), coursework for Living Skills subject, Geography, History and many others.

3. Psychometric assessment

The purpose of this assessment is to gather information about the students' ability, strengths, weaknesses, talents, attitudes, potential, interests and personality to expand their potential and growth. The information on these aspects is generated from an aptitude test and a personality test. The data obtained from this assessment can provide teachers with comprehensive information about the students so that teachers can improve their understanding of their students' character and state of mind. Equipped with a better understanding about the students, the Ministry believes that teachers can organise a lesson that is suitable for their students. The instrument used in the assessment is developed by the Examination Board together with guidelines for use (The Blueprint, p105).

The implementation of this assessment seems to show that the Ministry is exploring various ways to encourage teachers to create lessons that are relevant to their students, instead of focusing on the syllabus in the curriculum. Perhaps, this could be one of the strategies to reduce the teaching to the test practice that is common in an educational context that is highly examination dominated. However, the extent to which this is effective still largely depends on the significance of examinations in the education structure that can impact students' future.

4. Physical, sports and co-curricular activities assessment

This is a form of assessment that evaluates students' physical endurance and body mass index as well as students' participation, involvement and performance in sports, uniformed bodies, clubs, and non-school sponsored activities. Generally, sports, uniformed bodies and clubs are organised by the school with one teacher being

appointed as the advisor. The teacher is responsible to evaluate students' achievement and performance in those activities.

For extracurricular activities, the Ministry has identified voluntary activities as part of the evaluation which opens up possibilities that students may participate in activities outside of the school. This is where the flaw in the evaluation emerges. The Ministry has prepared guidelines to score students based on their attendance and level of engagement in the activity. For example, if the students play a sport and are selected to play at an international sports event, they will be awarded a high mark to correspond with their level of engagement in the activity. On one hand, the grading criteria are comprehensive and clear for activities that are done in schools. However, the guidelines do not specify the method of evaluation for students' participation outside of school. It seems that students fill up a form indicating the activities they participate in without any further source of evidence being required.

In conclusion, the new structure of the assessment framework involves a broader range of output over a longer period of time which is divided into academic and non-academic assessments. For academic assessments, the results are intended to provide teachers with more regular information that gives them the opportunity to take the appropriate actions for their students. For non-academic evaluation, the results are intended to act as a record of students' aptitude and personality as well as their physical strength and ability. This aspect of the curriculum transformation indicates that the Ministry is committed to varying the assessment approaches to align with the broader aims of the curriculum, as described in Chapter 2 of this thesis, which is to produce individuals who are:

1. Balanced in terms of intellectual, spiritual, emotional, physical and social aspects;
2. Responsible Malaysian citizens;
3. Functional in a global platform; and
4. Knowledgeable employees.

5.3.3 The roadmap to implement the policy

In the Blueprint, the Ministry detailed the plan to implement the policy. This plan is organised in three phases with milestones, described as waves, to indicate the gradual process of the implementation.

- **Wave 1 (2013 – 2015)**

The milestones of this wave were to improve the then current curriculum and to prepare for structural change. Particularly, this process involved refining and revising curriculum content to align with international standards. The official launch of the policy in 2011 did not mark an end of the policy development; the Ministry continued to refine and revise the curriculum based on feedback received from various individuals to ensure the policy incorporated international best practice to produce globally competitive citizens. In the case of KSSR, the Ministry made substantial revision to the curriculum policy that was in use since 2011. This revised curriculum was launched in 2017 to replace the earlier curriculum document. The revision was based on the feedback, benchmarking and stress-testing results after the curriculum was in use (The Blueprint, p107).

Refining and revising curriculum content to align with international standards

The changes to the policy still retained the essence of the curriculum objective, but with improvements in several aspects. These changes or improvements were reported in the annual publications of the Blueprint, and according to the report in 2013 (MOE, 2013b), the Ministry had started to align the curriculum and assessment for English Language, Science and Mathematics to international standards and to incorporate Higher Order Thinking Skills (HOTS) in teaching and learning. Particularly, these subjects were selected for the alignment to mirror the subjects tested in PISA. In this case, the underlying reason was highly likely to expose students to the standard of PISA, so that students could score better in the assessment though it was not explicitly stated in the Blueprint. This situation can also be observed in Ireland (Looney, 2016) where changes were incorporated in the local curriculum policy without making explicit

references to PISA data; it was only after students had scored better in PISA that the Ministry acknowledged that the curriculum change was driven by PISA data (the details on this experience can be found in Chapter 3 of this thesis).

Intensifying various forms of assistance for teachers to improve classroom teaching

During this period, the Ministry planned to strengthen the role of SISC+ to intensify support systems for teachers to improve the delivery of the curriculum. In the Blueprint, the role of SISC+ was described as taking on responsibilities to align classroom practice with new curricula and assessments, coaching teachers on pedagogical skills, and monitoring the effectiveness of practice. This process was illustrated in a top-down manner which may raise the issue of power disparity as mentioned earlier. The Ministry nonetheless believed that the introduction of the SISC+ was beneficial in two ways: (i) it could reduce the number of tiers involved in curriculum and assessment delivery; and (ii) it could provide on-the-ground training to teachers (The Blueprint, p106).

For these reasons, the Ministry wanted to expand the number of SISC+ to 2500 coaches by 2015. It was predicted that the increased number of SISC+ could provide teachers with greater, more direct on-the-ground coverage and could reach out to a wider coverage of teachers. The additional number of SISC+ was also beneficial for teachers because they could focus on teaching as they did not have to leave school to attend courses. Training for teachers was tailored to the teacher in question as the coach would have prepared the feedback and plans for improvements after observing them in their classrooms. However, during the fieldwork, neither the teachers nor the head teachers made reference to such assistance being provided to them. This was possibly because the schools were not considered as under-performing schools under the evaluation of the District Education Offices. In the Blueprint, the employment of these coaches was given priority to under-performing schools (MOE, 2013) as one of the ways to ensure that all students could have access to quality education.

In addition to the direct coaching and assistance from SISC+, the Ministry also provided additional teaching resources to ensure that teachers were fully equipped to enact the curriculum in classrooms, such as video libraries of exemplar teaching. These resources are intended to be used by teachers for inspiration and for reference. The Ministry also promised that the exploration of innovative teaching and learning pedagogical approaches was continued as a strategy to strengthen classroom teaching. One of the initiatives was to pilot the International Baccalaureate Middle Years Programme Curriculum Model to ten secondary schools. This is a well-recognised curriculum model that has grown in popularity in Asia, and this model was chosen because it has been widely used in 141 countries.

Upgrading assessment framework to increase higher-order thinking skills

Another major component of this reform included having a systematic plan to increase the proportion of questions in both school-based assessment and national examinations that tested higher-order thinking skills. These questions would be developed based on Bloom's Taxonomy of Higher-Order Thinking Skills (HOTS): applying, analysing, evaluating and creating. The Ministry aimed to have 80% of UPSR questions, 80% of Form Three Central Assessment (PT3), 75% of core-subject questions and 50% of elective-subject questions in SPM on questions that tested students' higher-order thinking skills (HOTS). To equip the teachers with relevant sets of skills and knowledge to inculcate HOTS in the classrooms, the Ministry introduced the i-THINK Programme which highlighted the usage of mind maps as a critical tool in teaching and learning (MOE, 2013b). This programme was introduced in 2012 in 510 schools and later expanded to another 548 schools in 2013. The Ministry also undertook various efforts to promote thinking skills and questioning in teaching and learning such as courses for teachers and collaborative leadership dialogues.

- **Wave 2 (2016- 2020) and Wave 3 (2021 – 2025)**

The subsequent phases of the policy implementation were planned to focus on the enactment of the new curriculum document for secondary school, KSSM and to produce a revised version of KSSR at the start of 2017.

The following section describes the Ministry's plans to improve the profession of teachers to make it attractive and, hopefully, to enhance teachers' motivation to stay committed to the teaching profession (The Blueprint, p129).

5.3.4 Teachers and School Leaders

Teacher Career Package: Making teaching a profession of choice

An essential part of the enactment process is for teachers to understand the policy and engage in the process of exploring suitable pedagogical approaches that could translate the policy into classroom teaching effectively (Gardner, 2010). The enactment of KSSR policy required a transformation in the relationship between teachers and students in the classroom (Smith, 2016), and thus the Ministry introduced a new Teacher Career Package to help keep teachers committed and motivated in their enactment of the policy. The proposal was also considered an important strategic initiative to attract potential individuals who were talented and passionate about teaching to choose teaching as a profession. Mainly, this package addressed the challenges that teachers had to face, from recruitment and teacher training through to retirement. It included raising entry standards, increasing individualised continuous professional development opportunities, enabling teacher progression in competencies and performance, and creating a peer-led culture of excellence (The Blueprint, pp 136-137).

The following sections identify components that were incorporated in the package and explore how the government planned to create an attractive career package for teachers.

Strategy 1: Raising entry standards for teacher trainees and new intakes

The Ministry proposed to strengthen the selection process for candidates for teacher education. They should be selected from the top 30% of any graduating class and they should also be able to demonstrate basic competencies as new teachers from the analysis of their on-site training report. The report (PADU, 2018) that recorded the progress of the implementation did not include any information on this except for a reassertion that the Ministry was still committed to improving the quality of teachers by ensuring that the minimum criterion for SPM leavers to apply for teacher training was to obtain at least 5As. The Ministry also enhanced the implementation of practical training placement at the Teacher Training Institutes and developed a virtual library for teaching and learning which is accessed on 1BestariNet, an online portal, as well as research facilities. (The Blueprint, p136).

Strategy 2: Strengthening the link between performance and competencies

The Ministry had also developed a single instrument to evaluate teachers' pedagogical practices in the classrooms (The Blueprint, p136). This instrument clearly articulated the competencies that were expected of teachers of different tenure levels across four dimensions: teaching and learning, professional values, non-classroom activities, and professional contributions. To enhance the reliability of the assessment, the Ministry proposed using more than one evaluator for each teacher, including a peer evaluator, and creating an appeal process for teachers who disagreed with their evaluation.

The objective of this evaluation was to create an approach to achieving greater consistency and objectivity across evaluations and to instil a stronger performance culture in schools. In this case, during the fieldwork for this study, the head teachers in both schools did state that they had conducted this teaching observation. To minimise the pressure of being observed, the head teacher in School B consulted the

teachers before the observation to allow them to prepare. The head teacher in School A, on the other hand, did not consult before the observation; instead, he gave constructive feedback after the observation. Either way, the purpose of this evaluation may be criticised because the evaluation was performed as part of the school's quality measurement that can affect the ranking of the school across the state.

Strategy 3: Improving the effectiveness of pre-service training and ongoing professional development

- **Pre-service training**

Generally, the Ministry felt that there was a need to increase the time available for the practical component. Currently, trainee teachers completed their practicum for approximately 3 months in selected schools. The extension of the practicum session will give an opportunity for teacher trainees to practice their skills in schools more effectively under the guidance and supervision of an experienced teacher (The Blueprint, p138).

- **Ongoing professional development**

The results from Malaysia's participation in the Teaching and Learning International Survey (TALIS 2008; 2013) suggested that teachers' participation in professional development activities had been very good (Tee & Samuel, 2017). Over 90% of teachers reported that they spent approximately 10 days each year on professional development, which was more than the Ministry-mandated requirement of seven days per year. This training spanned the spectrum from self-study and off-site workshops to school-based coaching activities such as classroom observations and lesson planning. These findings suggested that Malaysian teachers were strongly committed to self-improvement.

Besides physically attending these training programmes, the Ministry also prepared other forms of assistance to ensure that continuous professional development among teachers was continually observed and it encompassed:

- e-Guru Video Library

Providing this video library enabled teachers to concretely visualise good classroom skills. Good teaching approach can be shown to them and they could implement these in their own classrooms more effectively. These videos can also be used during training and coaching sessions on pedagogical skills (an earlier section has described the impact of these resources to teachers' teaching practices).

- Expansion of the SISC+ teacher coaching programme

The role of SISC+ will be made into a full-time position in which they will be stationed in schools to allow them to work with greater frequency with more teachers. Most importantly, a greater number of SISC+ will be provided to teachers in lower band schools (ie: Bands 5, 6 and 7). Ultimately, they need to ensure that their coaching consistently focuses on the three interlinked dimensions of curriculum, assessment and pedagogy.

- Improving working conditions for teachers

One of the grouses expressed by teachers was the struggle of coping with clerical work. This arises because they are required to key in similar information into multiple databases. Teachers had requested that the Ministry establish a systematic process of keying the information into the system to reduce the need to enter the same information in multiple platforms. To address this issue, the Ministry has started streamlining existing data collection and management systems to eliminate duplication of data requests to improve the accessibility of various information and improving teachers' working conditions. This one-for-all system is known as Sistem Analisis Peperiksaan Sekolah (translated as School Examination Analysis System) which provides access to an array of

information on students. This database can be shared with higher authority officers, fellow teachers and parents.

Strategy 4: Developing new career pathways for teachers

Under this component, the development was focused on two categories of teachers: high-performing teachers and poor-performing teachers. In both categories, the Ministry developed strategies to optimise their potential and also to explore other possibilities for them to contribute in other areas than teaching.

- **High-performing teachers**

Firstly, under the revised fast-track scheme, high-performing teachers are expected to be promoted from a junior teacher position to a senior position within a much shorter time frame compared to the current 25 years. Progression speed will depend on how quickly each teacher masters the competencies expected of each level. Furthermore, these teachers may be deployed to rural schools or under-performing schools for periods of between three and five years to help the schools boost their performance. These teachers will be given extra credit if they successfully complete these short, three-to-five-year deployments in rural and/or under-performing schools. In this case, the Blueprint document did not specify the conditions of deployment and if teachers were given options to decline. Perhaps, providing options to teachers may increase the possibility that there will be few teachers who would be interested to be deployed to these areas. It also reflects the instructional operation in Malaysian education system which largely adopts the top-down approach.

- **Poor-performing teachers**

On the other hand, the Ministry also launched a transition scheme for teachers who performed poorly, and this evaluation was based on two characteristics. First, if evaluation by the head teacher demonstrated that they were unable to master basic competencies, or, second, if their students' examination results were constantly declining or showing no improvements for three consecutive

years. These teachers will be supported with intensive guidance, but if they do not show improvements, the Ministry will redeploy them to other functions within the school such as administration, discipline management, or co-curricular management. These teachers will also be retrained for the new chosen role. This is an initiative to allow teachers to explore other possibilities than teaching which may be more beneficial to them.

The approach of reassigning teachers to a new role seems motivating, but the procedure of evaluation may be exposed to criticism and open to bias. In terms of judging teachers' quality based on students' examination results, there may be other factors that are not related to the teachers' teaching quality that have affected the poor performance of teachers. It seems unfair to assume their lack of competence based on students' examination results. Moreover, bias may emerge during the evaluation by the head teacher as there could be other issues that can affect their teaching quality, and it was also unclear from the Blueprint that these teachers were given feedback to improve the areas in which they were lacking.

Strategy 5: Creating a peer-led culture of excellence

Traditionally, teachers are instructed to follow the directives from the Ministry to improve their pedagogical approach. Usually, the Ministry sets up a training programme that allows teachers to learn new teaching strategies where there is a mentor/master trainer who has been trained to share teaching strategies for teachers to learn and adapt them in their classrooms. Most of the time, this strategy is a one-size-fits-all approach, and its implementation in all learning contexts may differ.

To overcome this issue, the Ministry has encouraged a peer-led culture of professional excellence where teachers in a local context mentor and inspire one another, share best practice and hold their peers accountable for meeting professional standards. The Ministry assured that they will collaborate with teacher representatives to achieve these aims. Theoretically, this style of professional development allows for greater

autonomy among teachers who no longer solely depend on a superior power to inform them of appropriate classroom teaching. However, it may be too simplistic to conclude that establishing this peer-led culture can improve teachers' instructional practices.

For example, Dimmock and Walker (1998; 2000) have argued that the Asian 'collectivist' culture is the factor that hinders the growth of professional learning community practice. In Vietnam, school principals would avoid conflicts during a discussion with teachers and parents by keeping the discussion at ease to avoid dispute among teachers and parents which may risk the quality of the discussion. Because of this quality in Asian cultures, it can be challenging to create a learning culture that promotes the discourses of sharing and analysing peers' teaching practices as the teachers would rather avoid tension to keep the good relationship among colleagues.

5.3.5 School Leaders

Improving the Quality of School Leaders

The practice of determining the quality of school leaders involves looking into the way high-performing school systems around the world define quality school leaders. In high-performing school systems, principals are more than just administrative leaders; they are characterised as instructional leaders who focus on improving the quality of teaching and learning in their schools.

There have also been studies (eg: Qing et al., 2018) that assert that school leaders in top performing school systems such as in Canada and Hong Kong are leading curriculum change in their schools by providing optimal conditions, structures, and cultures for learning and teaching in which teachers are able to interpret, contextualise and reframe external policies in terms of agreed-upon educational purposes and practices. This style of leadership does not promote heroic leaders, but ones that practise distributed leadership. As part of the curriculum reform of KSSR, the Ministry

started to transform the role of school leaders/principals to that of instructional leaders who practise distributed leadership in line with international standards. It is a form of leadership practice shared by many (Harris, 2003; Heller and Firestone, 1995; O'Day, 2002; Plowman et al., 2007; Spillane et al., 2007; Spillane & Diamond, 2007 and Timperley, 2005b, 2008) and practised in the 'interactions between leaders, followers and their situation' (Spillane, 2006, p26). Following the improved leadership style, the selection criteria of a school leader were also revised.

Traditionally, the selection criteria for new principals in Malaysia were more linked to tenure than competencies (The Blueprint, p139). As many parties are involved at the district, state and federal level during the selection process, the end-to-end process from identification of a suitable candidate to a formal appointment can take up to a year. The main weakness of this system is that it prevents the system from securing the best talent available in the entire nation, and it also disrupts the management of the school with the lengthy process of obtaining a school leader (The Blueprint, p139). This situation is exacerbated by the historical existence of two schemes: one for non-graduates in primary schools and one for graduates in secondary schools. In the past, the position of school leaders in primary school was for the non-graduates while the graduates were assigned to secondary schools. On top of this, the old and lengthy process of selecting school leaders greatly affected the quality of school leaders. Since the principal post in primary schools is still designated for non-graduates, it has naturally eliminated qualified, graduate primary school teachers from consideration, and these teachers may have better leadership qualities which could optimise the performance of the schools (The Blueprint, p139).

As part of the curriculum reform process, the Ministry has outlined the roadmap that sets the milestones in creating and building high performing school leaders in every school, and this roadmap was introduced in the Blueprint document (MOE, 2013). There were six strategies to achieve this:

- **Principals actively participate in improving the school's performance**

The responsibility of improving a school's performance was not placed upon the school principal alone, the Ministry planned to broaden the scope of responsibility to include the school's middle management such as assistant principals, subject heads and department heads. To encourage the head teachers to build their capability for effective school leadership, a new career package for principals was introduced. It was hoped that this new career package could motivate head teachers to establish a higher set of professional standards and accountability.

- **Improving selection standards and support system**

In contrast to the traditional way of becoming a school principal, the Ministry made it compulsory for future school leaders to attend a principal preparatory programme, The National Professional Qualification for Executive Leadership (NPQEL). Participation in this programme was in line with the Ministry's effort to standardise and improve the selection and preparation process for new principals in recognition of the fact that the country needed quality and suitable candidates to lead schools in Malaysia. Prior to that, the Ministry was also careful in selecting school leaders. The incoming principals must demonstrate a minimum leadership competency bar, for example, through prior experience as a subject head or assistant principal. To avoid a constant change of school leaders as well as to give opportunity for school leaders to grow, the Ministry aimed to only appoint candidates who were not near to retirement and had completed the NPQEL training programme.

When the Ministry appointed a new school leader, the Ministry would ensure that there was a transition process between the outgoing and incoming principals to ensure that the new school leaders had an opportunity to receive on-the-ground training from the existing school principal (further details will be explained later in this chapter). This can be done by observing the following steps:

- the selection process commenced early enough and was shortened by 50%;
 - the Ministry would widen the pool of potential candidates through a more aggressive recruitment campaign; and
 - the Ministry would also create a tracking database that allowed for earlier identification of upcoming vacancies.
- **Establishing a principal residency programme and enhancing the existing immersion programme**

The transition process stated earlier was referred to as the principal residency programme. The establishment of this programme helped to enhance the existing immersion programme to support newly appointed principals in their transition, so they were able to act effectively from the beginning of their tenure. In this programme, the incoming principal spent one month with the outgoing principal at the school in question. As another way of helping the incoming principal to settle in the new school, the Ministry introduced an immersion programme. In this programme, principals received seven days or 42 hours of direct coaching and mentoring from an experienced principal or School Improvement Partner (SiPartner+) (The Blueprint, p143).

- **Enhancing professional development programmes**

For existing school leaders who were in service, the Ministry prepared continuous professional development (CPD) programmes to strengthen the link between performance and competencies. It was also important because sustaining the quality of school leaders was challenging yet critical. To this end, the Ministry introduced a single instrument that clearly articulated the competencies expected of principals at every tenure level. It was developed based on four dimensions which were leadership, professional values, contribution, and external relations.

The Ministry also emphasised the need to build instructional leadership skills, particularly as they pertained to the ability to adapt internal structures, methods and procedures to the needs of teachers and students. As stated earlier, the role of contemporary school leaders was also working closely with teachers to identify suitable strategies to improve classroom teaching.

On a larger scale, the Ministry made sure that there was a sufficient range of programmes for principals at different performance levels. This helped to broaden their skills and gave them the platform to further grow as a leader in an organisation. It also reduced discrimination by giving support to principals that needed guidance. For example, high-performing principals can be seconded to other government agencies or private corporations whilst the under-performing principals received specialised, one-to-one coaching from SiPartner+ (The Blueprint, p143).

- **Expanding capability-building support and operational flexibility**

In line with perceived international best practices, the Ministry aspired to adopt the model of distributed leadership where effective, high-quality school leadership permeated the entire organisation of the school. This model was primarily concerned with the practice of leadership rather than focusing on specific leadership roles or responsibilities. It promoted shared, collective and extended leadership practice that built the capacity for change and school improvement. One of these core elements is the emphasis on leadership as practice rather than leadership as role or responsibility (Spillane and Diamond, 2007). In addition, distributed leadership places an emphasis on interactions rather than actions; it presupposes that leadership is not simply restricted to those with formal leadership roles but that influences, and agency are widely shared (Harris, 2013a).

- **Reviewing incentives for hard-to-fill positions**

For this component, primarily, the Ministry worked on revising its existing set of incentives for positions that were typically hard to fill such as in rural and under-performing schools. With more attractive incentives, it was hoped that talented and high-performing school leaders would work in rural and/or under-performing schools as an initiative to help these schools deal with issues that hindered them from achieving good results (The Blueprint, p142).

5.3.6 Ministry transformation

Background of the transformation

The transformation of the Ministry as outlined in the Blueprint was primarily transforming the way the Ministry delivered the policy. In the Blueprint (p148), the Ministry acknowledged that in the past, there was inconsistency in the policy-in-practice experience. Furthermore, feedback from in-house research showed that that these educational policies were well-designed, but the Ministry had not always delivered the intended outcomes successfully. This was corroborated by a Universiti Malaya study (2011) on the impact of seven major education policies and 72 sub-policies implemented between 1957 and 2011. A UNESCO review (The Blueprint, p149) had also identified specific weaknesses in the policymaking and implementation process in Malaysia that needed to be addressed. They were:

1. There were too many programmes that the school had to manage. High-performing schools were typically able to manage this demand whilst weaker schools seemed to struggle. The struggle was reflected both in terms of handling the increased workload as well as in the dilution of their focus on teaching and learning as an effect of having too many programmes at the school level;

2. There was no sufficient data to inform decision making. This was possibly due to the lack of access to the database caused by poor connection speeds and complexity of the user interface;

3. A lack of coordination across key divisions had created overlaps or gaps in activities. In some instances, the implementation and planning of the policy were treated as isolated practices within the Ministry. For example, while teachers were in the process of enacting the KSSR curriculum policy, the Examination Board introduced the school-based assessment in 2014. Even though school-based assessment was part of the assessment framework for KSSR, this fact was not clearly publicised and teachers were not clearly informed on how these two components were related. Such a situation created confusion among teachers which affected the implementation process.

4. The Ministry focused heavily on the process-based results (the percentage of schools that had conducted a certain training programme) rather than outcome-based (eg: the proportion of teachers that demonstrate competency). As a result, it reduced the ability of school and system leaders to resolve why certain programmes might not be yielding the impact expected, or how they should be adjusted to better contextualise the programme to the needs of schools.

5. The highly centralised organisation structure in Malaysia has impacted the way educational change operated. The 2012 UNESCO review (The Blueprint, p150) noted that 'Malaysia arguably has one of the largest central (federal) education administrations in the world, relative to the number of schools and a top-down policy making and implementation is commonly practiced in Malaysia'.

Based on these issues, the Ministry wished to improve its role in the implementation process of KSSR curriculum policy. The following section outlines the strategies that were prepared to transform the Ministry to support the processes of change in schools.

The roadmap: Strategies to transform the role of the Ministry in the processes of educational change in schools

1. Articulate a clear sense of direction for the Ministry and the education subsets

The aim of the Ministry's transformation was to close the implementation gap between the three dimensions of the curriculum, written, taught and examined. In the delivery of KSSR, the Ministry articulated a clear sense of direction both for itself and the overall education system. Achieving a clear understanding of the role and responsibility of each individual involved in the change process has helped to improve the implementation of the policy. For example, in the record of educational change initiatives in Malaysia, the LINUS programme has been quoted as an example that demonstrates a successful policy and practice relationship. The key to its success was the coherent understanding between and across all stakeholders which has improved the interaction among them. Building from this experience, the Ministry's transformation was to create ways to develop a coherent understanding among stakeholders to improve the implementation of KSSR curriculum policy (The Blueprint, p152).

2. Increase accountability for system performance

The Ministry planned to move away from a predominantly administrative role to one that was focused on improving system performance. It was to ensure that every programme undertaken had a clear link to student outcome targets and continually contributed to the system's improvement.

3. Redefining roles and strengthening the role of State Education Department and District Education Offices

The Ministry felt the importance of redefining its role to establish a clear set of responsibilities at the federal, state and district level. To achieve this, the Ministry wanted to collaborate with the central agencies, particularly Civil Service Department

(JPA), to clearly articulate what the restructured Ministry should look like. This included not only the roles, organisational structure and headcount of the federal, state, and district offices, but also the implementation details on how the transition would occur over the subsequent years. Following that, the Ministry had revised the roles and responsibilities of the Ministry and its subsets to provide a clear delivery channel from the central government down to individual schools (The Blueprint, p153):

Table 18: The proposed transformation of roles and responsibilities in the Ministry of Education and its subsets

Level	Responsibility
Federal	The Head Office retained its functions of policy-setting and macro-planning.
States	Responsible for coordination and delivery planning, customising implementation of programmes and initiatives based on the different needs and segmentation of districts; monitoring the progress of each District Education Office and encouraging collaboration and sharing of best practice across districts; and managing stakeholders.
Districts	The District Education Office was to function as a support partner in schools; to have the capability to analyse school data, diagnose underlying problems, and design differentiated support for schools; to assist schools in engaging parents and the broader community to maximise the impact of delivery provision; to become the primary communication channel to schools, integrate all directives from the federal and state offices; to reduce bureaucratic confusion and gridlock.

Specifying the role and responsibility of each organisation suggests that the Ministry was ready to reduce its dominance and streamline the decision-making authority across the federal, state, district, and school levels. This included granting the State and District Education Offices greater decision-making rights in selected matters such as principal deployment (The Blueprint, p154).

4. Strengthening the leadership style in State and District Education Offices

Current leaders in State and District Education Offices had to be evaluated to measure their competency and capability to keep their position. If they were found to be incompetent, the Ministry would send people to support them or they faced the possibility of being deployed to another administrative role. This evaluation was based

on a set of leadership competencies that were prepared by the Ministry (The Blueprint, p154).

5. Deploying full-time SISC+ and SiPartners+

The responsibility of selecting SISC+ and SiPartners+ was processed at the district level. By creating full-time positions of these roles at the district level, coaches were able to specialise in mentoring, and in a positive way, could develop stronger relationships with their teachers and principals. The level of support provided by the SISC+ and SiPartners+ was differentiated based on the school's performance band, and this was considered a relevant step because the strategies of training were differentiated according to the school's overall performance.

6. Enhancing performance management and capability building for all JPN and PPD officers

The Ministry clearly articulated expectations on how the day-to-day activities of these offices and officers would change, and it was going to be done through cascading strategy (refer to Chapter 2 of this thesis for details). These priorities would be cascaded appropriately throughout the organisation across all levels. PPDs would also receive similar guidance for their shift towards supporting and sharing best practices with schools.

7. Empowering and holding the State and District Education Offices accountable

The State and District Education Offices were restructured to allow for greater specialisation and provided clear mandates for officers. The following clusters were identified:

- **Curriculum:** This section was responsible for overseeing the subject curriculum, assessment and pedagogy. It was structured by subject to ensure specialisation. There was a separate unit to control academic, co-curricular, and sports programmes to ensure holistic student development;

- **School management:** This section monitored the running of schools. It also examined the implementation of non-academic programmes and initiatives such as Kumpulan Wang Amanah Pelajar Miskin (Poor Students Proficient Fund);
- **Finance, Human Capital, Procurement and Administration:** This section is responsible for finance and accounting, school maintenance and procurement as well as other administrative functions.

8. Expanding school-based management and autonomy

The Ministry provided greater school-based management opportunities to schools that met certain performance criteria. For example, high-performing schools were given more operational flexibility over budget allocation and curriculum timetabling. The Ministry used 1BestariNet to equip schools with the best Information Technology (ICT) practices to facilitate school-based management.

9. Reinforcing organisational strengths

In the future, the Ministry aimed to continue to reinforce this progress by strengthening the link between competency and performance for all officials and enabling faster, competency-based progression to provide more schools with greater school-based management opportunities as their performance improves.

Chapter Summary

In this chapter, we have learnt about the ideology that constitutes the policy thinking of KSSR curriculum policy. The background is driven by the aspiration to benchmark the quality of the Malaysian education system to an international standard. This is represented by the references in the Blueprint to top-performing countries in the world, particularly Finland, Hong Kong, South Korea and Singapore, and how these countries have maintained their top ranks in PISA. This move also reflects the adoption of global

educational policy that has been the driver for many countries in the world to undertake a curriculum reform process.

The analysis of the Blueprint also has informed us that despite the government's aspiration to establish an education quality that is aligned with an international standard, it also emphasises the importance of considering the cultural values within the development of KSSR curriculum policy as these values play important roles in shaping the character of its people. They are manifested in the way the curriculum is developed based on the National Philosophy of Education (1993), and the features of the NPE are specified in six broad aims of producing quality students: knowledge, thinking skills, leadership skills, being bilingual, ethics and spirituality, and national identity. Most of these qualities are aspects that have been benchmarked, whereby the Ministry adopts what has been implemented in other top-performing countries and integrates this in the local policy context. Ethics and national identity qualities are the two characteristics that are unique to the Malaysian education context and important to be embedded in the national curriculum. Particularly, these qualities need to be instilled among Malaysian students as they live in a multi-cultural society where the people have different religious and faith cultures. They need to learn to embrace differences and respect one another. Living with people from a diverse background has had its impact in Malaysian society. In the past, ethnic tensions have evolved, and this initiated the development of a standardised curriculum. Based on past experiences, the government now feels the urge to continually instil the importance of acknowledging cultural differences to avoid racial disputes from happening again. These qualities may not be made explicit in other educational contexts, at least not in Singapore and Finland, and these have contributed to the uniqueness of education in Malaysia.

Additionally, this chapter has also presented the strategies and plans from the Ministry in its pursuit of implementing and enacting the curriculum policy. This included the plan to make the profession of teaching as a profession of choice by introducing a new career package. A similar career package was also developed for school leaders and

there were plans for the Ministry's transformation in an attempt to decentralise the governance structure to reduce the power differential between the community of practice and the government. These plans were presented in a comprehensive and convincing manner which demonstrated that the Ministry was committed to undertaking the process of curriculum change and see it through to success. The presentation of the Blueprint was also supported with statistics and figures to indicate that the policy implementation was carefully thought out and delivered in such a way that it could attract people's interest which eventually built a sense of trust in the government as it continued to improve its education quality.

However, as the findings from other aspects of this study suggest, many aspects of the Blueprint were likely to be criticised. First, the intention to benchmark Malaysia's education quality to an international standard may reflect a political agenda in which Malaysia aspires to improve its rank on an international stage. The changes that were proposed to improve the curriculum may be superficial as the Ministry orientated the change to match the test design of large-scale international assessments such as PISA and TIMSS rather than focusing on the benefits for students' learning. Furthermore, as subsequent reports of the policy were produced, it seems clear that the agenda of curriculum change in Malaysia has always been driven by political values.

This has impacted the curriculum design such as the aspiration of making assessment integral to the learning process. This assessment framework was supposed to empower teachers' assessment and formative assessment in the classroom, but the way it was designed seemed to generate results for summative purposes. For example, the purpose of classroom assessment as presented in the Blueprint is to record students' mastery level in the classroom, which is summative in nature. The evaluation of sports and co-curriculum also records students' performance in a summative manner. These examples indicate that the role of teachers' assessment in the assessment framework is to evaluate students' performance summatively. There were also instances where improvements were made to improve students'

performance in the large-scale international assessment. For example, the improvements in Science and Mathematics were given more emphasis than other subjects, as these subjects were tested in PISA and TIMSS.

The Ministry also laid out plans to support teachers and school leaders to lead the curriculum change in their schools, but the proposed strategies seemed to limit the possibility of teachers and school leaders growing independently as they still had to follow the directives from the Ministry. This can be observed in the government's desire to close the gaps among the three dimensions of the curriculum, but the intervention plans such as the establishment of SISC+ and SiPartner, even the way training events were conducted, retained the practice of a top-down structure. All these examples signify that the planning for KSSR curriculum policy contains flaws which can significantly impact the enactment process in schools. In the following chapters, 7 and 8, I will present the findings from classroom observation and interview data sets. These findings will then be compared with the findings in this chapter to examine the relationship between policy and practice and discuss how they interact in Malaysian classrooms which is the aim of investigation in this study.

6 Classroom observation

Overview

Chapter 6 of this thesis discusses the outcomes of the classroom observations. The purpose of the observations was to examine teachers' pedagogical practices, particularly observing their practices which might be evidence of formative assessment practice. The process of observing teachers' teaching practices provided a large data set in this study. On average, for every teacher, I observed their classes at least five times. The purpose of observing the teachers this frequently was to ensure that the data collected showed a trend that revealed the teachers' routine teaching practices. Even though I informed them not to prepare a special lesson for observation purposes, I had to be alert during the observation that they were not 'putting on a show' for me. Therefore, it was important to visit them consistently to make sure that the outcome of the observation reflected their usual teaching practices.

The KSSR curriculum policy aims to expose students to teaching strategies that promote student-centred learning (www.bpk.gov.my, 2016). This can be manifested through integrated learning activities, 'fun' teaching activities, and activities that inculcate thinking skills and soft skills. The curriculum department unit in the Ministry has prepared examples of classroom teaching for reference (www.bpk.gov.my, 2016). Besides these differentiated teaching strategies, the curriculum also promotes an assessment for learning approach that encompasses learning criteria, questioning techniques, giving formative feedback as well as self and peer-assessment practice. I observed the teachers to obtain information related to these characteristics of teaching practice described in the curriculum policy. The observation took four months to complete.

From the analysis of the observation data, the teachers displayed teaching practices that can be categorised in four broad themes as follows:

1. Exhibiting teacher-oriented teaching practice
2. Promoting student-centred learning practice
3. Using feedback to inform students' learning progress
4. Observing learning objectives and success criteria practice in the classroom

In each of the themes, there are sub-themes that represent the classroom teachings and activities that constitute the emerging themes. I will first present the findings of the first emerging theme from the analysis that represents the most commonly observed teaching practices among the teachers in this study.

6.1 Exhibiting teacher-oriented teaching practice

6.1.1 Displaying the behaviour of teaching to the test

In this section, I will present the most commonly observed teaching practices that is teacher-oriented teaching practice. Particularly, most teachers appeared to exhibit the behaviour of 'teaching to the test' to ensure that students had sufficient practice before the examinations. For example, Nora, a Malay Language teacher displayed this behaviour quite consistently in her class throughout the observation period. It was first observed when she explicitly informed her students that she wished to do a writing practice according to the examination format rather than teaching a writing topic from the syllabus that would go untested.

This behaviour indicates the washback effect from the high-stakes examination that is widely practiced in Malaysian schools. This finding resonates with the view of Hamilton (2013) about the washback effect of examinations in the classroom. He stated that in the classroom where examinations are of important value to the students, preparing for the examinations has become a top priority for parents and teachers, and this has greatly affected the teaching and learning practices in the classroom. This is especially true in the context of this study as the results from the national examinations are used

to determine the future of students such as for educational opportunities, employment and certification for achievement. With such importance coming from the examinations, teachers may feel that it is their responsibility to teach to the test as a way to help students in the exam. In the context of Singapore classrooms, the Ministry of Education in Singapore also agreed that young children should not be given too much emphasis on examinations as it would impede students' confidence and desire to learn and prevent students and teachers from understanding and using assessment to support and improve learning (Klenowski, Carter, and Carter 2018). This shows that, in countries that have put too much emphasis on examinations, the educational leaders have eventually acknowledged the drawbacks of examinations especially in relation to classroom teaching.

Nonetheless, Nora seemed to hold on to the importance of the examination quite strongly because in another lesson, she reinforced this practice by making her students memorise the template of the writing section that she had prepared, in which she had provided the opening and concluding sentence. She then reminded the students that during the examinations, they just needed to fill in the blank with appropriate details without worrying about other aspects of the text. She expressed this as follows:

Now, I want you to copy the template I've written on the whiteboard. Make sure you memorise it. During the exam, use this template and fill in the blanks with the information from the question paper since I have provided you with the introduction and conclusion. Make sure you memorise it, okay?

Throughout the observation, Nora always related the topics of the lesson to the examination setting by sharing tips on how to answer questions based on these topics in the examinations. This continuous emphasis on examinations affected the way she communicated feedback to her students. Her comments for her students' work mainly consisted of strategies to get high marks in the examination. She also seemed to welcome questions related to examinations and was happy to share important tips for examination purposes.

However, it could be argued that her teaching to the test caused some incoherence in the way she organised her lessons. For example, during the introductory part in one lesson, Nora had asked students to share their experience of using a self-service laundry. The lesson then continued with a reading aloud activity from the textbook on the topic of entrepreneurship. The lesson then was followed with a grammar practice on the topic of 'Active and Passive Voice'. For this activity, she identified five words, unrelated to the earlier activities, and instructed her students to construct sentences. She then asked them to present their sentences to the class for evaluation. At the end of the lesson, she asked the students to complete a grammar exercise from the textbook. The whole lesson organisation did not reflect the relationship between the reading activity and grammar practice, and this might have affected the understanding of the students in the class.

In another situation, Nelly, an English teacher, conducted revision sessions with her students and she seemed to take a more relaxed attitude as compared to Nora earlier. In the revision class, she mainly read through the list of topics and asked her students if they had any issues to address. When the students did not raise any issues, she quickly ended the revision session. Her style of doing revisions could be to check for students' understanding and hoped to create a collaborative session with her students. However, since the students did not respond to her questions, her lesson seemed to lack interaction between the teacher and students.

In Flora's Mathematics class, the revision involved teacher-initiated activities. During the revision session, there were no indications that Flora communicated with her students to ask if there were any topics that needed further teaching or discussion. For most parts of the revision, she decided on the tasks for her students to complete and after assigning the task, she initiated the answer-sharing sessions. During the discussion, she actively shared tips and strategies to answer examination questions, and this process seemed to motivate her students to participate in the discussion.

Shirley who is a Science teacher, also organised teaching activities that were examination-oriented that involved sharing tips for the examinations. In her class, examination-oriented teaching was also observed from the way she made her students complete exercises that mirrored the examination questions. Additionally, while she was teaching, she also highlighted topics or question designs that often appeared in the examinations. Most importantly, her lesson was also designed for examination purposes as she focused on the content aspects without doing any scientific experiments because she had to complete the syllabus. To this end, students also did not show disagreement with the teacher's decision to remove the experiment part of the lesson and accepted the teacher's plan.

Teacher: Since we don't have much time left before the exam, can we skip the experiment part of the topic? I need to finish teaching the remaining topics before the exam. Is that okay?

Students: Yes!

The response from the students could indicate that Malaysian students share the same traits as Chinese students in terms of having the same perception about the role of teachers in their classroom. Yin and Buck (2015) suggested that in China, the difficulty in implementing formative assessment practice could be attributed to the Chinese Confucian culture where students regarded the acquisition of essential knowledge as important and they looked up to their teachers as the authority of knowledge and accepted the power difference with the teacher. This suggestion seems to suit the situation that happened in Shirley's classroom. Students did not argue with the teachers and followed the teachers' rules in the classroom. This can further signify that students in this study, similar to the students in Chinese classrooms (Yin & Buck, 2015), may also not be able to adopt the Western ideology of learning that centralises on socio-constructivist learning because of the strong influence of high-stakes examinations in their education system and the deep-seated learning culture that gives a significant role to the teachers in the classroom.

Peter who is also a Science teacher decided to reduce the number of experiments that he could conduct with his students. During the observation period, he conducted one experiment and admitted that he had to leave out the rest of the experiments due to time constraints. At the time of observation, the final examination was one-month away, yet he still had topics to cover from the syllabus. The delay was mainly caused by the public holidays in Malaysia as well as school events and training that teachers had to attend; all of which pushed forward the lesson from the original timeline outlined in the curricular policy. Due to the limited time that he had, Peter planned to teach the lessons theoretically without the experiments to ensure that all topics were covered. Furthermore, the process of actually doing the experiment was time consuming, and this affected the lesson. This issue could be related to the time allocated for each subject which is determined by the Ministry. For each lesson, the Ministry allocates 30 minutes for one period, and for Science, the allocation of teaching time is 2 hours per week (4 meetings). Relatively, this is insufficient compared to Malay Language and English, where the allocation of time for these subjects is 5 hours per week (7.5 meetings). Besides having a limited time each day, the distance between the Science lab and the classroom becomes a further constraint on teachers wishing to conduct the experiment. Students take time to move from their classroom to the lab, and by the time they arrive at the lab, there is not much time left for the lesson. Apart from the experiment, the teacher had to also teach the content to the students. These limitations have contributed to the teacher's decision to omit the practical parts and focus on teaching the content as this seems to be more important and useful for the examination.

6.1.2 Asking questions to inculcate critical thinking skills

Another aspect that emerged from the analysis was that teachers were often seen to ask questions as a way to encourage interaction with students. Establishing interaction through asking questions is a particularly new strategy that has been promoted in the new curriculum to facilitate formative assessment practice; hence, teachers were seeing actively implementing this in their classrooms. It is important to note that

employing this strategy in the classroom can be challenging for the teachers as it is very different from the highly directive practices earlier. From the data analysis, there were two purposes that emerged from the questioning techniques these teachers employed: to seek a response and to inculcate students' critical thinking skills. Generally, most teachers employed closed questions to initiate interaction. The following example is extracted from part of an English lesson:

This interaction is extracted from an English class, and the topic of the lesson is Adverb.

Teacher: Do you know what is adverbs?

Student: Yes...

Teacher: What is the meaning of adverbs?

Student: Adverb is...frequently, quickly (giving a list of examples of adverbs)

Teacher: Okay...anyone else wants to try? (sharing their answers) ...Now, let's open the textbook and do the exercise.

From the above excerpts, the teacher initiated the interaction by asking a closed question. From students' response, the exchanges gradually developed with more open-ended questions.

Pearl, on the other hand, employed closed questions in most parts of the lesson to check for students' understanding. If she asked questions that required them to express their views or share personal experience, she prompted them because they normally gave short answers without elaboration. For example, while doing a comprehension activity, Pearl asked her students several questions intermittently while reading a text as a process of exploring the meaning of the text. For example, '*Why does the character in the story behave this way?*' or '*What do you understand with this word?*'. The students normally responded with a short answer, directly answering the questions. They hardly supported their answers with reasons unless the teachers prompted them.

She also seemed to promote students' interaction in the class by asking questions like *'Do you have anything to ask?'* at the end of the lesson. Asking such questions may encourage students to address any problems they had with the learning activities. However, the students normally responded 'No', but this response may not reflect their actual feeling. They may feel unconfident to express their thought in front of their classmates. As a result, students felt more comfortable approaching the teacher personally after the class as I sometimes observed the students did to seek for clarifications at the end of the lesson.

Rachel also practised a similar questioning technique. In one lesson, she had asked her students to share their experiences of attending a *'kenduri'*, a Malay colloquial term for a wedding ceremony gathering. Asking students to share their experience was a strategy used to encourage the students to think and organise their thoughts clearly so that people could understand their experiences.

Teacher: Have you attended a 'kenduri?'

Students: Yes.

Teacher: How did you feel about the 'kenduri' that you attend?'

Students: It was fun.

The above example showed how Rachel made an attempt to encourage students to share their opinion, but more elaborated responses could only be obtained after they were prompted. In another situation, Rachel was observed using the same strategy to teach writing. At the beginning of the writing activity, she encouraged her students to brainstorm for ideas with their partners or as a group. When they presented their ideas, she asked questions to encourage them to explore more ideas. The interaction pattern as described above illustrates the questioning technique that has the initiation-response--feedback (IRF) or recitation paradigm (Cazden, 1988; Mehan, 1979; Sinclair & Coulthard, 1975) pattern. This kind of questioning technique is considered low-level as it is suitable to elicit factual recall and check for understanding, which means that it is not effective to engage in an interaction that promotes higher order thinking skills (Almeida, 2010).

The same strategy of prompting was also observed in Ian's Mathematics class. He often asked his students to explain the steps they took to arrive at the answer for every Mathematical problem he gave. If the students were able to provide the correct answers, he would ask them further questions to facilitate their thinking processes and to allow other students to understand the process of getting the answers. This kind of questioning technique is characterised as open questions as it is employed to elicit and scaffold students' knowledge (Smith, Blakeslee & Anderson, 1993). It also reflects the use of higher-order open questions because they encourage students' thinking and reflection which are good to stimulate students' thinking skills as desired by the policy.

The analysis from Shirley's class showed that she often asked stimulating questions to her students such as:

- *"Why is that...?"*
- *"Do you think that...?"*

She asked these questions because she wanted to seek for detailed answers from them which they were not able to express without being prompted from the teacher. As much as this is a positive finding in exploring the interaction between the teacher and students, it is not conclusive whether that practice is an outcome from the new curricular guideline or is merely the teacher's teaching style.

Peter also asked questions to inculcate students' critical thinking skills. Similarly, the questions served like prompts to encourage students to generate detailed responses. For example, he always asked his students the following questions:

- *"Do you think that...?"*
- *"In what ways that...?"*
- *"Why do you think that...?"*

These questions were not only used to prompt for details, but they also challenged students to explore their knowledge to respond to these questions. Students often responded to these questions with appropriate and relevant answers though the teacher needed to ask follow-up questions for an elaborated response. This kind of

questioning technique is closely associated with what Mortimer and Scott (2003) described as initiation-response-feedback-response-feedback (IRFRF) pattern. It depicts a sequence structure in which elaborative feedback from the teacher invites further response from the students in a potentially expanded chain of response-feedback discourse. This kind of interaction shows that the teacher is practising questioning technique that instantiates formative assessment.

6.1.3 Teacher-oriented peer and self-assessment practice

The analysis of the data further revealed that the peer and self-assessment practice that was observed in the classrooms was also teacher-led. A typical practice of peer assessment practice was that students exchanged their work to be evaluated by their friends and the answers were provided by the teachers. Similarly, self-assessment was a way of checking the answers in the students' own work, correcting the grammatical errors or sentence structures in written texts. Nelly, an English teacher, never demonstrated any forms of peer-assessment practice in the class, but a self-assessment practice was observed in one of the lessons, when she instructed students to check their work for spelling and grammatical errors in their sentences. However, she did not demonstrate the strategies to check them. Effective self-assessment practice strategies include sharing success criteria, effective questioning and feedback (Panadero et al., 2012), but the situation in her classroom demonstrates that she did not apply the strategies that regulate appropriate self-assessment. Her instruction to check for spelling and grammar errors was a generic one instead of asking to identify errors for specific grammatical aspects. During the process, the students did not complain or raise any questions which suggested that the students agreed with the way it was done.

In the context of Pearl's class, peer-assessment practice was evident, and she seemed to make efforts to develop students' independent learning. In one lesson, the peer-assessment practice was teacher-led. During the practice, she asked them to exchange their worksheet with their friends. She then selected some students to share

their answers, and other students clarified whether the answers were correct or not. At the end of the activity, they wrote down the score to record the number of correct answers that their friends had achieved. In this classroom, the slow nature of change can be related to the lack of clear guidance of peer-assessment practice where the teacher seems to be trying to involve the learners in the discussion of possible responses to questions, but in the end, the activity was aimed at recording the score. This does not promote the peer-assessment practice as suggested by Falchikov (1995) which involves providing qualitative comments to peers based on the established criteria, augmented by feedback about the students' strengths and weaknesses, along with suggestions for improvement.

In another situation, students completed an exercise that involved transferring information from a text into a table. After they had completed the task, they shared their answers by writing them on the board and the teacher asked other students to evaluate the answers. Students explained their decisions and the teacher asked for justification if the answers were wrong. By asking for justification, perhaps, she was developing critical thinking process among her students, where they were able to support their choices of answers with reasons. From these instances, Pearl seemed to have incorporated a peer-assessment practice that promoted students' thinking skills, and this practice could also inform her that the students understood the subject matter; hence, they could prepare justifications that reflected their knowledge.

In another situation in Ian's class, the basic practice of peer-assessment activity in the classroom was similar to other teachers, but in his class, after the students had finished checking their friends' work, they returned the work to them without any reflective discussion to help students identify appropriate strategies to improve learning.

In short, the analysis of the observations showed that teachers' teaching practices mainly reflected a teacher-oriented practice represented by the way teachers communicated with students and a lack of evidence of students' active engagement

in classroom activities except for some instances that were allowed by teachers. Nonetheless, it should be noted that some teachers tried to encourage students in the learning process. However, it appeared that they were still tied to their dominant role in the classroom, possibly caused by their perceived responsibility to carry out teaching according to the syllabus in the curriculum.

Analysing the teachers' teaching practices so far, we can see a variety of teachers' practices in the classroom. There are teachers who displayed practices that tried to exhibit formative assessment practice, though the majority of them did not seem to have had clear guidance on how to strengthen their teaching practices that can foster higher order thinking skills and develop students' self-regulated learning. This finding consolidates the literature that discussed the implications of adopting a transmission model of change. Though these teachers received training from the Ministry and, perhaps, were given the same advice by the management of the school, their teaching practices vary.

6.2 Promoting student-centred learning

6.2.1 Starting a group activity to encourage students' participation in the classroom

Earlier, I explained the teachers' practices that were highly teacher-centred. However, there were teachers who exhibited teaching practices that promoted student-centred learning. A common strategy manifested by the teachers to promote student-centred learning was the engagement in group activities. Pearl often incorporated group activities that encouraged students to work with their peers. This usually involved completing simple tasks from a worksheet. For example, in one of the observations, she asked the students to reorganise sequences of sentences to complete a story for their writing activity. During the group activity, the students were seen discussing and at times arguing with one another as they completed the activity.

She also started a group project called 'Newspaper Scavenger Hunt'. The aim of the project was to create a story using pictures that students found in the newspaper. At the time of the observation, the project was at the initial stage, but I gained a little knowledge about the project in one of the lessons when she gave instructions to her students about the project. She wanted them to find in the newspaper a list of items such as flags, countries, singers and foods. When they had found them, they were to cut and paste the pictures on card. Further details about the project were unobtainable as the teacher did not revisit the project during the period of observation.

Flora who taught Mathematics was another teacher who demonstrated that her planning aimed to make the class interactive and student-centred. Generally, she encouraged students to engage in discussion with friends while they completed the tasks in the revision classes. Furthermore, when she asked her students to present their answers, she encouraged other students to determine whether they were correct or not. She did not intervene in the process by giving her answers. If needed, she also prompted her students with questions that made them explain the step-by-step process of achieving the correct answers. Additionally, the students also used this session as an opportunity to discuss appropriate strategies to improve their skills and competence of a particular topic. I also observed that students were motivated doing this revision practice as they were able to evaluate their knowledge on a particular topic and further identify which topics needed more practice.

Among other teachers, Nora used YouTube videos to encourage students' interaction. In the observation, she showed a video on Malaysian's Independence Day from YouTube to her students. She used the video as a tool to stimulate students' thinking before they engaged in a discussion. She also used a YouTube video as a tool to stimulate the students' schemata before introducing a new topic to learn. The following example shows how she used the video in her teaching:

Teacher: ...now, let's watch this video on Malaysia's Independence Day.

**After watching the video*

Teacher: What was the video about?

Students: It showed the historic moment of Malaysia gaining independence.

Teacher: Do you remember the celebration of Independence Day in our school last year?

Students: Yes.

Teacher: Can you describe what happened?

**Students shared the stories of that event*

Teacher: Now, let's open the textbook and do the exercises from the textbook.

The example above showed how the use of YouTube video can stimulate students' thinking and lead to discussion with their friends. During the observation, students were actively sharing their responses which created interactive learning.

Additionally, the analysis of Flora's revision classes showed instances of student-centred learning practices. For example, she always encouraged her students to discuss and check their answers on their own or with their friends while doing the revision exercises. Furthermore, every time the students were asked to present their answers, the teacher asked their friends to check the answers which often led to a group discussion as they shared their strategies to solve the Mathematical problems. Adopting this way of making students involved in the learning process seemed effortless and students also seemed to enjoy the process. This was illustrated in the way they were seeking for ways that could help them achieve their goals such as consulting a friend whom they perceived as 'good' in Mathematics. This practice reflects the socio-constructivist learning theory (Vygotsky, 1962) where, in his view, learning happens with the assistance of other people. It also depicts the application of the Zone of Proximal Development that constitutes the aspect of acquiring the knowledge with the assistance or guidance of adults or more skilled peers (ibid).

6.2.2 Scaffolding students' learning

The observation data showed that scaffolding techniques were also used to develop a formative learning process in the classroom. Particularly, I observed this being practised in Ian's classroom. For example, before he let his students complete the assigned exercises, he would first demonstrate the steps that should be taken to arrive to the answers. As a result, when students presented their answers, they also followed his way of presenting the answers. This was his way of making students develop the thinking process when they approached a Mathematics problem. Additionally, he constantly encouraged students to decide the first step that should be taken when they solved the problem. He emphasised that the first step had to be selected carefully to determine the correct use of formula or work order to arrive at the answer.

However, it might be argued that his scaffolding technique might sometimes appear as 'drilling' the students with repetitive practice of memorising formulas and techniques to answer Mathematical problems. Before he introduced new knowledge to his students, Ian always asked his students to recall the knowledge from the previous topic or sometimes he started the lesson by asking students to recite the multiplication table especially if the knowledge was relevant for the new topic. If the students failed to answer correctly, he encouraged them to continue trying until they got the correct answers. These strategies were employed to ensure that the students were ready to learn new knowledge which should be built from their schemata. This was also a practice to encourage students to consistently revise and study to enhance their knowledge and to prepare for the new knowledge they would continue to receive.

Similarly, Peter also scaffolded students' learning by activating their schemata before he introduced a new topic. For example, in the experiment of identifying objects that were alkaline or acidic, he asked students to think of the taste of the items given. With the learners' hypothesis in mind, he then demonstrated the experiment to test the alkaline or acidic level of the items. By asking the students to activate their schemata,

students seemed to capture the base knowledge of the topic which helped them in the learning process.

In another class, he aimed to teach 'Phases of Moon'. Before the main part of the lesson, he encouraged them to think of their experiences of watching the shapes of moon.

Teacher: Have you noticed that the moon has different shapes?

Students: Yes.

Teacher: Can you tell me the shapes of moon you've seen?

Students: Crescent...Half-moon...Full-moon...

Teacher: Do you why moon has different shapes?

Students: No...

Building on their schemata, he introduced the topic while regularly making connections with their experience. It was observed that students showed better understanding of the topic when they were able to relate it to their existing knowledge or experience. This finding reiterates the claim that education should be made relevant to students' lives, interests and cultural background (National Research Council, 2003). This can help them to connect curricular activities and valued goals, interests and personal experiences to achieve a meaningful learning process for students (Albrecht & Karabenik, 2017).

The findings described in this section show that a number of teachers displayed teaching practices that promoted student-centred learning, from organising group activities and scaffolding students' learning. These activities allowed students to be actively involved in the learning activities and helped to establish a meaningful learning experience for them. In the next section, I will present the analysis of the data that addresses the purposes of communicating feedback to students in the classroom.

6.3 Using feedback to inform students' learning progress

6.3.1 Giving summative feedback to inform performance level

In this section, I will present the findings from the observations that demonstrate the approach to communicating feedback by the teachers in this study. The common feedback strategy demonstrated by the teachers was giving summative feedback that represented the teachers' evaluation of students' work. Particularly, giving summative feedback to students is important, especially in the context where they are going to be facing an examination as it contains information that inform students of their achievement.

In a language class, for example, feedback related to grammatical mistakes was commonly observed. For instance, in one of the lessons, Nelly instructed her students to construct sentences using adverbs of frequency. After they completed the exercise, she selected a few students to present their sentences verbally. Often times, her comment after the presentation was *'That's good'*, while other times, she gave comments with suggestions for improvements.

Pearl showed a different style of giving feedback to her students. In one of the lessons, she gave six riddle problems for students to solve and instructed them to form pairs and solve the riddle together. She then asked them to write their answers on the whiteboard. When checking the answers, the teacher did not ask perception-checking questions with her students, such as the following:

- *Do you think this answer is correct?*
- *Do you agree with this answer?*

Instead, she focused on identifying correct answers and correcting spelling mistakes that she found in the answers. After she had completed checking them, she announced which pairs got the highest score. In this situation, the teacher did not make the process of identifying error explicit to her students. It is therefore possible that students did not learn from the mistakes as they only observed corrections being made without explanation, rather than discovering the errors on their own.

Even though Ian practised scaffolding techniques with his students, he did not provide feedback that could help his students improve. Most of the time, he was observed to give summative comments to his students' work that were often represented by praise such as 'Good' or 'Excellent' to commend students' achievement. Sometimes, he also informed them of the areas that he felt important for students to enrich their knowledge, but he did not provide the suggestions or strategies to achieve that. For example, he said:

Teacher: You have to improve your knowledge on this topic. I cannot be teaching the same topic over and over again until you understand. You have to improve yourself on your own.

This kind of feedback illustrates that the teacher did not provide specific criteria of success in learning to allow students to engage in a self-directed learning process. Potentially, giving this kind of feedback does not help students to improve in the classroom. This finding illuminates the importance of informing students about success criteria of a particular topic. The purpose of success criteria in the context of formative assessment is it can help students to engage in a self-regulated learning process which promotes greater learner autonomy (Crichton & McDaid, 2016). It is an important tool to clarify the purpose of learning a topic in the classroom as suggested by educationalists and policy makers (Department for Education and Skills (DfES) 2007; Education Scotland, 2010; Hattie, 2009; Stobart, 2008). It has been argued that failure to understand the purpose of success criteria can cause a 'procedural, ritualistic' process of learning (Swaffield, 2009, p. 4) which strongly reflects what students in this classroom have experienced.

6.3.2 Giving formative feedback to shape learning

Generally, the strategies adopted by teachers in this study to communicate formative feedback in the classroom seem quite similar to one another. For example, Nora often gave suggestions and comments that facilitated learning in her classroom. For example, in one of the speaking lessons, she encouraged students to express their

opinions based on three questions. During the presentations, the teacher evaluated their responses, and she gave praise at the end of it. Besides, she was also observed to identify students' errors and gave suggestions to improve the errors.

This kind of feedback was often delivered to the whole class as she was not able to lead them with questions as the number of students in her class was large, and this limited her space to communicate formative feedback to individual students.

Similarly, Rachel gave feedback that represented her thoughts on the students' performance and suggested ways for improvements. When she checked students' work, for responses or answers that were incorrect, she informed them of the correct answers. She also explained the strategies of getting the correct answers so that students could apply them in the future.

In short, we learn that feedback strategies that were employed by the teachers were both summative and formative. In KSSR curriculum policy, where the aim is to empower students' learning, all teachers in this study should strengthen their knowledge on formative feedback strategies so they can better incorporate it in their classrooms.

6.4 Observing learning objectives and success criteria practice in the classroom

6.4.1 Ineffective practice of sharing learning intentions and success criteria with students

In the context of assessment for learning, learning intentions (LI) and success criteria (SC) are seen to be important features. LIs should focus on the pupils' learning during the lesson, rather than what they will be doing, and should be short, achievable and measurable. SC are linked to the LIs and tell the learners how they will recognise if they have been successful (Crichton & McDaid, 2016). The analysis of the data showed that most teachers informed students of the topic of the lesson but not the learning intentions and success criteria in the classroom. If it was practised, it was not

used for its purpose of regulating autonomous learning among students. They failed to demonstrate how these criteria can be used to foster independent learners. In this context, learning criteria refers to the list of criteria that students should achieve in a particular lesson.

From the analysis of the observations, there was no reference to show that Pearl had incorporated students' thoughts on the LIs and SC. For example, in the lesson where the students wrote a story about 'Lost and Found', the teacher mainly focused on getting the plot developed. She assigned the students to verbally articulate the story while she wrote it on the whiteboard. As she copied the story on the board, she did not explain the learning intention or success criteria of the activity. Instead, she kept her focus on completing the story in which the students wrote it in their book afterwards. This activity could have been more engaging for students if the teacher communicated and utilised the LIs and SC to encourage the students to be actively involved in the classroom.

Similarly, Ian also seemed to have a lack of understanding of the purpose of sharing Lis and SC in the classroom. In one of the lessons, he wrote on the whiteboard, 'Students will have to be able to complete three Mathematical problems correctly'. However, these criteria were not used to provide opportunities for students to engage in a peer or self-assessment practice, but they were basically to outline his personal goal of the lesson.

Chapter Summary

Primarily, from the analysis of the observation, I reiterate the outcomes of teachers' teaching practices based on the four emerging themes.

1. Exhibiting teacher-oriented teaching practice

In this section, there are three characteristics that shape teacher-oriented teaching practice. First, the teachers displayed the behaviour of teaching to the tests where they adjusted the teaching activities for examination purposes. For example, there were teachers who made changes to the syllabus to do more practice for questions that would be tested in the examination. There were also teachers who left out science experiment activities so that they would have sufficient time to prepare students for examinations. Furthermore, the teachers also regularly shared tips and strategies to answer examination questions. They displayed a belief that the examination is important, and learning should be aligned with examinations. Besides that, the practice of peer and self-assessment was also teacher-oriented which did not reflect the processes that the research and empirical literature recommend.

2. Promoting student-centred learning practice

Despite the dominant role that teachers generally played in the classroom, there were also teachers who had designed lessons that promoted student-centred learning. This was reflected in two ways: the effort of the teachers to encourage students' participation in the learning process through group activities and scaffolding techniques employed to enable students' learning. Mainly, these activities were used to allow students to explore the learning process with each other, in which teachers played the role of a facilitator. The scaffolding technique appeared to be helpful as it allowed students to discover successful learning strategies and apply them in other parts of learning. Furthermore, the scaffolding strategy was used to tap into students' existing knowledge before new knowledge was introduced. This can be a motivating factor for students to participate in the learning process because the new knowledge is built on their existing knowledge (Vygotsky, 1962).

3. Using feedback to inform students' learning progress

Establishing a successful learning process is recognised as good practice for teachers to communicate ways for students to improve their learning progress. From observation data, most teachers appeared more comfortable giving summative feedback that mainly described their evaluation of the students' performance. Additionally, they sometimes informed students of learning areas that needed improvement but did not often demonstrate the strategies by which this could be achieved. On the other hand, teachers who did provide formative feedback to their students were able to articulate examples, suggestions or strategies to help them improve their learning, but they might not be able to address them specifically for each student. Enacting a curriculum policy that is student-centred, giving formative feedback might facilitate students' learning as this kind of feedback helps students to focus on important areas that need improvement.

4. Observing learning objectives and success criteria practice in the classroom

The last theme that emerged from the analysis was the way learning objectives and success criteria were enacted. Generally, many teachers were aware that they had to share success criteria with their students, but they did not seem to manifest it effectively in the classroom. The most common observed practice was that teachers informed students about them at the beginning of the lesson but did not follow through. Most importantly, the teachers did not encourage students in self-directed learning using these success criteria.

In conclusion, the findings from the classroom observations suggest that many teachers are finding it problematic to put the policy into practice despite the efforts they have displayed. From the observations, the activities are still mostly teacher-oriented, and students still behave as passive recipients of the knowledge. Furthermore, the way assessment in classrooms is managed still leaves room for improvement, especially in making a clear and coherent connection between formative assessment practice in classrooms and the examinations that play a significant role in the teaching and learning process in the classroom. A further discussion on how these

findings affect the relationship between policy and practice in Malaysian education context will be presented in the next chapter.

7 Interviews

Overview

The previous chapter consists of findings from classroom observation of eight participating teachers. The purpose of the observation was to investigate the way teachers teach especially in the way assessment for learning is manifested in practice. Primarily, the findings have shown that the teachers play a dominant role in the classroom which leads students' learning. Students, in return, behave as the beneficiaries of the knowledge manifested through classroom practices designed by the teacher. This chapter continues to present the outcomes from the interviews with four groups of participants in this study, the policymakers, school leaders, teachers and students. This interview allows us to seek knowledge and clarification on issues emerging from the observations as well as to seek understanding on the perception of these participants about curriculum change process. The presentation of the findings emerging from the analysis is divided into four parts.

The first part presents findings from the interviews with two policymakers from the Ministry of Education in Malaysia. Interviews with the policy makers sought to explore their insights into the process of developing the curriculum policy and their thoughts about the process of enactment of the curriculum policy in schools. The data explored the issue of the power relationship between officers in the policy-making department and the members of schools.

The second part of this chapter presents the findings from interviews with head teachers of the participating schools. The interviews set out to explore their perception of the curriculum policy and offered an opportunity to reflect on the role of leadership in leading change in schools.

The third part of this chapter reports on the findings from interviews with the teachers who participated in this study. These interviews sought to explore their understandings and their perceptions of the curriculum policy including their reflections on their pedagogical and instructional strategies. The interviews took place after the classroom

observations to allow opportunities to understand more deeply the reasons behind decisions to employ or not to employ certain formative assessment strategies in their classrooms.

The last part of this chapter reports on the findings from interviews with students who are learners in the observed classes. These interviews sought to explore their understandings and perceptions on assessment for learning strategies and the teaching and learning activities. Mainly, I was interested to know the role of students and their positions in the process of educational change because based on the policy design of KSSR, the role of students should not be passive recipients of the knowledge imparted by teachers. In fact, there should be substantial opportunity for them to engage in active interaction with teachers and peers.

7.1 Policy makers

The analysis of the interviews with the policy makers has been organised to reflect three crucial aspects of the processes of educational change in Malaysia. Firstly, I sought to investigate the process of educational policy making especially in the process of policy thinking and the power of decision making in the process. Secondly, I wanted to explore their perception about the policy enactment in schools, particularly in unravelling their thoughts on the role of teachers and finally, I sought to evaluate their perception on the purposes of assessment in the context of the newly developed curriculum policy.

Before I present the findings of the interviews with these policymakers, I will first highlight the characteristics of policymakers in Malaysia. Policymakers in this context are civil servants who work directly to the Minister, and they are mainly involved in the thinking process of policy development. In Chapter 2 of this thesis, I have provided examples of cases to show that the policy makers are involved in the policy thinking process that encompasses data and reports generated from national public dialogue, formal discussions with universities, Ministry reports, major reviews and policy

documents, international research, surveys, state visits, and focus groups with teachers and parents. These reports serve as a fundamental framework, but the final decision about the policy is made by the government leader, and the decision is often politically, socially or economically driven. This suggests that the role of policymakers is not independent; they are mostly involved in the groundwork to identify the key aspects that determine a standard education that is functional and beneficial for economic growth. The next section contains more information that demonstrates the process of policy thinking, policy making and policy implementation in Malaysia.

7.1.1 The process of policy thinking, policymaking and policy implementation of KSSR

The analysis of the findings shows that the process of developing KSSR policy adopted a top-down approach led by senior management in the Ministry and ultimately by the Minister of Education.

7.1.1.1 Decisions related to policymaking is made by the Minister of Education with support from senior management officers

Prior to making changes to the curriculum policy, the traditional practice, according to both policy interviewees, was a standard process involving a needs analysis; a process of benchmarking the education standard to an international standard using international assessment platforms such as TIMSS and PISA in which the data is used to *'reflect upon its curriculum and policy and evaluate whether it is competitive with other countries across the world. It's important because we have to ensure that the next generation is prepared to explore the world'* (Ava). These sources of evidence were fed back to senior policy makers who used the evidence to inform the changes to the curriculum. It was their decision to use the data in a way that they found useful such as to upgrade or review a particular policy. This indicates that research data and reports were used to identify salient ideas for change, but the final decision was made by the Minister.

Isabella described this process in her interview by saying,

'...Yes, the process of policy development is led by the Minister...Usually, after we've conducted the research, we would suggest to the higher authorities and they'd make the decision whether to improvise or review the policies that are related to the curriculum.'

Similarly, Ava also agreed that it was the 'top' directors who made the decisions based on the analysis of research prepared by the research team from the Ministry of Education.

However, Isabella also referred to instances where the educational policy decision taken was strongly influenced by the wider community. For example, the decision to revert the PPSMI (translated to English as Teaching Science and Mathematics in English) policy to teaching these subjects in Malay Language was due to strong protests by two main groups in March 2009. The Malay Nationalists, represented by the national laureate and opposition politicians, attacked the policy on grounds of pride in identity as they feared that the status of the Malay Language would be weakened if the English language was used as the medium of instruction for two critical subjects in Malaysian schools. In response to this strong protest and the royal intervention urged by the Nationalists, the senior managers had to decide whether to retain or abolish the policy. In July 2009, the policy was abolished using a soft-landing method starting in 2012. Apart from this example, both policy makers strongly suggested that the person who ultimately has the power and authority to make decisions on matters related to educational policy is the Minister of Education.

Even though decisions related to the curriculum are made by the Minister, the development of educational policies in Malaysia reflects a robust and thorough process. For instance, the Ministry takes efforts to ensure that any possible harm to a particular group of people is managed through meetings and discussions with them because the changes made to the curriculum policy are likely to affect them. The platforms that are commonly used for this purpose are workshops and meetings with

governmental and non-governmental organisations (NGOs). The discussion includes identifying possible negative implications that might be experienced by a certain group of people if the policy were to be implemented. For example, *'if the Ministry decides to stop the practice of comparing exam results with other schools, it can have many implications. For example, tuition centre operation may be affected because it seems irrelevant to send children for additional lesson practice'* (Isabella).

It is clear that the policy thinking and policy development processes reflect a top-down approach with final decisions made by the Minister of Education. The purpose of research data and reports is to inform the changes, but the information does not determine what changes should be employed. In the next section, I will present the findings on the implementation of the curriculum policy to a wider community of practice from the perspective of the policy makers. From the analysis of the interviews, it is certain that this process also adopts a top-down approach.

7.1.1.2 Using a top-down approach to implement the policy

The top-down approach to decision that was evident in policy design is also mirrored in the process of policy implementation. Ava described the process of policy implementation as commonly a cascade approach where disseminating information about the changes in the curriculum is seen as a process in which information generated by government leaders makes its way through a series of stages or tiers eventually to the teachers in schools.

This understanding is drawn from her interview, *'when let's say the new syllabus need to be implemented, of course we have our dissemination strategies...we will select the teachers to be the National Master Trainer..we train them and then after that ..these teachers will go down to the schools usually or at the JPN (State Education Department) level and then they will also train the Master Trainer which comprise of the teachers as well.. so these teachers will go..and then will also give..what you call..the input or this in-house training to all the Subject Coordinators (KP) of every*

schools..so all the KPs when they come back to schools, they have to give in-house trainings to their teachers..this is how it's supposed to be done' (Ava).

At what is described as 'the top tier', the Ministry selects and trains a group of teachers as National Master Trainers. These trainers visit the State Education Departments to train another group of teachers at the state level and afterwards those trained teachers pass on the input during in-house training to all Subject Coordinators from every school. These Subject Coordinators will then organise in-house training in their individual schools to brief the subject teachers about the changes in the curriculum.

Through the employment of a cascade method as the model of change, the teachers receive briefing and are 'trained' regarding changes in the curriculum. In addition, the Curriculum Development team also provides the teachers with a 'teaching and learning kit' that contains suggested activities for the transformation school programme. Isabella emphasised that '*...This kit reinforces the importance of active pedagogy, fun learning for deep understanding and continuous classroom assessment*'. The preparation of the kit is based on the research findings of the Research Team from the Ministry that revealed teachers needed a guide that describes the 'How-to' guidelines on formative assessment practice in the classroom; these guidelines contain instructional practice as how the Ministry expects practice to be carried out. She further described it as, '*...when our research shows us evidence that the teachers don't know how to give feedback, we thought that we have to spell out everything. But, when we spell out everything, it seems like we are limiting the teachers' creativity because they have to follow our directives. We initially thought the teachers could be creative to assess their students and be able to manage the classroom assessment. It turns out that they couldn't, so we feel that we have to provide everything*'.

In response to the feedback from teachers about the teaching kit, Isabella said that the Ministry is *'seeking for funds to conduct workshops and training on formative assessment practice for teachers in schools since that is highly requested by the teachers.*

The preparation of the teaching kit as mentioned by Isabella earlier indicates that the Ministry intends to actively support the teachers to make changes in schools, but it clearly does not encourage teachers' engagement in the process of exploring and owning the change process. As Isabella briefly mentioned, at their end, they are fully aware that providing such a teaching manual limits teachers' creativity and somewhat implies that teachers have to follow the directives from the Ministry for changes to happen. However, since teachers seem to lack confidence in managing classroom assessment, the Ministry has to step in.

'...when we spell out everything, it seems like we are limiting the teachers' creativity because they have to follow our directives. We initially thought the teachers could be creative to assess their students and be able to manage the classroom assessment. It turns out that they couldn't, so we feel that we have to provide everything' (Isabella).

Essentially, these examples demonstrate the process of policy thinking, policy making and policy implementation that is centralised and highly bureaucratic. In this kind of governing structure, there is a potential for a power struggle between the educational leaders and teachers in the process of top-down approach to curriculum change.

In the next section, I will present the analysis of findings that illustrate the role of teachers during the process of policy enactment as perceived by the policymakers.

7.1.2 The role of teachers during the process of policy enactment

7.1.2.1 Teachers are expected to learn about the changes in the curriculum

The perception of policymakers about the role of teachers in the process of change that emerged from the analysis of the interviews is that they see the responsibility of making changes in the classrooms as the teachers. Both policy makers made reference to actions taken to urge teachers to *'accept the changes positively and to change their attitude and mindset to be able to translate the curriculum practice into practice'*. Isabella expected the teachers to quickly learn and embrace the changes after receiving professional training sessions from the Ministry and asserted that the information regarding the changes are described in the education blueprint. She argued that *'it is the responsibility of the schools and teachers to read and understand it, but they don't seem to be able to do it'*. She then expressed reservations about the process by saying, *'...probably, they don't have anyone to explain it'*. From these expressions, she seems to blame on teachers' attitude as not self-sufficient to learn about the curriculum change despite being provided with training. Additionally, she seems to suggest that teachers do not take responsibility for seeking information about the changes even though information about the changes has been described in the Blueprint. On that note, she personally wished that the teachers could have been more accepting of the changes and hoped that they could understand the direction and goal that the government wanted to achieve. She sounded upset with the teachers when she expressed this because in her view, they do not understand our (the Ministry's) intention and aspiration for the curriculum, yet they respond to the changes negatively. She said, *'...teachers don't understand what we want to achieve. So, when we inform them about the changes, they feel that the Ministry keeps making changes to the policy'* (Isabella).

Ava also consistently urged the teachers to change their attitudes and mindset during the process of enactment so that they could deliver the changes effectively. She seemed to view the process of change as one where the role of an educational leader is to provide the training and materials whilst the teachers have to work out how to translate changes in the classroom. She illustrated this by saying, '*...we still need to really train our teachers...probably our teachers need to do more homework and to do more on their part*'.

Ava suggested that teachers should not be instructed or guided during the process of change. They need to naturally have the 'right' attitude since they have acquired the knowledge in the university, and using that knowledge, they should be able to embrace change and therefore, should be proactive in discovering knowledge to make changes happen. She suggested that teachers need to read and, through considerable reading, they would become experts in the subject. If teachers would make this increased effort, Ava argued, Malaysian society would be impressed and this would help to re-establish trust in teachers. She expressed this by saying, '*it all starts with attitude of the teachers ..teachers need to be naturally..be proactive..you need not be told over and over again what to do..you need to read up a lot on your own ..and you have to be the expert in that subject so that you know even the parents, the community will look up to you... that's the kind of teachers that we need in this country*' (Ava).

In the end, Ava concluded that the enactment of the policy would be successful if teachers possessed qualities that could facilitate the curriculum change process to be successful.

Generally, the perception of these policymakers was that the responsibility for making changes in schools and classrooms lay with teachers. To them, the job of a policy maker was to provide training and prepare materials and, with all these resources such as the teaching 'kits', teachers should be able to transform their classrooms. The policymakers argued that teachers should not be defiant and instead, accept proposed changes as the Ministry was doing its best to improve education in Malaysia. However,

there was little recognition of challenges that teachers might face such as there was no reference made to the importance of context and of increasing demands on teachers in having to deal with students from diverse backgrounds. This is an example of how the power struggle identified earlier is playing out in the relationship between policy and practice. This is a critical point to consider during processes of change that I will return to later in this thesis.

7.1.3 The understanding of classroom assessments from the perspective of policy makers

In the interviews, the policymakers articulated the purpose of classroom assessment theoretically. For example, Isabella described it as, '*...classroom assessment is used to improve teaching...We identify which part of the topic that students struggle to understand, and we improve our teaching based on this information*'. While Isabella perceived classroom assessment for teaching improvement, Ava simply described it as a process where "*the teachers must be an expert to assess the students*".

However, the language of policy makers at times suggested that they believed assessment could serve multiple purposes that are related to both learning and judgement. For example, Isabella added to her earlier description of classroom assessment by saying, '*...it is important for the students to 'achieve our minimum standard*'. The minimum standard in this context refers to the mastery level determined by the Ministry to ensure that students have demonstrated the knowledge and skills required for a particular subject. Particularly, this expression gives the impression that assigning the mastery level to students is done for the purpose of standard setting and there is no reference to other possibilities such as using evidence for feedback purposes. It was also suggesting that classroom assessment and assessment to measure minimum standards are separate forms of assessments carried out by the teachers.

In the interview with Ava, a further issue arose. She raised concern about the dependability of teacher-based assessment and described what she believed to be a drawback of classroom assessment. She expressed concern about *'the quality of standardisation'* between schools. She said that parents have difficulty in trusting teachers' judgement in the context of classroom assessments because of problems with standardisation. For example, she said, *'...she'll (the student) get a Level 5 (from a teacher in one school), but in other schools, she'll be given a Level 6'*. This expression also suggests that parents are not well-informed about the purpose of the mastery level and how it is supposed to inform the teaching and learning process.

The interviews with the policymakers made little reference to the importance of the engagement of students in the assessment process. Ava exemplified this when she said, *'... how you assess your students..it's like on-going ..it's on-going from January till the end..so in that way the teacher has to continuously doing that..the teacher must be an expert..you must know how to evaluate your students'*. From this articulation, there were no references made to peer or self-assessment or to the importance of dialogue between pupils and teachers or amongst students; instead, formative assessment is a practice of assessment performed by teachers, and it should be conducted throughout the schooling year.

However, there was a significant emphasis on the use of assessment evidence to account to parents on their children's progress. Isabella described the main purpose of classroom assessments is to inform parents about their children's academic progress in the classroom. *'The purpose of the assessment is for the sake of the teachers to inform the parents about their children's performance in the class. Parents should use that information to provide assistance at home'*. In this case, Isabella highlighted the parents' role in assisting students' learning at home, which suggests the need for parents to cooperate with teachers in helping students to improve their learning process.

In conclusion, the analysis of the interviews with these policy makers shows that the policymaking and policy-implementation process in Malaysia reflects a top-down approach. During the policy implementation phase, the Ministry has prepared training, workshops and is even planning to produce teaching 'kits' for teachers to materialise the changes into effective classroom practice. On that note, the policymakers feel that teachers must change their attitude and mindset about the changes; instead of complaining about the change initiatives, they should be more proactive to translate the policy into practice. However, as much as they encouraged teachers to be proactive about the curriculum change, the responses articulated by the policymakers about classroom assessment did not express consistency in their personal understanding on that matter. Isabella showed conflicting views by assuming teacher assessment to be a formative practice to inform teachers and parents about students' learning as well as a tool to evaluate students' mastery level, while Ava assumed teacher assessment to be a process of evaluating students' learning progress. The findings from these interviews inform us that there is an issue of power play in these processes of change represented by the lack of interaction between policymakers and teachers. The interaction is critical to increase understanding from both sides about the issues and challenges of curriculum change process faced by both policymakers and teachers.

The following section is a presentation of the analysis of the interviews with the head teachers from both participating schools. The significance of exploring their perception is to understand the processes of change at the school level.

7.2 Head teachers

From the analysis of the interviews with head teachers from participating schools, there are three areas of curriculum change process that can be explored. First, the data has informed us on the perception of head teachers on the policy implementation and enactment process in their schools as well their knowledge of KSSR curriculum policy. Second, the analysis of the interview further informed us on the perception of

head teachers about the role they play in the processes of change. In this part, we learn that the perceived role of head teachers as implementers is related to the way the Ministry implements the policy. Lastly, I also present examples that show a lack of leadership quality among these head teachers in leading changes in their schools.

The selection of head teachers in Malaysia has been linked more to tenure than to competencies (Ministry of Education, 2013). Teachers with experience in an administrative role can apply to the Ministry to be promoted as head teachers. In recent years, potential candidates for head teacher positions have been required to undertake administrative training organised by a specified organisation under the administration of Ministry of Education. The role of head teachers in schools is mainly to mediate the information received from the Ministry and State Education Department and to oversee the management and operation of the school.

The selection process for head teachers seems to be dependent on decisions in the Ministry of Education. Therefore, I assume that they are obligated by the directives from the Ministry. The following section presents the perception of head teachers on the curriculum policy and the enactment process of the new curriculum in their schools. The information can be used to enlighten us on their perceived role as head teachers in the process of policy enactment.

7.2.1 The implementation and enactment process of KSSR

The analysis of the interviews related to this aspect reveals that the head teachers have interesting views on the knowledge of KSSR. First, their knowledge of the curriculum policy is not comprehensive. Another emerging theme from the analysis is their belief about education as they argue for education for learning purposes or for accountability purposes. These aspects will be explained in the following sections.

7.2.1.1 The knowledge of head teachers about KSSR

The analysis of the interviews illustrates that the head teachers are not able to articulate clearly the purpose of the newly developed curriculum policy, KSSR. Ismel from School A described KSSR as a curriculum that emphasises the development of four skills which are reading, writing, arithmetic and reasoning and that the aim of the curriculum is to produce independent students.

“In KSSR, it emphasises on 4 elements which are Reading, Writing, Arithmetic and Reasoning...reasoning promotes higher-order thinking skills...Besides that, we want to produce students who possess qualities for the 21st century such as independence and able to search information by themselves.”

This response shows that he perceives KSSR as a curriculum that promotes thinking skills, building independent and being resourceful citizens.

Bianca, the head teacher from SCHOOL B viewed KSSR as a curriculum policy that helps to build students who are *‘knowledgeable, skillful and possess values that make them a whole-being individual as reflected in the National Education Philosophy. The students are considered whole-being in terms of their physical, emotional, spiritual and intellectual’*. She then added that the curriculum also has an additional domain to be mastered by students after reading, writing and arithmetic, and that is reasoning skill. Analysing the responses of these head teachers about KSSR, both of them were able to articulate only certain parts of the curriculum and unable to explain comprehensively other aspects of the curriculum such as the background and the aim of the curriculum as well as the major changes of the curriculum that could impact the teachers and students.

The next section contains information on the belief of head teachers which their responses have revealed the values they perceive in education.

7.2.1.2 The belief of head teachers on education: education for accountability or education for learning?

From the analysis, a characteristic of the head teacher that is quite prominent is their perception of educational values. For Bianca, the head teacher of SCHOOL B, her main concern and, seemingly, goal that she wanted to achieve during her tenure as a school leader was getting recognition or award for excellent performance recorded by the school. She even shared her personal achievements while being school leader in other schools for the past years, and her perception about receiving the award in the current school.

'You see, two schools were nominated for the award of Excellent Head Teacher – School X and School Y. The award is usually offered to high-achieving schools... But, I don't think this school is going to be nominated for the award since this school doesn't achieve a full percentage of LINUS (Literacy and Numeracy Screening). Apparently, that is one of the criteria for the nomination' (Bianca, SCHOOL B).

From the response, it suggests that this time around, she also hopes to be nominated for the award, but she is aware of the school's achievement based on the LINUS report, and she does not seem confident about it.

Another example that shows Bianca's choice of educational value is her concern about maintaining a good ranking of the school. Schools are ranked according to 'Band', which goes from non-achieving schools to high-performing schools, and ranking is decided based on the report of the school's self-evaluation practice. The criteria for school's self-evaluation are determined by the Ministry to which head teachers are responsible for preparing the report. Her concern about ranking is demonstrated as follows:

“We also have to be cautious with the Band category. We will fill up the details in the form for quality assurance, and if everything is fine, we could upgrade our school’s Band. Otherwise, there is a potential that our Band is graded down. If the school receives a band 1, that’s considered as excellent. So, it has the potential to be a high-achieving school” (Bianca, SCHOOL B).

This is another example that clearly indicates her perception on the value of education – aiming for recognition and ranking. This belief will shape her behaviour while leading the change process in her school. When she was asked about her perception of the curriculum change, she responded, *‘Well, if we look at the objective of the reform, I think it’s good and I agree to it. I’m sure they’ve done the research, so we have to accept it. Even if we don’t agree to it, there’s nothing we can do because the government has decided on it’.*

Her response indicates the behaviour of a passive recipient of a government policy about which she does not seem to be critical. There was no reference made to show her concern about the teaching and learning culture in her school that could have been challenging to enact the government’s curriculum policy.

On the other hand, the head teacher of SCHOOL A, Ismel, does not seem to emphasise school’s ranking; in fact, he does not support the practice.

‘Actually, this practice of comparing schools’ performances shouldn’t happen, but unfortunately, that has always been the tradition after the PSAT exam results (exit examination in primary schools) were announced’.

He also expressed his concern about describing the value of education in terms of students’ achievement. This is exemplified when he was asked about parents’ reaction about the curriculum policy that is trying to move away from examination-oriented learning, he said, *‘Well, our society (parents) honestly, puts a high value on achievement actually... They are concerned about the amount of A’s that their children have achieved’.* From the response, he does not seem eager to value education based on comparing students’ academic performance.

Ismel also showed clearer understanding about his school culture. He seemed to have been interacting with teachers in his school to understand their behaviours while enacting the curriculum change. For example, from his observation, he was aware that teachers in his school were still lacking in translating the curriculum into practice.

'If we look carefully in KSSR policy, it promotes a learning process that is more flexible... It's just that we are not used to it and still teach using the traditional approach. In terms of the content, we are following the KSSR content, but in terms of its pedagogy, we are still lacking'.

Furthermore, Ismel also showed support to his teachers to build a community of learning, and he was aware about it.

'I'm pretty sure it (community learning practice) can be observed within smaller group of teachers who teach the same subject... Starting this year, 2017, we are emphasising on Professional Learning Community (PLC) among teachers. It is a form of collaborative teaching and learning process for their subjects'.

From the examples above, it is certain that the leadership quality can shape a successful change process. The leadership quality is determined by the belief of head teachers about the values of education which is important in building the school culture. Bianca and Ismel perceive education differently; hence, they behave differently in leading the change process in their schools. Bianca does not seem motivated to drive changes in her school as she is more concerned with her school's ranking. While Ismel does not support such practice, he seems more apt when describing the change initiatives and has a clearer understanding of his role to drive changes such as by supporting the interaction among teachers in his school.

7.2.1.3 The perception of head teachers on the process of implementation

The analysis shows that the implementation process of KSSR from the central government to schools reflects a top-down change process by employing the cascading strategy for disseminating information. From the perspective of Ismel, the head teacher of SCHOOL A, cascading strategy is employed to disseminate information on the curriculum to a wider community of practice.

'The Ministry is actively organising programmes [related to the implementation]; but due to the large number of teachers in Malaysia which is about 400 thousand people, the implementation is cascaded by levels' (Ismel, SCHOOL A).

He further explained how cascading strategy is operated in the process of informing practitioners about the new curriculum policy.

'Prior to 2011, all head teachers and the administrative officers have been informed and briefed... After that, the teachers were briefed according to the subjects. This briefing session was conducted to the subject coordinators. Then, the subject coordinators would organise an in-house training in their respective schools' (Ismel, SCHOOL A).

The cascading strategy that has been employed seems to illustrate that the information is supposed to be transmitted from one tier to another without any reference made to illustrate how this information is supposed to be processed and treated in different learning contexts.

The head teacher from SCHOOL B also described a slightly different process of the implementation process.

'Before the official implementation, the head teachers were called for a briefing. Then, we organised an in-house training for the teachers to deliver the information that we've received during the briefing' (Bianca, SCHOOL B).

The above response informs us that the process of transmitting the information about the curriculum policy to teachers was done by the head teacher of the school after she was called to attend a briefing. Though it still reflects a cascade strategy, the operation of cascading is described differently by these head teachers. Despite the differences, it is clear that head teachers do not have the authority to determine the processes of curriculum change in their schools. Their role is depicted as implementers of the government policy and the information received during the briefing and training sessions should be utilised to manage the change process in their schools. However, we are unable to really understand what has been learnt during the briefing and training sessions because such details could not be elicited from the interviews. A better understanding could be established if such information were made available in the interviews.

From the process of implementation of the policy, we learn that the role of head teachers is deemed as implementers, and they do not have the authority to decide on the enactment process of the policy in their schools. The government policy is standardised and should be enacted as how the Ministry desires. In the next section, through the analysis of the interviews, I will present the perception of head teachers on their role in these processes of change.

7.2.2 The role of head teachers in the processes of change

From the analysis of the interviews, both head teachers displayed the characteristics of implementers who should obey the Ministry's directives. Bianca demonstrated this behaviour when she said, *'...even if we don't agree to it (the government's policy), there's nothing we can do because the government has decided on it'*.

Ismel also displayed a similar behaviour when he was asked about the significance of integrating knowledge of technology in the classroom. To this, he simply responded, *'I think that's the decision made and understood among the policy-makers'* (Ismel, SCHOOL A).

Both of them did not demonstrate an effort to understand the meaning behind the change initiative or to challenge the implementation. This suggests that the head teachers realised their limited power as head teachers who do not have the authority to question the decision made by the Ministry after the policy is implemented.

The implication of having such an attitude about leading changes in schools is that they tend to depend on the Ministry's directives including the preparation of information about the change. There is a lack of initiative to learn about the change process among teachers in their schools. For example, when Ismel noticed the lack of information of the new curriculum policy provided by the Ministry on official online platforms, he felt that the information is deliberately made unavailable for people to access.

'Apparently, the use of internet and technology is not widely applied in Malaysia. If such information is made available in the Ministry's website, we can easily access it... Probably, there is information that is confidential and shouldn't be accessed by public' (Ismel, SCHOOL A).

Bianca also felt that the initiative to drive changes should come from the Ministry and that teachers in school should follow through. She commented on the teachers' behaviour on the process of change among teachers. *'The teachers are always ready for any changes that are bound to happen. With the training, the teachers can adapt to the changes eventually'.*

Ismel then commended the effort of other teachers external to his school who have developed a blogspot to share interesting or innovative classroom teaching and learning practice and to upload the important documents related to the curriculum change. However, there was no reference made by Ismel to initiate such a practice in his school.

'The blogs are teachers' initiatives to share the information and support each other, especially from those who have attended the training' (Ismel, SCHOOL A).

Furthermore, it is not clear as to how the information is understood and used by other teachers who obtain information from the blog, and to what extent the information shared is coming from reliable sources. What stands out from these analyses is that the head teachers do not feel that the change process should also be localised instead of depending on the standard instruction from the Ministry. This shows that the head teachers display the characteristic of implementers instead of playing an active role in leading the change process in their schools.

7.2.2.1 The mindset of implementers shaped by the Ministry's regulations

From the analysis, there were aspects of the findings that indicated the development of an implementer mindset among head teachers was shaped by the Ministry. For example, they have been instructed to observe teachers' classroom practice and they need to record and report these observations to the Ministry.

'The teaching observation, which is now known as PDPC (translated as learning and facilitation), is part of the head teachers' responsibilities... It's the head teacher's responsibility to manage and organise the task of teaching observation as stated in the circular letter number 3-1987 from the Ministry' (Ismel, SCHOOL A).

Previously, this task was carried out by the school inspectors, and the shift of this role to head teachers is seen as an initiative of the Ministry to promote the value of inclusiveness in the processes of change. This effort is supposed to reduce the power of central government in the process of change while at the same time, encouraging head teachers to be active and practice effective leadership quality in their schools.

However, the use of observation reports by the head teachers has an effect to the way this observation is operated. For example, Bianca seems to aim for excellence in her report. Before the observation, she would meet personally with the teachers and inform them of the criteria of observation that are expected from the Ministry so that they can prepare accordingly. She expressed this as follows:

“At the school level, the procedure of observing teachers cannot be done impromptu. As the observers, we have to consult and discuss with the teachers on the lesson that’s going to be observed. We have to advise them on the aspects that we expect to see during the observation especially on the use of technology in the classroom. Our intention is to inculcate the teachers’ practice to match the critical elements in the curriculum. When they are familiar with the elements, they’d apply them in their teaching practices at all times, not just for the sake of observation and evaluation’ (Bianca, SCHOOL B).

However, practising such an approach may not lead to sustainability. During impromptu visits to the classrooms, Bianca commented vaguely on the improved ‘learning environment’ and ‘seating arrangements’, but she did not make further comments on the teaching practices.

On the other hand, Ismel’s approach to maintaining effective classroom practices according to the curriculum policy is by practising consistent interaction with teachers. He seems to aim for building collegiality among teachers as he sets up a regular meeting with them to share ideas of interesting classroom activities that can be incorporated during the learning process.

‘I am exercising a policy whereby there’ll be a monthly assembly and interaction session with the teachers. These sessions are used as a platform to inform our teachers about the changes that are happening or set to happen in the future. Other than that, we’ll also discuss about activities that we can apply in the classroom during the learning and facilitation process’ (Ismel, SCHOOL A).

7.2.2.2 The perception of head teachers on teachers’ teaching practices

From the interview data, I also learned about the perception of head teachers of the instructional practices of teachers in their school. Both head teachers observed that teachers seemed to ‘spoon-feed’ their students with knowledge instead of encouraging students to learn independently. This was exemplified when the teachers

could not integrate technology into the classroom activities due to the lack of facilities. Ismel felt that teachers had to spoon feed their students to ensure they obtained important knowledge for examination purposes.

'...the use of computer lab depends on the timetable. That's why the teachers feel even more desperate to spoon-feed because otherwise lessons cannot proceed and our system is exam-oriented because we want to achieve good result' (Ismel, SCHOOL A).

Besides the limitation on technology facilities, teachers tended to spoon-feed their students because students did not gain knowledge that is pertinent for the examinations from taking part in interactive activities such as group discussion. Ismel said,

"...if we let the students do discussion, it's very difficult for them to get an A in the exam...Before this we were hesitant to have a learning process that is student-oriented because it usually does not produce an outcome that we've desired. For example, when we give a topic for students to discuss in groups, the outcome is rather...well, we as teachers always have a high expectation from our students' performances...that's why we feel it's better to provide them with the lesson input' (Ismel, SCHOOL A).

Similarly, Bianca also felt that teachers could not be creative because they needed to finish the syllabus before the examination. *'Since we need to complete the syllabus to prepare the students for PSAT (national exam), we can't do interesting activities in the classroom. We're catching up with the time and we don't want to be doing extra classes because of insufficient time' (Bianca, SCHOOL B).*

Analysing the perception of head teachers of their role in these processes of change has revealed that head teachers do not perceive themselves as playing a significant role in shaping the changes in their schools. This representation of leadership quality has an adverse effect on their perception of the role of teachers in the enactment process. They perceived that the changes in classroom practice are externally driven.

Rather than being conscious that they play a significant role in making changes happen in schools, they still believe that teachers are able to make changes with training provided by the Ministry.

Bianca reiterated this by saying, *'The teachers are always ready for any changes that are bound to happen. With the training, the teachers can adapt to the changes eventually'* (Bianca, SCHOOL B).

Ismel also confidently said, *'The teachers in this school do not have problem with teaching and learning activities including matters related to the preparation, enactment and improvement'* (Ismel, SCHOOL A).

From the responses, both head teachers feel confident that the teachers are ready to make changes in line with the government policy. Even though the outcome from classroom observation showed that teachers did not exhibit teaching practices in support of the curriculum policy, there was no reference made to show that head teachers should be working together with the teachers to improve the situation. In their view, teachers should be able to make changes if they receive professional training from the Ministry. This places the role of head teachers as external to the change process. This behaviour could be related to their perception that they are implementers of the government policy who have limited authority and power in leading changes.

7.3 Teachers

In this section, I will present the findings obtained from the analysis of the interviews with eight participating teachers in this study. Generally, the primary objective in this section is to seek understanding of the teachers' knowledge and their understanding of KSSR curriculum policy and how their understanding has shaped their belief on their classroom practices.

There are two broad themes emerging from the data: the perception of teachers of KSSR curriculum policy and the perception of teachers of their teaching practices. There are three main topics that emerge from the perception of teachers of KSSR which are their knowledge of KSSR, their understanding and perception of school-based assessment and their perception of examinations. Under the heading of unravelling their perception of teaching practices, there are five sub-themes that represent their views:

1. teachers were able to establish student-oriented learning
2. teachers were unable to make changes to their teaching practices
3. teachers adopted a teaching for examination strategy
4. teachers had limited knowledge of how to practice peer and self-assessment
5. teachers were able to give feedback for students' improvement

The following section will reveal teachers' knowledge and understanding about KSSR curriculum policy.

7.3.1 The understanding of teachers about KSSR curriculum policy

The analysis of the interviews has led to emerging ideas about teachers' understanding of the new curriculum policy, KSSR. Mainly, the understanding of KSSR among teachers is either as a student-oriented learning concept or as a curriculum policy that does not have a clear framework. The following section will provide the detail on each of these perceptions.

7.3.1.1 KSSR is a student-oriented learning concept

From the analysis, a common understanding perceived by teachers about KSSR is that it is a student-oriented curriculum framework. However, the interpretation of what constitutes 'student-oriented learning' varies between the teachers. Nora perceived a group discussion as a form of student-centred learning. She claimed that the previous curriculum was teacher-centred since *'everything was initiated by the teachers, But, this new curriculum [KSSR] gives opportunity to students to express their ideas especially in group discussion'*. By having group discussions, she believed that *'the role of the students has become more significant and the role of the teachers has become of a facilitator'*.

Shirley argued that KSSR is a curriculum policy that promotes students' independent learning. She said that, *'The curriculum policy is to avoid the students to be dependent on the teachers'* and that *'teachers had to give little input to allow the students to work their own ways to learn more on their own'*.

Nelly on the other hand, viewed student-centred learning as having the students to *'think out of the box'*. Moreover, in KSSR curriculum policy, she realised that the *'students have to express their responses more as compared to KBSR'*.

Teachers were able to articulate one characteristic of the curriculum as student-centred learning, but even then their understanding differed from one person to another. Despite the differences, these interpretations suggest that teachers were aware that students play an active role in the learning process.

There was one teacher who initially perceived KSSR as a curriculum policy that was *'based on students'*. This expression could be interpreted as implying a curriculum design that centralises students' learning. However, he later expressed a different view on KSSR when he said,

'...but because my students are mostly among low-achieving students, I still have to help them. If you let the students find the answers on their own, they will not be able to complete them until the class ends' (Ian, SCHOOL A).

This particular teacher contradicted his view as he went on with the interview. The latter part of his response showed that he believed that student-centred learning activity which was represented by independent learning could not be sustained in a classroom where the students were among the low-achieving students. In his view, this group of students often needed his guidance to help them complete the class exercise before the lesson ended.

From these responses, we learn that the concept of student-oriented learning in KSSR is interpreted differently by the teachers and there is also one view inconsistent with it. This shows that there is a larger issue underlying the different opinion; it also suggests that teachers do not have a clear understanding on the framework of KSSR curriculum policy based on their lack of coherence when they express their view about it.

7.3.1.2 The framework of KSSR is incomprehensible

Besides the few teachers who perceived KSSR as a student-learning concept, the analysis also shows that there was a teacher who claimed that she did not understand what KSSR curriculum policy is about. She said,

'...if someone asks me about KSSR, I don't know what to say. When I started teaching using the new curriculum last year, I was clueless. I just got some information from my colleagues who attended the trainings.' (Rachel, SCHOOL B).

In the interview, she regarded her recent experience of enacting the new curriculum and the insufficient training courses as the factors that contributed to her lack of understanding about the curriculum policy. She further explained that she is among a few teachers in the school who started enacting the curriculum in 2016, and this was

five years after everyone has enacted the curriculum. This was attributed to the gradual implementation process by which Rachel had to wait five years before she was introduced to the new curriculum.

Moreover, her involvement in professional training related on KSSR was also affected because the training sessions were usually organised according to specific subjects. For example, if the training was to train teachers who taught Malay Language for Year 1, the head teacher identified a suitable teacher to attend the training as the representative from the school. Since the professional training sessions were largely conducted at the early stages of the curriculum implementation, Rachel had never been selected; therefore, she had only been informed about the curriculum from the in-house training organised at the school level.

'...during the change process, other teachers, who were experiencing the change at the initial stage were called to attend for various training courses and briefing. And I basically don't know anything... the information I got during the in-house training was incomparable to those who attended the training for 3-4 days. In the end, what do I get actually?' (Rachel)

The analysis of the interview also reveals a set of responses that show that the teacher has little knowledge about the curriculum policy. Nelly described KSSR curriculum policy as a *'student-oriented learning'* and *'it is for 21st century'*. In order to exhibit skills and knowledge related to this concept of learning, the students had to *'give more responses'* and *'think out of the box'* as compared to KBSR, the previous national curriculum policy. As she was explaining, she also came to realise that there were also activities that involved group discussion which was an example of an opinion-sharing activity. Soon after, she went on to say that *'the new curriculum [KSSR] is not much difference from KBSR. We still teach the same things. The difference is just in terms of assessments and activities'*.

Her hesitation in expressing her thoughts on KSSR highlighted her limited knowledge about it. She was not able to make a clear distinction between the new and old curriculum policy, and therefore, she was not able to elaborate well on the key aspects

of the new curriculum. Responses from these teachers, Rachel and Nelly, could also indicate that there are serious issues underlying their lack of knowledge about the curriculum policy, and these issues may lead to complexity in other aspects of the processes of change, and I shall address these issues later in the thesis.

Knowledge of KSSR curriculum policy should also include knowledge of its assessment framework. The next section contains teachers' perception on school-based assessment framework which is an important aspect of KSSR curriculum design.

7.3.2 The perception of teachers on school-based assessments

School-based assessment is an important aspect of KSSR because it is part of the curriculum policy design. Exploring teachers' knowledge about this assessment framework will further enrich the findings that encapsulate their knowledge and understanding about this curriculum policy.

7.3.2.1 Classroom assessment measures students' learning in a summative manner

From the analysis, a common theme emerged from the interview data that teachers perceived school-based assessment as just the same as classroom assessment practice intended to measure students' learning for summative purposes. Here are some articulations from the teachers as examples:

'School-based assessment (SBA) is aimed to assess the students according to the learning intentions...it was conducted by looking at specific topic and skills' (Pearl, SCHOOL A).

'SBA is for me to assess students' skills' (Nora, SCHOOL A).

'...it's (SBA) more specific' ... Last time, I feel that the assessment was based on tests and exams. Now the assessment is more towards skill-based?' (Nelly, SCHOOL B).

'...the mastery of the students in learning is based on the topics. We're not assessing them using the exams, but we assess them using SPK (Standard Content Assessment) rubrics' (Flora, SCHOOL B).

The excerpts above highlighted that these teachers defined school-based assessment in the context of classroom assessment practice which is used as an instrument to measure students' learning and assumed that such practice is a replaces tests and examinations.

Peter, a Science teacher, shared his thoughts on this. He perceived school-based assessment as, *'an assessment that is school-based and we need to assess the students individually. With that, we get to know the students' true potentials.'*

He provided additional information on what he thought to be the purpose of classroom assessment which was to identify students' true potentials.

"There might be cases where some students, no matter how many exams they sit for, they cannot get excellent results. But, they are good in acting. So, with SBA, we acknowledge that these students are talented in one aspect such as acting. Later on, we could suggest them to go into fields that are suitable with their potential'.

Peter hoped that the grading used for school-based assessment would have an equal weighting to indicate students' achievement and that it could be used for admission to higher education.

The examples above clearly show that many teachers perceived school-based assessment as classroom assessment, and that the reports could be used to replace examination results.

Since the teachers viewed classroom assessment as a form of measuring students' performance for grading purposes, Nora expressed her concern about her students' scores, especially the low-achieving ones, and she is willing to modify the assessment activities as long as their scores could be improved.

“For the low-achieving classes, the activities have to always be of their interests...if the activities just involve discussions, they wouldn’t feel interested with the lesson...so, in that case, it’d be very difficult for them to achieve Mastery Level 4 and 5’ (Nora, SCHOOL A).

This response contains two important points that illustrate the importance of awarding high scores to students. Firstly, the classroom activities have to capture the interest of the students and she observed that low-achieving students were not interested in group discussion activities. In her view, if the students were not interested in a particular activity, it was difficult for them to perform well in the assessment and it would be difficult for her to award a high score to her students. She even went further by allowing her students to review the assessment just so that they have better chance to improve their mastery level. She expressed this by saying, *‘For Malay Language subject, the assessment is according to the topic. After the assessment, we can improve the performance...If let’s say after we’ve done with the topic, we can review it again to improve the mastery level’ (Nora, SCHOOL A).*

Nora was not the only teacher who modified her assessment strategy to benefit students. Flora, a Mathematics teacher also gave her students a chance to improve their mastery level by encouraging them to do more exercises so that she could amend their score.

‘I personally collect the exercise books for marking and also for the assessment. After I’ve done that, I return the books to the students and display their performances that show their Mastery Level...So, from there, the students can improve themselves. I always tell them to improve themselves, do more exercises and I can amend their Mastery Level’. (Flora, SCHOOL B).

Drawing from the above responses, it is clear that teachers perceive school-based assessment as a form of measuring students’ academic performance, similar in purpose to tests and examinations. They also supported the idea of using this assessment score to replace the results obtained from examinations to measure

students' learning. There was no response recorded to show that they use the assessment score for progressive purposes, and this has informed us of their lack of knowledge and understanding about the assessment framework and how it should operate to support students' learning.

Drawing from the teachers' views of classroom assessment illustrates their confusion or lack of knowledge about the assessment framework in KSSR. Building on their perception that classroom assessment is used to measure students' academic performance, there were teachers who believed that doing examinations inhibited their classroom assessment practice. For example, Peter, a Science teacher, claimed that sometimes he could not do classroom assessment to cater to the teaching for examinations and that did not surprise others.

'...So, we always set a target to finish all syllabus by the middle of the year. Surely, there'll be no more SBA during that time. Especially for Year 6 students. We would focus on finishing up the content...So, if there were anyone to argue about this, we would just say that we're speeding things up because of the exam. They would also agree with us and to an extent understand our action'. (Peter)

Since there were teachers who thought that examinations were a hindrance to an effective classroom assessment practice, there were also teachers who believed that without examinations, they could make changes happen in the classroom.

Flora expressed this as follows:

'If there's no test, we can change this'.

She continued to argue that having two separate assessments, classroom assessment and formal examinations, is unnecessary because the results obtained from each assessment do not complement each other. For example, if the students were awarded with Mastery Level 6 which is the highest level for classroom assessment, their results from the examinations should also mirror such achievement.

“If the students could do well in the exams, we would’ve imagined that they are able to achieve Mastery Level 6, and that’s why we really need to assess them properly’.
(Flora)

Since there are separate reports that provide information about students’ performance, teachers were always faced with difficulty to deliver the reports to parents.

“We’re always concerned with some people who don’t understand this especially parents. They might wonder, if their kids could get an A in the exam, why can’t they achieve the highest Mastery Level which is 6? So, we need to explain the difference between the two to parents who don’t understand’ (Flora, SCHOOL B).

Shirley also asserted the importance of focusing on classroom assessment as she thought that having two summative assessments was redundant since they were used for same purposes.

“If you want KSSR, you have to abolish the exam-oriented system. You should abolish UPSR (Primary School Achievement Test). It’s enough to assign the students with bands that are equivalent to their ability. We don’t need UPSR at the end of Year 6’ (Shirley, SCHOOL B).

In short, the majority of the teachers in this study perceived the classroom assessment as a means to measure students’ learning for summative purposes; therefore, it should replace tests and examinations. On that note, teachers suggested educational leaders should focus on only one form of summative assessment because doing both assessments to achieve the same purpose seems redundant and a waste of time.

The analysis of the interviews further revealed that teachers perceived classroom assessment negatively and felt that it was burdensome. They felt it was burdensome mainly for two reasons: time consuming and the large number of students in a classroom.

Ian confessed that these two factors have caused him to assess students ineffectively. He was not able to assess all students fairly and for reporting purposes; he gave scores based on their examination results and class participation.

'I couldn't do a comprehensive assessment for all the students. I will only select several of them to assess according to the criteria given. Then, for the rest of them, I will assess them based on their exam performance and also from their classroom participation. (Ian, SCHOOL A).

Shirley added, *'...how can we do that when we have a lot to catch up – teaching, paperwork, online filing...and all of these have deadlines. Sometimes, when we're too drawn, we cannot cope with all these'*.

Though Ian seemed regretful of his action, he felt that doing classroom assessment was time consuming.

'This classroom assessment is an additional work to the current workload that's already burdening. Even though I understand about the needs of the new curriculum...but if I were to relate that to the time factor, that's what I think makes it difficult to carry out this assessment effectively' (Ian, SCHOOL A).

Shirley also expressed her feeling about classroom assessment which is burdensome. *'I just feel that the teachers' role nowadays is not just teaching. I agree with what the government is doing now is for the betterment, but it also means that the teachers' work has increased. We cannot cope with it'*.

There was another teacher who thought that the kind of workload that is burdening them is the clerical work which is closely related to the reports of classroom assessments. She also added that preparing teaching materials was not a burden to them; in fact, she felt satisfied in doing it.

"Actually, teachers do their work all the time, even at home and in the middle of the night. All those online reports that are not part of the teaching and learning preparation are the burden. Anything related to materials preparation for teaching, like the old

days, we've never felt that as a burden. In fact, we enjoy doing it more than all these online work' (Flora, SCHOOL B).

The responses from these teachers indicate their perception of classroom assessment as burdensome and not facilitating the teaching and learning process because it was merely used for reporting purposes.

Additionally, Pearl argued that the ineffectiveness of classroom assessment is due to the large number of students.

'...the number of students in a classroom is a hindrance to properly conduct the SBA. I believe that if we have less number of students, it will be more effective.' (Pearl, SCHOOL A).

Ian also added, *'I can't do for all the students [classroom assessment]. But if I select some of them, then it's possible'.*

The responses expressed by these teachers have informed us that the teachers have little knowledge of school-based assessment which is generalised as classroom assessment. Due to their lack of information about these aspects, they have developed a negative perception of the assessment framework and have not been able to use the information effectively. Therefore, they also felt that it was burdensome as they misunderstood the purposes of assessment.

In the next section, I will present the analysis of the teachers' perception of the significance of examinations in the classroom.

7.3.2.2 The perception of teachers on exams

In the previous section, teachers expressed their views on classroom assessment which they thought was used to measure students' learning which led to misunderstanding and confusion as well as frustration among them. They also suggested earlier that the Ministry should just focus on classroom assessment and abolish the national examination. In this section, I will present the perceptions held by teachers of examinations and the extent to which they would modify their classroom teaching for examination purposes.

In making preparation for the national examination, UPSR, Peter said that he would give full attention to preparing students for the examination and even cancelled doing classroom assessment for his students.

'...Surely, there'll be no more PBS (classroom assessment) during that time, especially for Year 6 students. We would focus on finishing up the content...So, if there was anyone to argue about this, we would just say that we're speeding things up because of the exam'. (Peter, SCHOOL A).

Rachel also referred to the importance of teaching for examinations and not doing 'KSSR' though it was unclear what that meant. In her response, she also implied that she may leave out topics that were not tested so that she can focus on preparing students for examinations.

"Most teachers including myself, we can teach according to the syllabus, but we tend to emphasise on the exams. Especially if we teach Year 6 students. It's not so much emphasised if we teach Year 5 and 4. But for Year 6, there are many programmes to strive for their excellence in the exams. So, with that focus in mind, we cannot focus so much on KSSR' (Rachel, SCHOOL B).

Besides leaving out certain topics and classroom assessment, Shirley even chose to give answers for the classroom activities instead of allowing students to actively seek knowledge because she had to allocate more time on teaching the content.

'We have to make sure that we have finished teaching the syllabus before the exam...and we can't afford to leave the students to learn on their own. What we can do is to discuss the answers in the classroom and the students copy them down' (Shirley, SCHOOL B).

The responses from these teachers contradicted their thoughts in the previous section. From this analysis, we learn that teachers are willing to leave out classroom assessment and even leave out teaching certain topics as long as they can use the allocated time to prepare students for the examination. In fact, there was also a teacher who was willing to inhibit students from exploring the learning process so that she could focus on teaching the content for the examination. The findings in this section indicates that teachers perceive examinations as highly significant in shaping their teaching behaviour in the classroom.

Building on the understanding that teachers' teaching practices are closely related to their thoughts on examinations, the following section contains their perceptions of their teaching practices. The analysis of findings in this section is useful to inform the review of their teaching practices in Chapter 7 of this thesis.

7.3.3 The perception of teachers on their teaching practices

7.3.3.1 Able to create a student-oriented learning environment

The analysis of the interviews has shown that there are teachers in this study who believed they have made changes to their teaching practices especially in promoting student-oriented learning. Particularly, there were two teachers who believed that they had made changes to their teaching practices. Pearl, an English teacher, believed that she had supported the student-oriented learning by '*encouraging students to do group discussion*' in which she perceived her role as a '*facilitator*'. Furthermore, she also thought that she had substantially changed her teaching practice because she followed the topics in the new curriculum document.

'For example, this new curriculum content has a new language learning component that is called Language Arts. Every week, this component of language learning is carried out for one hour' (Pearl, SCHOOL A).

She further added, *'Another new element in this curriculum is the use of a computer programme called FrogPlay. It becomes a platform for the students to learn by themselves because this software can be accessed from home'* (Pearl, SCHOOL A).

Ian, a Mathematics teacher, described his instructional practice that promotes student-centred learning this way:

'Previously, the teaching style was reflected a chalk-and-talk method. Now I explain the concept and let the students solve the mathematical problems on their own'.

His response indicates that his understanding of student-oriented learning is that he provides opportunities for the students solve Mathematical problems independently.

7.3.3.2 Unable to make changes to teaching practices

On the other hand, Peter admitted that his teaching practice *'has not completely changed'*, but he tried to follow the suggested teaching practices as closely as possible. He emphasised that his priority was to finish the contents of the syllabus before revising and reviewing the topics that the students were unable to comprehend. He usually reviewed these topics nearing the examinations.

Besides that, another teacher, Flora admitted that it was difficult to change her teaching practices because *'there are many other things that needed to change. Previously, our focus was mainly on exams. Now we also have to do individual assessment'*.

She was referring to the additional work represented by classroom assessment which she thought of as a challenge to transform her teaching practices.

In conclusion, teachers who perceived they had made changes to their classroom practice were focusing on classroom activities that could promote student-centred learning. Teachers who confessed that they could not make appropriate changes to their teaching practices attributed this to the pressure of preparing students for examinations and the burden of managing classroom assessment as well as examinations.

7.3.3.3 Teaching for examination purposes

From the analysis, two teachers have demonstrated their teaching practices to be teaching for examinations. In particular, Shirley, a Science teacher, argued that her students could not be nurtured to be independent. Despite acknowledging the benefits of using a technology-assisted programme to promote students' participation in the learning process, she strongly felt that the students were not able to learn anything if the knowledge and information did not come from the teacher, especially for low-achieving students.

'Those low and intermediate achievers are the most challenging...so, I end up spoon-feeding them the information and knowledge'. She also added that, '...we can't afford to leave the students to learn on their own. What we can do is to discuss the answers in the classroom and the students copy them down'.

In addition, Shirley thought that the younger students would not be able to learn independently because the topics were too difficult for them.

'these students are still young, so the level [of the curriculum content] is not compatible with their ability. So, it becomes a hindrance to the learning process. In the end, whether you like it or not, we need to spoon-feed them'.

Another teacher, Rachel, may not have expressed profound disagreement about allowing students to explore student-centred learning strategies, but in her classroom teaching she ensured that students were well-informed on knowledge for the examinations.

'While teaching, regardless of the topic or theme, I'd still include knowledge and information for exams. I even told them to memorise the structure and the formula because that's what they'd use in the exams' (Rachel, SCHOOL B).

The responses from these teachers clearly support the importance of teaching for examination purposes. Rachel, for example, had even prepared a writing template for the students to memorise because it was an important part in the examination. Shirley also had deliberately left out the science experiment activity because she wanted to finish teaching the syllabus to prepare students for the examination.

Even though this section represents the perception of only two teachers, they still inform us on what matters in the classroom from teacher's perspective. This information is also useful in clarifying the issues of processes of change in Malaysia, especially in exploring the relationship between policy and practice which will be discussed in Chapter 8 of this thesis.

7.3.3.4 Limited peer and self-assessment practice

Another topic that I want to present from the analysis is teachers' perceptions of peer and self-assessment practice. It is important to seek teachers' understanding of these elements because they contribute to student-centred learning.

However, the analysis showed that the teachers had little knowledge of peer and self-assessment practice in a way that fosters learning. Most teachers could not elaborate on self-assessment; however, they seemed more comfortable sharing their views on peer-assessment.

Among the responses elicited from the interview is this:

'Students are not sure of the answer. So, they need teachers to provide them the answers...If I let the students discuss the answers by themselves, they may discuss irrelevant issues which will make the class becomes noisy and it's also time-consuming'. (Pearl, SCHOOL A).

This was her justification for her lack of peer and self-assessment practice. She did not clearly articulate her understanding; hence, we are not certain about which aspect of this activity she referred to.

Flora and Nelly agreed that they had tried using peer-assessment practice to check each other's correct answers. Nelly even added that, *'they have done it (peer-assessment practice), but only sometimes and it is for high-achieving class. Low achieving-students are not able to do this'*.

Pearl also described her strategy of peer-assessment as an activity where students check each other's correct answers in the assigned worksheet.

'Usually, they will check their friends' answers for questions such as true/false statements, multiple choice questions (MCQ), cloze passage for grammar exercises and matching items'.

Nora, on the other hand, confessed that she had never initiated a peer-assessment activity because she felt that her students have similar levels of competence; therefore, no one is capable of assessing his/her friend's work.

'Ooo...so far, I have not done such activities (peer assessment). I feel that sometimes, these students are about of the same level. There is no one exemplary student whom they can refer to or be the person of reference' (Nora, SCHOOL A).

Peter also revealed that he had never done such activities. When he was asked to share his thoughts on the challenge of using peer and self-assessment practice in the class, he could not respond well; instead, he addressed other issues.

'Well, if the government wants to implement change in the curriculum, it should be in total, as a whole...but when the change is in a situation where...how do I put it into words, yea? Sometimes, there's one party who emphasises on school-based assessment. Well, it's good in terms of its policy...but there's also another party who is still exam-oriented. So, as teachers, we're always contemplating' (Peter, SCHOOL A).

From the responses above, it is clear that teachers have limited understanding and practice of peer and self-assessment. They seemed hesitant to elaborate and were only able to briefly describe their thoughts. Chapter 7 of this thesis contains the outcomes of classroom observation, and the information in this section can be used to inform a better understanding on the relationship between teachers' belief and practice which will be discussed in Chapter 8 of this thesis.

7.3.3.5 Able to give feedback for students' improvement

The analysis of the interviews presents the teachers' perceptions of the importance of giving feedback to students in the classroom. The data also informs us of the way teachers give feedback to their students. It is particularly important to understand the practice of giving feedback to students in KSSR curriculum policy design as it is one of the key components in the KSSR assessment framework (Refer to Chapter 3 for more detail).

The analysis of the interviews showed that teachers mainly perceive giving feedback as an important process for the students to identify their mistakes for self-improvement especially for examination purposes.

‘I seriously think that it’s really important to give feedback for every exercise that the students have done. Sometimes, it’s not that the students cannot get the right answer, but they are pressing for time’. (Nora, SCHOOL B).

Her response shed a light on her belief that students can get the correct answer if they have more time to think and prepare the answer. Pearl emphasised the importance of giving feedback for class exercises. However, she did not indicate clearly the purpose of giving feedback in her classroom. She also highlighted that her feedback after a particular test has been conducted was only given to the most problematic students or the excellent ones.

‘Well, I usually give overall feedback to my students especially for the homework exercises. For the feedback after the exams, I can only manage to give individual feedback to a handful number of students that often consists of either the most problematic ones or the good ones’.

Ian adopted a group-feedback session so that he could give a specific advice to students who have been identified as facing similar issues.

‘...So, apparently, this group of students is not mastering a particular topic, so I will gather them and give them feedback...but not a detailed one. (it is) to help them overcome their weaknesses... (Ian, SCHOOL A).

Peter on the other hand, seemed to have used the information to modify his teaching, a point which had not been identified from other teachers’ responses.

‘Sometimes, depending on the feedback, I give a general one to the class. And I would revise that particular topic with everyone. Because I don’t think it’s possible to give feedback to students individually...’ (Peter, SCHOOL A). Shirley also shared her struggle in giving feedback to students.

“I can manage to give individual feedback to only 2-3 students. I just don't have enough time to do all” (Shirley, SCHOOL B).

From the responses analysed from the interviews, the teachers shared a common understanding of the purpose of giving feedback to their students, and they were also aware of its significance to the learning practice. Furthermore, it was also a common practice among teachers to give group-feedback session rather than individual feedback due to time constraint. The practice of giving feedback from these responses illustrates a one-way interaction with students. There was no reference made that demonstrates the involvement of students in the process which may suggest teachers' lack of understanding of the purpose of feedback in fostering learning in the context of KSSR curriculum policy.

7.4 Students

In this study, the purpose of interviewing them is to explore their perception on their teachers' teaching practices, particularly the way assessment for learning strategies were employed. From the analysis, the themes that emerged are as follows:

1. Students' perceptions of learning intentions and success criteria in the classroom
2. Students' perceptions of the questioning technique employed in the classroom
3. Students' perceptions of peer and self-assessment practice in the classroom
4. Students' perceptions of feedback-giving practice in the classroom
5. Students' perceptions of the role of teachers in the classroom

The interview is an initiative to include students' voice in this study as it is an important aspect to further understand the processes of change in Malaysia (refer to Chapter 3 of this thesis for more details on the importance of students' voice in the curriculum change process).

The next section will contain findings on students' perceptions of the importance of the four main strategies employed in assessment for learning practice in the classroom which are learning intentions and success criteria, questioning technique, peer and self-assessment and feedback.

7.4.1 Students' perception on learning intentions and success criteria in the classroom

In the practice of assessment for learning, the students should be informed of the learning intentions and success criteria of the lesson. Knowing the purpose and the desired goal of the lesson can help students to prepare themselves for the lesson.

The analysis of the data informs us that students felt it was important for teachers to inform them of the topic of the lesson to prepare for the learning process. Hannah did not understand the term 'learning intentions'; hence, she did not pay attention when the teacher introduced it. Nevertheless, she felt that it was important to know the topic of the lesson to prepare for examinations.

'I don't really pay attention to the learning intentions because I don't understand what it means. But I think it's important to know the topic of the lesson especially as a preparation for the exam' (Hannah, SCHOOL A).

While Hannah was unsure of the term used, other students gave positive reactions on the importance of knowing learning intentions or learning outcomes (LO) at the beginning of the lesson. They expressed it as follows:

'It's important to know the LO because we can gain more knowledge when we know the topic' (Raymond, SCHOOL B).

'It's important to know the LO because I want to know what to expect during the teaching and learning process' (Diana).

'It's important to know the LO so I can get ready for the lesson. And if I don't know the LO, I feel like I will not know the topic and it will be hard for me to understand' (Durrant, SCHOOL A).

These responses suggest that the students wanted to be informed of the learning intentions at the beginning of the lesson to help them prepare for the lesson. Durran even added that not knowing the learning intentions would make him difficult to understand the lesson.

Tom also agreed with Durran. He said, *'Well, if we don't know the topic to learn, we'd be puzzled especially if the teacher begins the lesson immediately after she/he walks in the class'*.

Regarding the success criteria, most of the students thought it was important to know the success criteria of the lesson because *'I can achieve the target that the teacher list on the board'* (Nancy and Tom, SCHOOL A & Tina and Sue, SCHOOL B).

Sheila, on the other hand, did not have knowledge of learning intentions and success criteria of the lesson and she felt that lacking such information did not affect her learning process.

'I have never been explained about LO and SC... I don't think it will affect the process of learning if I'm unclear about the LO and SC' (Sheila, SCHOOL A).

From the responses above, we learn that these students would want to be informed of the learning intentions and success criteria of the lesson. They also seemed to show understanding about the purposes of knowing these aspects of the lesson. Another aspect that is used to facilitate assessment for learning practice is the questioning technique. The employment of the appropriate questioning technique can promote students' engagement in the learning process.

In the following section, I will present the perceptions of students, particularly their preference on the questioning technique that should be employed in the classroom.

7.4.2 Students' perception on the questioning technique employed in the classroom

Generally, the analysis from the interview showed that the majority of students preferred closed-type questions so that they did not have to give an explanation to support their response. For example, Diana said that *'I prefer closed-questions...so I can just choose between a yes or no'*. In her case, she was hesitant to respond to questions that needed elaboration because she feared making mistakes if she gave a wrong response; hence, she preferred to give short answers.

'It's difficult to answer to answer questions that need explanation because I'm afraid I make mistakes'. Durran also said that he preferred giving short responses because he could not construct proper sentences to provide explanation.

'I don't like to explain because I don't know how to construct the sentences'.

Hannah also argued that, *'I think it's quite challenging to respond to open-ended questions because I have to use higher-order thinking skills (HOTS) and it's difficult to respond to such questions'*.

Fay did not like questions that required her to provide an explanation because she did not have any ideas to support her answer.

'I think it's hard for me to give explanation because I don't have ideas'.

Unlike these students, Nancy (SCHOOL A) enjoyed responding to questions that can challenge her thinking skills.

'I like challenging questions because the questions will challenge our mind to think deeply in order to answer correctly'.

Durran also felt that questions that require students to explain are beneficial for them to enrich their knowledge.

'I like questions that require explanation so I can understand and get more information. It's also not difficult to respond to such questions because if we read a lot of books, we will understand it' (Durran, SCHOOL A).

Katie preferred questions that required her to give reasons to benefit her in the examination.

'...students can think further and in exam, we can answer this kind of question'.

Furthermore, there were students who believed that responding to open-ended questions is a form of self-expression, and therefore, did not find it challenging.

'I don't find open-ended questions difficult to respond because it's like telling what we feel' (Tina, SCHOOL B).

Katie also did not find it difficult to provide explanation as long as students stayed focused during the lesson.

'... this kind of question just requires us to think. If we focus in class while the teacher is teaching, we can answer even if it is a difficult question'.

In brief, two salient ideas have emerged from the findings. First, there are students who prefer closed questions to be employed during the learning process because they want to avoid giving explanations. Providing elaboration is perceived as an act that challenges their thinking and reasoning skills. Second, there are a few students who prefer challenging questions because in their view responding to such questions encourages them to be critical mainly for examination purposes. The findings have helped us to develop an understanding about these students' belief about learning as well as their learning behaviour.

The following aspect of assessment for learning strategy will be presented: students' perceptions of peer and self-assessment practice in the classroom.

7.4.3 Students' perceptions of peer and self-assessment practice in the classroom

Investigating the peer-assessment and self-assessment practice in a learning setting that aims to promote assessment for learning concept is vital. In this learning context, the opportunity to allow students to engage in classroom activities is central, so they can become active learners who understand their learning process. This too will reduce the teacher-centredness in which teachers transmit knowledge and students become passive recipients of the knowledge. Nevertheless, It is also equally important to explore students' perceptions of peer and self- assessment practice as knowing their belief about it can make us understand their perceived role in the classroom.

7.4.3.1 Students' perception on peer-assessment practice

Analysis of the interviews showed that a common practice of peer-assessment in the classroom was a process of checking each other's work. The way it was usually carried out involved exchanging students' own work with a peer and, while the teacher provided the answers, they checked their peers' work and marked them as correct or incorrect.

Dan described it as follows:

'Yes, I have experienced doing it (peer-assessment). My teacher asked us to check other students' work' (Dan, SCHOOL A). He also positively viewed the benefit of peer-assessment.

'The good thing about it is I can tell my friend's mistakes and I can teach him how to do it correctly' (Dan, SCHOOL A).

Hannah also described a similar process in her class.

'We usually exchange our work... Then, we will check each other's work...Teacher gives us the answers'.

Raymond shared a different peer-assessment practice in one of his classes, though there was no further reference made on the way the comment was used to improve learning.

'I have done peer-assessment...The teacher asks us to leave our feedback if the work is comprehensible or not'.

Furthermore, the analysis also informed us that the practice of peer-assessment was conducted in the class following the teacher's instruction. Fay claimed that she never initiated a peer-assessment practice without instructions from the teacher.

'I've never done that (an activity of assessing my friend's work) on my own'.

Zach also expressed his concern that the teacher was needed to participate in the peer-assessment activity.

"I still think that we need to have the teacher to tell us the right and wrong answers' (Zach, SCHOOL A).

Hannah further shared that she did not have the confidence to do a peer-assessment practice without the teacher's instruction and getting the answers from the teacher.

'I don't think checking my friend's work on my own is good because I don't know all the answers' (Hannah, SCHOOL A).

Diana gave a fresh perspective to support her concern on getting the teacher to be involved in the peer-assessment activity. Particularly, she did not like the argument that took place in discovering the answer.

'I've never checked my friend's work without teacher's instructions because we'll be competing and betting on whose answers is correct and I don't like it' (Diana, SCHOOL A).

The analysis has also revealed students' behaviour in doing peer-assessment. Tom claimed that he did not like if he had to give comments on his peer's work. He preferred if he just needed to check for correct or incorrect answers. He viewed it as less complicated '*because the answer is already there and we just need to check*'.

From the perspective of Raymond, he would rather get negative comments from his peers than his teachers.

'I don't feel hurt when my friend points out my mistakes and I prefer my friend to highlight my weaknesses'. (Raymond, SCHOOL A)

Analysing the responses from the students, it is clear that the practice of peer-assessment is not driven by a sense of interaction and trust among each other, it is a practice that is teacher-oriented and the purpose is primarily aimed at checking the accuracy of answers. Discussion was not identified as part of the process; in fact, there was a concern that arguments might affect the harmonious environment in the classroom. There were a few students who thought that peer-assessment was a good practice as they got to inform their peers about their mistakes. It seemed that the feeling of knowing more than their peers provided a sense of achievement for these students.

7.4.3.2 Students' perception on self-assessment practice

In the previous section, we discovered that peer-assessment was teacher-oriented and students mainly viewed it as an activity to check for correct answers. In this section, I will present the findings from the analysis on the perceptions of students of self-assessment. Generally, self-assessment activity is perceived as a process of checking personal work thoroughly to ensure that it is error-free before the work is submitted to their teachers. Dan claimed that he had practised self-assessment while checking his work.

'I have done it to check my own work. I can improve and correct my mistakes in grammar, introduction, etc...' (Dan, SCHOOL A).

Diana added that, *'Doing self-assessment is good so that I can further improve my work'* (Diana, SCHOOL A). Similarly, Sue also claimed that she had initiated self-assessment practice to check her work.

'I check my own work...I will ask teacher or my friend and I will do exercise if I identify the errors I make'.

Sue further added that she thought identifying and correcting errors she had done in the work were useful to help her in the exam.

'In the exam I will pass if I know the questions'.

Durrant also felt the importance of correcting his mistakes for examination purposes.

'I need to correct my mistakes so that I can succeed and I can get high marks for my exam later on'.

Tom also gave a positive view on self-assessment practice despite his lack of exposure in that area.

'I've never done it (self-assessment)...(it's good) so that, we will know our strengths and weaknesses' (Tom).

Besides doing self-assessment practice for examination purposes, Hannah claimed that her reason was to aim for perfect work for submission.

'If my answers are all correct, the teacher is not going to get upset with me' (Hannah, SCHOOL A).

Raymond had a similar view about submitting perfect work to his teacher.

'...if we make spelling errors, the teacher may have difficulty to understand my work'.

However, Katie thought differently. She did not initiate a self-assessment practice because she might be dishonest while checking her work.

'If I check by myself, I might mark everything correct...like cheating' (Katie).

These perceptions about self-assessment practice showed that students thought of it as a practice of checking their own work before it was submitted to the teachers. The main purposes of checking were to submit a work that contained no error and to ensure that the teacher did not have a difficult time checking their work. Reference was made to using the self-assessment practice as a way of improving their knowledge for examination purposes by only a few students.

In conclusion, students' perceptions of peer and self-assessment were that this was not a practice that encouraged students' engagement in the learning process. It was a practice operated under teacher's control and students did not extend the initiative for personal gain. It was mainly used to identify errors and improvement was made for examination purposes.

In the next section, I will continue to present another strategy in assessment for learning which is feedback, and this entails the perception of students of the practice of feedback and how this practice is operated in their classroom.

7.4.4 Students' perception on feedback-giving practice in the classroom

The perception of students concerning this topic was related to two situations: feedback that was given after tests or examinations and feedback that was given after task completion.

7.4.4.1 Feedback after tests

The analysis of the data showed that the operation of feedback after tests involved teachers informing students of the correct answers after returning their test papers. In this context, while the teacher shared the answers, the students checked for any errors including the calculation of the marks. Sometimes, the teacher provided an explanation for questions that he or she thought challenging for students. This

feedback session was conducted in the class and involved all students. Nancy described the process as follows:

'My teacher reads out the answers and we'd check our answers. She didn't offer any explanation for the wrong answers. But she did explain the process to get the right answers. I like this process because I can correct my mistakes' (Nancy, SCHOOL A).

Besides Nancy, other students also seemed to be satisfied with this feedback practice because they got to learn about their mistakes and how to correct them to avoid them from making the same mistakes in the future. For example, Sue said, *'My teacher always discusses the correct answer with the whole class. I like this activity because I know the correct answer and will not repeat the same mistake in the future'*. Tina further added, *'Usually, my teacher discusses the correct answer with the whole class. I like this process so that I will not repeat the same mistakes in the future'*.

There were students who appreciated the feedback session as they could now improve themselves. Hannah expressed this as, *'...it adds on to our knowledge and we can also correct our mistakes'*. Similarly, Diana added, *'...I like this kind of feedback session because I can improve the mistakes I've made'*.

There were also other students who appreciated this feedback giving session as they got to identify important advice that can be used in the future.

"The Math teacher always has a class discussion to discuss the right and wrong answers. I like this kind of discussions because I will regret if I don't listen to my teacher's advices' (Raymond, SCHOOL A). Dan specifically found it beneficial to have such feedback session as it could help him to prepare for examinations.

"...I like this activity because it can help me for the coming exam' (Dan, SCHOOL B).

7.4.4.2 Feedback for classroom activities

In this section, the analysis informs us that this feedback was perceived by the students as a tool to learn about their mistakes and improve themselves. Therefore, the students encouraged the use of formative feedback rather than summative feedback as they felt it was more effective in helping them improve their work.

Hannah said that, *'I like formative feedback because I can make corrections for the wrong reasons'* (Hannah, SCHOOL A).

On the other hand, Durran and Katie argued that they were often given summative feedback though they preferred a formative feedback for improvement purposes.

'I always receive the summative feedback, but I prefer the formative ones because I can improve my writing' (Durran, SCHOOL B).

'I usually get the summative feedback. I have once received a formative feedback for writing activity. The comment was as such, "...this is okay, but there are grammar mistakes and tenses". I personally like the formative feedback because I can learn from my mistakes' (Katie, SCHOOL B).

Sue added that she was often given formative and summative feedback. She personally preferred formative feedback as it could help her to improve learning.

"I usually get both types, but I think the formative feedback is more effective to improve learning. I get this kind of activity for writing activities" (Sue, SCHOOL B).

Tina then explained the kind of feedback she always received in Malay Language class.

"I usually get both types (formative and summative feedback) especially for Malay Language. My teacher would tell me the parts that I need to improve if I made a mistake. That's why I prefer the formative feedback, so I can improve my mistakes" (Tina, SCHOOL B).

In this section, we learnt about the practice of giving feedback in the classroom. Fundamentally, the operation of the feedback giving session seemed to be controlled by teachers without references to two-way interaction with the students. The process indicated that students perceived their teachers as knowledgeable, and they showed a strong sense of trust in their teachers' comments. They also seemed appreciative of the teachers' effort to share with them advice and suggestions that they can keep for future use especially for examination purposes.

The findings in this section have certainly built our understanding of the belief and behaviour of students in this study. Generally, students portray themselves as individuals who are bound by teacher's rules, instructions and guidance in leading the teaching and learning process in the classroom. This has constrained students' creativity and confidence to extend their potential in learning. This kind of behaviour reflects their teacher-bounded, examination-oriented mindset which may have impacted the processes of curriculum change in Malaysia.

7.4.5 Students' perception on the role of teachers in the classroom

The previous section encompassed information on students' perceptions of the teaching practices focusing on assessment for learning aspects. Generally, students seemed to have developed a passive behaviour in the classroom. The teaching and learning process were perceived to be led by teachers' rules and instructions. This finding suggests that students thought highly of their teachers and they played an important role in the classroom. In this section, I will present the findings that represent their perception on the role of teachers in the classroom.

Primarily, the analysis revealed that students relied on teachers' teaching to guide them especially for examination purposes. For example, Hannah said that in her Mathematics class, her teacher often shared tips to solve Mathematical problems.

'My teacher shares the tips and demonstrates the calculation procedure for the mathematical problems for exams'.

Zach also sought for clarification and assurance from his teacher whenever he had faced a learning problem in the classroom.

“If I'm not sure about something, I will ask my teacher because the teacher will tell us the right answer”.

Katie further asserted that she preferred a specific comment about her work as she could use this comment to produce better work and eventually she could get good results in the examination.

“I like my teacher to give me specific instructions... because when the teacher tells me specifically, all students can do the work better and more accurate... so that I can do better in the exams”.

Raymond also gave an example that emphasised on the importance of his teacher's tips and strategies for examination purposes.

“My teacher shares the tips and strategies to get good results and I think they are important so that we can answer the exam questions easily”.

Dan even claimed that he was not able to answer examination questions if his teacher did not guide him.

‘If my teacher does not tell me how to answer exam, I will not know how to answer, what to write and so on...’

Diana also described the efforts of her teacher to inform students about important tips for examinations.

‘My teacher always reminds us to memorise the template or information from the textbook or to review and revise the exercises that we've done’.

The findings in this section have informed us that students perceived their teachers to play an important role in helping them to do well in examinations. Their perception has also shaped their learning behaviour and how they treated the learning process itself. The emphasis has been on examination-oriented teaching and learning activities, and

this has made students always aim for perfection in their work and prevented interest in extending their potential to explore learning independently. Such a situation also has developed the teacher's dominant role in the classroom while students seemed to be subject to teachers' instructions.

Chapter Summary

In this chapter, I have presented the analysis of the interviews with four groups of people typically involved in the processes of curriculum change in Malaysia – the policy-makers, head teachers, teachers and students. The primary purpose of interviewing them was to seek for understanding and to explore their perception of matters related to the change process. From the data analysis, we learn that Malaysia has adopted a top-down approach in its policy thinking, development and implementation process. Furthermore, they also perceived a passive role that teachers play in the enactment process. In their views, teachers have to change their attitude and positively accept the changes implemented by the Ministry. Moreover, the Ministry has been organising workshops and training to help teachers lead the changes and translate the policy into practice in the classroom.

In the second part of this chapter, the analysis of the interviews considered the perceptions of head teachers in three broad domains which are the implementation and enactment process of the curriculum policy, their role as head teachers in leading the process of change in their schools, and teacher's teaching practices. It was found that the head teachers displayed little knowledge about the new curriculum policy, KSSR, and highlighted their views on educational values. They also perceived their role as implementers which was largely shaped by the government's directives order. This further illustrated that head teachers do not own the change process and they are not authorised to make decisions related to the change process according to their school contexts.

The third part of this chapter encompassed the perceptions of teachers in two broad domains: knowledge of the new curriculum policy and their teaching practices. The analysis has revealed two emerging themes: teachers have little knowledge of KSSR and teachers positively believed that their teaching practices were aligned with the curriculum policy.

The last part of this chapter considered students' perceptions of teachers' teaching practices in the classroom. These practices include the practice of informing students about the learning intentions and success criteria, the questioning technique that they employ in the classroom, peer and self-assessment, and feedback-giving practice. The students also expressed their thoughts on the role of teachers in the classroom. We learn that students did not exhibit innovative behaviour to drive independent learning as they depended significantly on teachers' teaching. They also displayed examination-oriented learning behaviour and treasured learning tips and strategies that could facilitate them to perform well in the examinations.

The importance of understanding the insights from different groups of people who are typically involved in the processes of change is that we learn about their belief and how it shapes their behaviour. The findings in this chapter have revealed that there is an element of power play across the governance structure as perceived by different individuals such as between policy makers and teachers, between head teachers and policy-makers as well as between teachers and students. Another salient point that can be drawn is the perception of head teachers, teachers and students on examination-oriented teaching and learning while they are leading the enactment process of the new curriculum policy, KSSR. As we synthesise and compare the information gathered from the curriculum policy document analysis and classroom observation analysis, I will discuss the relationship between these sets of data and the processes of curriculum change in Malaysia, which will be presented in Chapter 8 of this thesis.

8 Discussion and conclusion

Overview

This final chapter sets out the main conclusions drawn from the study. The chapter begins with a presentation of original contributions of knowledge which highlights the general findings of this study. It is followed by a summary of the main data from the study related to the research questions. In the summary, I also include the discussion of the findings and their implications for the phenomenon of curriculum change in Malaysian classrooms. Then I discuss the theoretical and methodological contributions of the study, outline the limitations of the study and make suggestions for future research. I conclude the chapter and the thesis with my personal reflections on the PhD.

8.1 Original contributions of knowledge

This study investigated the relationship between policy intent and policy enactment, particularly on the assessment reform in Malaysian classrooms. It found that within the enactment of curriculum change, there are practices that do not facilitate the integration of formative assessment into the classrooms effectively. This demonstrated the challenge of integrating formative assessment practice in an exam-oriented educational context. It found that both Malaysian teachers and students have not yet established formative assessment practices that foster learning. For example, peer-assessment was not used as part of the recommended teacher assessment processes. In this case, both teachers and students view it as an activity to check the accuracy of answers instead of using it as a mechanism to develop independent learning. Furthermore, aspects that could have inculcated a culture of inquiry in the classroom have not been exercised appropriately. For example, sharing the learning objective and success criteria in the classroom was not performed in a way consistent with what was identified as important in the research literature. These approaches, if applied appropriately, encourage students to engage in the learning activities; however, the teachers merely mentioned the learning objectives and often did not specify the success criteria necessary to achieve the objective. Finally, the most

significant and profound finding of this study is the lack of consistent understanding between policy makers, head teachers, teachers and students on effective approaches to meaningful change. For example, assessment for learning, a central focus of this study, was perceived as a tool to measure students' academic achievement and not as a medium to improve teaching and learning. This ran counter to the research informed principles of assessment for learning. This lack of understanding can, at least in part, be attributed to the ineffectiveness of the model of change, the lack of authority held by the school leaders as well as the limitations of classroom and school cultures that commonly fail to support teacher assessment practices. Interestingly, this study also explored the perception of students of their teachers' teaching practices which revealed that the aim to empower both teachers and students in the classroom was still far from the targeted goal. Therefore, it can be concluded that similar to other Asian and Western educational contexts, to be more effective, assessment reforms in Malaysian classrooms will require greater attention to policy implementation from the governing authorities. Only by linking policy aims with an effective change process will the Malaysian education system be able to build the necessary knowledge and the empowerment among educational leaders, school leaders, teachers and students to put into practice the principles of assessment for learning.

8.2 Summary of the main findings

8.2.1 RQ 1: What factors influence the enactment of the recently developed Malaysian curriculum framework in teachers' classrooms?

- **Economic growth and international benchmarking are the factors that influence the enactment of KSSR curriculum policy**

The fundamental drive to modernise the Malaysian curriculum framework emerges following the argument that suggested that the former curriculum, KBSR, lacked

relevance and was unlikely to result in students who had the competencies to support future economic growth (Lee, 1993a, 1999; MOE, 2013, Nor, Leong, Kalsum et.al, 2017). It was argued that the new economic model needed students who displayed good reasoning, the ability to make inferences and to apply knowledge and skills (ibid). Furthermore, since Malaysia's participation in large-scale international assessments, particularly TIMSS and PISA, Malaysia has been impacted by the data generated from the assessments especially after the discouraging result of the PISA 2009+ cycle. The report from the PISA 2009+ cycle indicated that Malaysia's ranking was below international and OECD averages in all subjects and these results suggested to the Malaysian government that Malaysian 15-year-old students had difficulty in functioning in situations that challenged their critical thinking and problem-solving skills based on real-life settings (Ministry of Education, 2013). These results from the OECD team which were presented in the form of a comparison table that listed the achievement results amongst the participating countries in the assessment. Malaysia's ranking in that cycle was relatively lower than its Asian counterparts such as Singapore, South Korea, Hong Kong and Shanghai. The motivation to transform the education increased as the data displayed that the skills Malaysian students lacked were among the most important skills that have been identified to support future economic growth. Following that, the New Economic Model (NEM) was produced by the Malaysian government where education was listed as one of the key economic areas in developing human capital for economic growth in Malaysia.

Malaysian education is not alone in having been influenced by PISA results. Many countries participating in large-scale international assessment, particularly PISA, experienced similar patterns of policy change. International comparative testing has also had a significant impact on the development of policy thinking in many countries across the world such as Germany, England, Ireland, China and Singapore. Steiner-Khamsi (2014) claimed that PISA data has been extremely helpful in providing the information on the competency of students in the components of Reading, Science and Mathematics, the three subjects tested in PISA. This information is presented as a database that identifies the high-performing education systems based on the performance of their students in these three subjects. The high-performing education

systems have been used as references for other countries to learn about their exemplary education systems, aspects of which other countries can adopt into their educational contexts.

In the context of this study, Malaysia sought to adopt ideas not only from Western educational contexts, but also attempted to learn from its Asian counterparts. Azian et al (2016) noted the initiatives taken by the Malaysian government to improve the quality of its education system by learning from high-performing countries. In the South East Asia region, Singapore and Vietnam have better ranking in PISA, hence, the Malaysian government sent a team of researchers to these countries to learn about their teaching pedagogies as part of the process of thinking about the new curriculum policy (Azian et al., 2016).

This instantiates the transnational policy-borrowing practice as observed in western countries such as Germany and France (Volante, 2017). It was argued that the practice of borrowing educational ideas from international contexts is situated within the comparative education field in the attempt to fulfil the desire of educational leaders to learn and borrow 'best practice' strategies from other systems (Schriewer and Martinez, 2004). This process is arguably political in nature because it is a process of 'externalisation' (Schriewer, 1990) in which the solutions to academic issues in one academic context are formulated by using policies from other systems (Steiner-Khamsi, 2014). This practice of borrowing reform ideas from Western education contexts became influential and favoured in the Asian educational contexts because of the nuance that the 'American education reform' or 'British education reform' is exemplary from the perspective of non-western educational contexts. For example, as explained in Chapter 3 of this thesis, the projects that investigated formative assessment practices in the classroom were based in the UK and Europe (eg: KMOFAP and OECD projects), and they showed positive outcomes of the practice which could be used as references when the phenomenon was being studied in another educational context. In fact, the emphasis on formative assessment practice in the classroom was claimed to be more apt in Western educational contexts than Asian education contexts. This is largely related to the difficulty of adopting socio-

constructivist theory in an Asian cultural context where the essence of Confucian learning heritage is largely embedded in the educational realm of Asian countries.

In the context of this study, it can be concluded that the trend of international education policy has shaped the policy thinking of KSSR curriculum policy through the trend of policy-borrowing. According to the Blueprint that was published by the Ministry of Education (2012), educational leaders and policy makers in Malaysia have explicitly expressed their interest in benchmarking its education system to an international standard and made reference to top-performing countries such as Finland, Hong Kong, South Korea and Singapore to legitimise its decisions regarding the development of new curriculum policy in Malaysia.

8.2.2 RQ 2: What are the policy intentions of the recent proposals for curriculum development in Malaysia KSSR curriculum policy?

The aim of this new curriculum, KSSR are to develop students who are:

1. Balanced in terms of intellectual, spiritual, emotional, physical and social
2. Responsible Malaysian citizens,
3. Functional in a global platform; and
4. Knowledgeable employees.

These aims are manifested in six aspirations of quality students which are knowledge, thinking skills, leadership skills, multilingual, ethics and spirituality and national identity. Apart from these characteristics of quality students, the curriculum also aims to integrate scientific, technological, engineering and mathematical skills into the classroom. These skills consist of exploration and inquiry, teamwork, problem solving, innovation and being aware of real-life issues (MOE, 2016). This curriculum framework also promotes student-centred learning in the classroom and differentiated pedagogy with a greater emphasis on problem-based and project-based work, a streamlined set of subjects or themes, and formative assessments (Ministry Knowledgeable of Education, 2012). These aspects of the curriculum are reflections of the global education policy which have also been the aspects of educational curriculum policy in other countries around the world (Martens, Knodel and Windzio, 2014; Bieber,

Niemann, Martens & Teltemann, 2015). These sets of knowledge and skills constitute the basic skills for the development of a knowledge-based economy, a domain of economic growth that is aspired to in the 21st century.

The identification of these sets of knowledge and skills are closely connected with how PISA conceptualised the curriculum in what has been identified as other successful educational systems (Schleicher, 2011; Sam and Lingard, 2014 and Thien et.al.; 2016). Learning from what seems important in other education system has become an ideology of 21st century learning which was based on the argument that acquiring basic skills of reading, arithmetic and writing was insufficient to survive in the world of science and technological advancements. Hence, higher order thinking skills such as reasoning, making inferences and knowledge application have been recognised as important skills to complement the learning condition in the present time.

8.2.3 RQ 3: How is the policy intent being enacted in the classroom?

The enactment of the policy is analysed through the lens of a series of classroom observations where I sought to explore teachers' teaching practices in their classrooms. The analysis from the classroom observations suggested that the teaching and learning process in Malaysian classrooms was largely teacher-oriented where teaching to the test was the most commonly observed practice, and more innovative approaches to learning and teaching such as formative assessment or employing STEM skills were hardly identified. This is, at least in part, due to the impact of high-stake examinations in Malaysian education on teachers' behaviour where the results are primarily used for accountability purposes. This analysis resonates with evidence emerging from other educational contexts regarding the challenges of implementing formative assessment in a highly centralised and examination-oriented education system. England, for example, had difficulty in implementing formative assessment because examination results are presented as 'league tables' as a way to inform parents about students' academic performance in their schools following the 'market-mechanism' policy that extended parents' involvement in education matters

(Machin and Vignoles, 2006). Consequently, educational assessment has become a tool for accountability as the pressure to improve in the ranking system reduces the focus on teaching practices and values that are associated with learning (Isaacs, 2010). Schools concentrated on teaching to the tests and this practice weakened attention to the wider curriculum and its learning goals. A similar impact of examinations can also be observed in France where teachers preferred to create lessons in preparation for the examination and, normally, the content of the lesson consisted of conventional types of knowledge and competence (Bonnet, 1997).

The cause of the lack of formative assessment practice in Australian classrooms is similar to that in other countries such as Spain and Portugal. Particularly, driven by the emerging trends of international assessments such as TIMSS and PISA as well as the National Assessment Programme in Australia (NAPLAN), teachers have been struggling with 'ensembles of policy' (Bowe, Ball and Gold, 1992) and their various conflicting pressures. To meet the accountability demands imposed, many Australian teachers appear to be directing more attention towards student preparation for summative type tests than to AfL strategies (Luke et al., 2011).

In Malaysian classrooms, since lessons have been primarily orientated towards examinations, other strategies that could engage students in improving their learning through formative assessment practice have been ineffective especially in the aspect of peer and self-assessment practice. Studies based in Western educational contexts suggest that engaging in peer and self-assessment can empower students to become autonomous learners. For example, the study led by Hayward (2011) investigated the perception of young learners on the significance of listening to their voices. The findings suggested that children emphasised the importance of their engagement in making decisions about the content of the curriculum and in discussing what mattered in supporting their learning. The children believed that the focus of learning should be on community activities, group tasks, peer-support and peer-assessment. However, perceptions about the nature of peer and self-assessment varied. Although most students argued that self and peer assessment helped them to develop deeper

understandings of how to make progress in their own work, ie, had a formative purpose, one of the participants perceived peer-assessment practice as a way to assess their friend's work and that this judgement should be supported by teacher's guidance, a more summative purpose. In her view, she was not able to check the work on her own because she did not know the correct answer. In another example, the students had attempted self-assessment merely to 'check' their work for correct answers. These findings reflect what commonly happens in Chinese classrooms (Yin and Buck, 2015). The classroom activities that were supposed to be formative were hindered because students were concerned with getting the right answer and the teachers also focused on guiding the students to get the correct answer.

Black et al. (2003) argued that the primary objective of integrating peer assessment activity in the classroom was to enrich the understanding of the students about the learning goals. It was argued that students can achieve a learning goal only if they understand the goal and can assess what they need to do to reach it (Black et al., 2003). However, from the observations conducted as part of this study, the peer assessment and self-assessment design employed was far from creating a learning environment that was collaborative and autonomous. Many teachers reported that they did not initiate or encourage their students to assess and mark their friends' work without supervision. In fact, a few teachers seemed puzzled when this topic was raised suggesting that they had never considered initiating the activities. The practice of what was described as peer assessment was most commonly observed in the activity of exchanging the work among friends who would mark each other's work with a set of answers provided by the teacher. The activity was also highly directive because the students did not initiate the activity without receiving detailed instructions from the teacher who controlled the activity.

Another aspect of formative assessment where there were differences between the research evidence and practice in Malaysia was the way feedback was operated in the classroom. In the study by Black et al. (2003), the critical part about giving feedback to students in the process of improving their learning is to ensure that the comments are focused on the quality rather than quantity. This involves describing the

nature of the work and not judging the quality of the work by assigning to it a grade or a score. It is argued that a numerical score or a grade does not tell students how to improve their work; hence, the opportunity to enhance their learning is lost. Furthermore, comments offer students and parents information related to the learning issues whereas a grade or a score does not contain such critical information. Giving feedback that promotes the opportunity to assess current progress and to use that information to determine the focus for progression is a central idea in the assessment for learning framework (Sadler, 1989, Black et al., 2003; Hayward, 2018). Black et al. (2003) emphasised that for the feedback to be effective, it should not be accompanied with grade or score.

The findings in this study showed that the teachers did not always give feedback with a comment to support future learning but often summarised their judgment with a score or a grade or a remark such as 'Excellent' or 'Good'. However, the students in this study expressed their preference for receiving feedback that contained information on how they might improve their learning. During the observation, it emerged that the teachers often gave feedback orally which was a comment that contained description of the mistakes or issues from the students' work and, briefly, they instructed them 'to make improvement' without providing suggestions on how to address the issue. This situation offered a further example of a gap between theory and practice and illustrates the teachers' feedback practices. In principle, the purpose of giving feedback is to address issues in teaching and learning. Thus, both teachers and students as they collaborate to make improvement and progression in learning. Since 'feedback' was performed in the manner noted, it is difficult to describe it as demonstrating the quality of feedback that promotes progression in learning because it did not include a plan to move forward by both teacher and students. As argued by Sadler (1989), feedback that assists learning requires an interaction between the teacher and students and it is only called feedback if measures are taken after problems are identified through the interaction.

However, there is no clear evidence to show that the comments articulated by these teachers offer useful suggestions for the students to make improvement. If the students have actually made improvement in the topic that was identified as problematic, it may not be related to the comment given by the teacher. Furthermore, one of the teacher's views on this issue revealed that he did not usually proceed with actions to revisit the topic that was difficult for his students because he wanted to focus on finishing the syllabus for the purpose of the examination. In his view, spending time on re-teaching the lesson could delay the progress of finishing the syllabus. He added that he could revisit difficult topics when preparing students for the examination or, in the worst-case situation, he would omit revision of the topic.

The preceding discussion demonstrated emerging issues from the classroom practices which did not reflect the spirit of assessment for learning. This term appeared in a paper by Marshall and Drummond (2006) in which they were involved in a national project in selected schools in the UK to investigate how teachers instantiate assessment for learning practices in their classrooms. The evidence gathered from the observations revealed that only a few teachers were able to promote students' autonomy through assessment for learning practices – to embrace the 'spirit' of assessment for learning. Those few teachers showed willingness and put effort into learning about making changes to their practices rather than having a fixed belief and behaviours in their classroom practices. A possible explanation for the situation may relate to the teachers' beliefs about learning which is why change in classroom practice is difficult to achieve (Fullan, 1991; Lovat & Smith, 1995; Handal et al, 2001). From the discussion above, there are a number of aspects of policy intent that were not being enacted in the classroom with a teacher-centred classroom culture dominating. In the next section, I will discuss further the relationship that exists between policy and policy enactment in Malaysian primary schools.

8.2.4 RQ 4: What relationship exists between policy intention and policy enactment, especially in terms of the formative assessment practice in Malaysian classrooms?

- **The top-down, mandated policy has contributed to the discrepancy in the relationship between policy intention and formative assessment practice**

In earlier sections, I have presented the summary of findings that identified the discrepancy between the policy intention and policy enactment. In this section, I argue that the inconsistency can be largely attributed to the top-down, mandated educational policy context in which the KSSR curriculum policy operates. The disadvantage of a mandated policy is that teachers do not develop a sense of ownership of the change process. Teachers in Singapore, for example, have been experiencing similar challenges. When Singapore launched the bite-sized assessment as a way to reduce the dependence on national examinations, the Ministry prepared its teachers to enact the changes by producing a comprehensive set of resources for teachers to learn and adopt them in their classrooms. But a study by Tan (2017) revealed that teachers involved in the study did not know what constituted the change and mainly considered it as a policy that was desired by the government.

In terms of the enactment of the new curriculum policy in Malaysian classrooms, the same scenario seems to emerge. Interviews with the teachers revealed that they had a superficial understanding of the policy, and they were unsure how to integrate the formative assessment strategies into the classroom practices when they were equally, if not more, concerned about the examination. Therefore, in some instances, teachers felt necessary to focus on examinations and completed the classroom assessment on a superficial level. The idea that building in more formative assessment practices into classroom activities could lead to an improvement in examination results was not part of their discourse.

Based on the evidence from the large-scale studies in the UK (eg: KMOFAP and LHTL projects explained in Chapter 3 of this thesis), the researchers in those studies advised that teachers should be given substantial support to enable them to learn deeply about formative assessment practice and, therefore, to give them a real opportunity to improve their classroom teaching and learning. In this study, the teachers revealed that the support for teachers in terms of professional development was represented in the forms of training sessions that provide them the exposure to learn the new pedagogy as envisioned by the Ministry. This approach reflects the cascade approach to disseminating information. The cascade model (Prophet, 1995; Gilpin, 1997; McDevitt, 1998; Hayes, 2000; Bax, 2002) is believed to be cost-effective because it allows for a professional training service to reach a wider community of practice at a relatively low cost. It operates on the principle of providing direct training to a relatively small number of specialists or trainers in the knowledge and skills that are central to enable changes in classroom understandings and behaviours. These first-level trainers then train the second-level trainers who usually consist of classroom teachers and these trainers will less formally pass the essence of their training to their colleagues through an in-house training session.

The practice is in contrast to professional development as described by a number of Western researchers. In their contexts, they highlighted the importance of allowing the teachers to think and innovate strategies that they think can work in their classrooms. For example, in the KMOFAP project (Black & Wiliam, 2003), the researchers did not impose the strategies that teachers should take; instead, they allowed teachers to think creatively of the pedagogical approach that could support the implementation of formative assessment in their classrooms.

The educational budget in Malaysia is not unlimited and policy makers may have had to match their professional development aspirations to the available budget. However, based on the evidence from this earlier study, the policy developers in Malaysia should have considered two aspects during the planning phase of the cascade training to increase the effectiveness of the training. The two aspects are: considering the context in which teachers have to work and establishing contextually appropriate systems to make schools and classrooms as supportive as possible for teachers returning from

the training. If teachers' working environment hinders rather than supports their attempts to engage with the learning, the cascade project is more likely to constitute an example of 'triumphalist symbolic action' (Goodson, 2001, p. 53), than to affect what actually happens in classrooms.

In addition, scholars in the field of educational change (eg: Fullan, 2000; Harvey, 1996, 1999; Leithwood et al., 2002) strongly advocate the school leaders to support teachers in schools and to encourage collaboration between them. In addition, the support should be extended to incorporate supportive action between schools within a local area to help individuals and institutions cope with the complexity that the introduction of educational change brings with it. For such collaboration to be genuinely supportive, it needs to be formally recognised as a part of teachers' work, be timetabled to take place regularly, and be structured and facilitated. Essentially, giving consideration on these two aspects is important as the cascade model has the potential to weaken the essential content details as they are passed down from one tier of trainers to another (Hayes, 2000).

- **The mandated policy affects the development of teachers' beliefs and teachers' assessment practices**

The construct of one's belief is contextually bound and is a critical trait in observing changes in classroom practices because it has the capacity to dictate behaviour. Wedell (2005) suggested that what actually happens in classrooms is influenced by hugely complex, dynamic sets of interdependent geo-political and socio-cultural contextual factors, in both the immediate and the wider environments. In other words, classroom practices are highly influenced by their social factors (Brown, Kennedy, Fok, Chan & Yu, 2009). This indicates that, to understand the learning culture of an education society, one should have a historical overview as well as deep cultural consciousness of the local community.

In the context of Malaysian classrooms, the belief of the teachers about assessment for learning is governed by the inter-relationship among educational leaders, head, teachers and parents as illustrated in the way teachers enact the practices of classroom assessment. In the policy document (MOE, 2013), classroom assessment is a form of teachers' assessment where students are evaluated for their mastery level of the standards criteria identified in the policy. The purpose of the assessment is to inform teachers to adjust their teaching practices to facilitate students' learning, but the findings in this study suggest that the results were mainly used for reporting purposes. The assessment was treated as a summative assessment which made the teachers confused about its purpose. They became confused because they thought that classroom assessment was a redundant practice if the examination was still in place and was still highly regarded as the central assessment (MOE, 2013). Teachers' beliefs that inform their teaching practices are tied to a deeply embedded conception of education in Malaysia which has been examination-oriented and prioritises examinations. That system is still dominant which increases the difficulty of making changes to the classroom practices. This addresses a key issue of the 'problem of enactment' (Kennedy, 1999) which is the conflict between classroom-based formative assessment and assessment that is summative in nature which is often used for accountability purposes. This issue seems to also appear in other Asian contexts such as China (eg: Yin and Buck, 2015), South Korea (eg: Suh et al., 2017) and Singapore (Ratnam et al., 2015).

- **The quality of school leadership is constrained by mandated, top-down policy implementation**

Analysing the leadership quality of the head teachers in this study reflects the lack of school leadership quality in the enactment process of the new curriculum (Bush et al., 2018). The Malaysian Education Blueprint (Ministry of Education, 2012) encouraged school leaders to move away from administrative leadership and to adopt distributed and transformational approaches which, the Ministry argued, would lead effective educational change. The purpose of approaching change using these strategies of

leadership could enhance the opportunities for teachers to understand the changes deeply through collaboration between the head teacher and teachers and multiple interactions with the teachers during the enactment process (Leithwood et al., 2007). However, the review of the literature showed that there is much less evidence to support their efficacy in centralised contexts such as in Malaysia even though international studies have proved the beneficial effects of approaching changes using these strategies. The review suggests a gap between leadership theory, developed in western contexts with high degrees of decentralisation, and leadership practice in centralised contexts, such as Malaysia, where even a limited degree of autonomy will not be granted to most schools until 2021 (Bush et al., 2018).

The findings from this study suggested that school leaders lack understanding of the policy illustrated by their limited capacity to articulate the curriculum. Their priority was not on improving students' learning, rather they were more concerned to maintain their school's ranking at the state level. They also displayed characteristics consistent with Hallinger and Walker (2017) who described Malaysian school leaders as individuals who are bound to the government's rules and specifications for enacting change. They do not possess the authority to decide on the vision and mission of their schools but act always under the imperatives of the central government. Therefore, they found it very difficult to display the necessary leadership qualities that would support a transformative change process.

Changing the implementation structure to include a more cooperative and shared nature of school leadership is highlighted by Ainscow and Hargreaves (2015) who emphasise that, 'leading from the middle approach, districts don't just mediate and manage other people's reforms individually; they become the collective drivers of change and improvement together' (p.44). The central idea of leading from the middle is that districts exercise initiative to change rather than implementing the change from a top-down order. This calls for an active role for the leaders at the district level including the head teachers and it operates by interacting and collaborating with people who are involved in the change process.

In the Malaysian Education Blueprint (Ministry of Education, 2012), there is a comprehensive plan dedicated to shifting the central government's power to the state and district level (p.120). An important part of the distribution of power to the State Education Department and District Education Offices is that it allows these middle layer institutions to tailor their intervention programmes to become suitable for the contexts of individual schools. However, these efforts were not clearly identified from this study. Teachers did not actively collaborate with their colleagues and their relationship with the head teacher was also hierarchical in nature. This is supported by the data gathered from the interview with the head teacher from School B in which she felt that the teachers established a professional gap with the head teacher and were not openly receptive to an idea of a critical discussion. Teachers, from the perspective of the head teacher, were more comfortable receiving feedback and comments from their colleagues, which suggests that the relationship is hierarchical. It is a challenge to build a different kind of relationship where members of the institution engage in a meaningful discussion plan for suitable intervention programmes for their schools in the existing school structure.

Most importantly, the gap between policy and practice in the enactment process of KSSR is attributed to the ineffectiveness of a systemic change that involves different people that have their specific roles in the process. Innovative changes integrated in the policy need to be deeply understood by every individual who is directly or indirectly involved in the process, for it is difficult to see real changes happen if any of these individuals moves in a different direction from the aim of the curriculum. For this to happen, innovation needs to be designed for sustainable development in which it is based on the notion of collaboration to build in different perspectives from different communities (Gardner et al., 2010). Hayward and Spencer (2017) also offered a meaningful insight about making real changes happen in practice by building innovation and change from the current scenario of the local context. However, as we have learnt in this study, Malaysia has a long way to go before it achieves the consistent and coherent relationship between policy intent and policy enactment in classrooms.

8.2.5 Contributions of the study

In this section, I will describe the contributions of this study which can be observed in two aspects: empirical and practical.

8.2.6 Empirical contribution

We learn that the ideologies behind the policy may not be well reflected in the practice generally due to a lack of coherence between the aims and the understandings of the policy. In Malaysia, the ultimate goal of the educational leaders is to establish an education landscape that is amongst the top countries ranked in the field of international assessment to portray that the quality of education in Malaysia is equivalent to the top-performing countries. This is a strategy to increase the marketability of Malaysian students in a global world where they are perceived as needing high levels of competence in reasoning and critical thinking skills. In order to achieve this, the Ministry outlines several strategies that can help produce Malaysian students with those qualities. Amongst those strategies intended to promote the development of these competences is the increased use of formative assessment in the classroom. This move is driven by evidence that the Malaysian education system is based on rote learning where it is difficult to encourage students' critical thinking skills as they are more able to reproduce subject content (Lee, 1993a, 1999; MOE, 2013, Nor, Leong, Kalsum et.al, 2017. Formative assessment practice is chosen as the Western literature promotes it as a strategy to foster learning in the classroom. Furthermore, studies that are based in Western education contexts which are also top-performing countries have shared its effectiveness and this motivates Malaysia to follow in their footsteps. However, instead of making this aspect central to the improvement of the quality of education, the plans for change have been incorporated into existing perceptions of the phenomenon of assessment in Malaysian classrooms where formative assessment is nuanced with summative assessment and students are evaluated to generate improvements in large-scale international assessment

results. Because of these inconsistencies in understanding, the discrepancy in the relationship between policy and practice becomes apparent.

Another empirical contribution of this study is that it includes the perceptions of students in Malaysia about the curriculum change. In this study, the interviews with students have provided insights into their perceptions and experiences of classroom teaching and in particular identifying their preference in learning. Their insights into what matters to them were fascinating. We discovered from this study that students like activities that are examination oriented. However, they would like their teachers to be more engaging and to guide them to learn more effectively for examination purposes. More importantly, they show interest in doing group activities, but they also express the importance of exams. The information gathered demonstrates how embedded examinations are in the thinking and practice of these students. In this sense, we can conclude that Malaysian classrooms are deeply examination-oriented and that both teachers and students see examinations as a key focus when they reflect on their learning experiences and their levels of satisfaction.

8.2.7 Practical contribution

The practical contribution of this study is that it can have real impact. The findings will be of interest to the Ministry of Education as they review the curriculum change phenomenon in Malaysia. The study offers clear insights into key aspects that need to be reconsidered if the change process is to lead to the desired changes to practice in Malaysia that are consistent with the vision for Malaysian Education.

Most importantly, the Ministry has to develop a clear vision for educational assessment based on the purposes that assessment is intended to serve. That vision has to be consistent with the vision for the new curriculum and the model of change that should underpin its implementation. Baird et al., (2017) argue that educational assessment is a goal setting activity and that it has a large impact upon the content and style of learning. At the moment, the KSSR curriculum framework aims to produce individuals who have the knowledge and skills to function in a knowledge-based economy as perceived by international standards. In this global education policy, the development

of such individuals includes students' critical thinking skills, application of knowledge and reasoning skills. These, therefore, have to become a focus for assessment.

One further issue that the Ministry may wish to consider is their use of international comparisons. Whilst countries can learn with one another, the very differing contexts within which change emerges, suggests that there are difficulties if countries try to learn from one another. Although formative assessment or assessment for learning has the potential to encourage students who are independent, critical, intuitive, active and aware of their learning processes, how these ideas emerge in an individual nation will depend on a wide range of factors, for example, the country's assessment history, the model of professional learning, the resources available, the existing experience of the teaching profession, the culture's attitudes to what matters in assessment. The building of these aspects in the classroom will only be effectively enacted if the cultural assumptions about the value of summative assessment as the only assessment that matters are challenged.

However, existing summative assessment practices in Malaysia can be improved. In the case of Malaysia, the Ministry can learn from Klenowski and Carter (2016), who have suggested that teachers need to be empowered to strengthen their use of assessment for summative purposes. They have discovered that the conflict between formative and summative assessment can be reduced if school leaders can create a culture of inquiry where assessment evidence is used to enable and drive school improvement to promote equity and inclusion (Ainscow, 2010; Darling-Hammond et al., 2009; Klenowski and Wyatt-Smith, 2014; Peck and McDonald, 2014). Harlen and Gardner (2010) further promoted the role of teachers' assessment to assess these skills as students can demonstrate them more readily during such assessment. The situation in Malaysian classrooms seem to still involve using tests as the primary tool to evaluate students as presented in a construct of school-based assessment that is mainly summative in nature (MOE, 2013). The role of school leaders is still constrained within the imperatives coming to schools from the higher authority.

8.3 Limitations of the study

The limitations of this study are first the scale of this study. This is a small-scale study and therefore it is important to be cautious about the claims made for the findings that emerge.

The fieldwork process had its own limitations. My study was subject to the same hierarchical processes that have been a feature in the findings from this study. I spent four months in fieldwork during which the first month was spent getting clearance from the gatekeepers. This proved to be no easy task. After I was given access to the schools, I did not get the chance to select the participants as this process was perceived to lie within the jurisdiction of the school leaders; hence, I had to allow the gatekeepers – the headteachers and class teachers – to select the participants for this study based on the criteria I had determined. Adopting this method, as discussed in the Methodology chapter of this thesis, may expose the argument to criticism in terms of the dependability of the data derived from this study. Nevertheless, it should be noted that the subsequent processes of obtaining consent and the regular reminders to the participants of their rights to withdraw were practised.

Another limitation was in terms of the classroom observations where I had to omit the video recording part of the lesson after considering the technical issues surrounding it. The decision was made after considering two aspects. First, I was a lone researcher, and that means I did not get appropriate help in dealing with the technical aspects such as setting up the camera and making sure that I had captured the important parts of the lesson. Second, it was difficult to separate students who had not given consent to participate in this study from those who agreed to participate without making some students feel isolated. If they had felt uncomfortable, I was concerned that this would not have been within the spirit of my ethical approval where it is clear that children should not be made to feel guilty for not participating as they were exercising their rights as a person. For these reasons, I decided to omit the process of video recording the lesson though I believe that video evidence would have offered increased richness to the data I would have obtained.

8.4 Suggestions for future research

This study has raised a number of areas that would offer interesting future research opportunities. It would be interesting to explore models of change more deeply. For example, researchers in this area could engage in action research where the researchers collaborate with teachers to examine alternative approaches to the process of change, as suggested in this study, and to explore the extent to which such changes lead to an improved relationship between policy and practice. Further investigations may include strategies to implement successful practices in a wider context and identify suitable practices that can work in Malaysian classrooms. This can be a way of providing the Ministry with suggestions to resolve the issues faced by teachers during the enactment process as well as tackling the problem from the root of policy thinking to ensure that there is an enhanced coherence between policy intent and policy enactment in Malaysia.

A final suggestion is to extend the scope of this study to investigate the relationship between policy and practice in different locations and different types of schools. In this study, we learn that high-performing schools have a set of standards and characteristics that are different from national schools in Malaysia. One of the prominent features in this type of school is that they are given autonomy in managing the schools. Perhaps, embarking on an investigation in these schools could be used to reflect on the literature on educational change that encourages empowerment of school leaders and teachers to lead successful and sustainable educational change. It would be interesting to examine how the practice emerges in such an educational context.

8.5 My reflections on PhD

Embarking on this journey of obtaining a doctorate degree has developed my thinking on a personal and professional level. It is a path of exploration, a journey of deepening my research skills and a learning experience, incomparable to other life experiences that I have had and have yet to face. On a professional level, carrying out PhD

research in education makes me reflect on my teaching profession and the kind of teacher I am. My research discusses the importance of empowering teachers and encouraging students in the learning process, yet I realise that I have not practised this in my classroom. This makes me reflect on the kind of teacher I am and what kind of teacher I want to become. The experience of learning about someone else's struggle in the classroom makes it even relevant to study the struggle of my own colleagues and perhaps, I can take up a more active role so that together we can strive to develop better classroom teaching that is adapted to our teaching context in Malaysia.

On a personal level, researching at the level of PhD has improved my thinking, encouraging me to take a more critical stance and not to be easily persuaded by a one-sided view. I realise that I have started to embed this value in daily life. Furthermore, being a researcher has also changed the way I react to emerging problems: instead of dwelling, I am quick to generate options that focus on well-informed solutions because that has been the practice since I began this journey four years ago. Whenever I was challenged with difficulties, I looked for alternative ways to address the issue so that I could continue to focus on my research. Building this attitude, I realise that I have become a more resilient person and that is one quality that makes me persevere to finish what I have started.

Along the way, I lost my beloved mother who had been supportive of my study, which means I lost a source of motivation at the time when I really needed it. I also had to cope with a personal accident and that, too, interfered with my study. However, I endeavoured to address the emotional and physical pain, and I started looking for alternative strategies and motivation to continue this journey. Now that the research is complete, I am surprised to see how far I have come and how much I have grown as a person. In the next chapter of my life, I wish to be an academician who continues to be resilient and hardworking and persevere in the face of any future challenges as this journey has taught me to embrace these valuable qualities. Most of all, I want to work with others to enhance the educational opportunities of young people in Malaysia who have the potential to achieve so much in a country that wants them to do so but is still looking for ways to make that happen.

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Appendix A: Letter of Ethics Approval University of Glasgow



College of Social
Sciences

August 14th 2017

Dear Ms Aziz

College of Social Sciences Research Ethics Committee

Project Title: *An exploration of relationship between policy and practice in the process of policy enactment of KSSR (Standard Curriculum for Primary Schools) in primary schools in Malaysia*

Application No: 400160186

The College Research Ethics Committee has reviewed your application and has agreed that there is no objection on ethical grounds to the proposed study. It is happy therefore to approve the project, subject to the following conditions:


- Start date of ethical approval: August 14th 2017
- Project end date: January 10th 2019
- Any outstanding permissions needed from third parties in order to recruit research participants or to access facilities or venues for research purposes must be obtained in writing and submitted to the CoSS Research Ethics Administrator before research commences. Permissions you must provide are shown in the College Ethics Review Feedback document that has been sent to you.
- The data should be held securely for a period of ten years after the completion of the research project, or for longer if specified by the research funder or sponsor, in accordance with the University's Code of Good Practice in Research: (http://www.gla.ac.uk/media/media_227599_en.pdf) (Unless there is an agreed exemption to this, noted here).
- The research should be carried out only on the sites, and/or with the groups and using the methods defined in the application.
- Any proposed changes in the protocol should be submitted for reassessment as an amendment to the original application. The *Request for Amendments to an Approved Application* form should be used: <http://www.gla.ac.uk/colleges/socialsciences/students/ethics/forms/staffandpostgraduateresearchstudents/>

Yours sincerely,

Dr Muir Houston
College Ethics Officer

Muir Houston, Senior Lecturer
College of Social Sciences Ethics Officer
Social Justice, Place and Lifelong Education Research
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Appendix B: Letter of Approval to conduct research in Malaysia

	<p>UNIT PERANCANG EKONOMI Jabatan Perdana Menteri Blok B5 & B6 Pusat Pentadbiran Kerajaan Persekutuan 62502 PUTRAJAYA MALAYSIA</p>	<p>Tel : 603-8000 8000 Laman web : www.epu.gov.my</p>
		<p>Ruj. Tuan Your Ref.</p>
		<p>Ruj. Kami Our Ref. UPE 40/200/19/3423 (5)</p>
		<p>Tarikh Date: → May 2017</p>
<p>Ms. Azima binti Abdul Aziz 14, Hala Tasek Timur 6 Kampung Tersusun Tasek 31400, Ipoh Perak Darul Ridzuan Email : a.binti-abdul-aziz.1@research.gla.ac.uk</p>		
<p>APPLICATION TO CONDUCT RESEARCH IN MALAYSIA</p>		
<p>With reference to your application, I am pleased to inform 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:</p>		
Researcher's name	:	AZIMA BINTI ABDUL AZIZ
Passport No / I.C No	:	850805-08-6041
Nationality	:	MALYSIAN
Title of Research	:	"AN EXPLORATION OF THE RELATIONSHIP BETWEEN POLICY AND PRACTICE IN THE PROCESS OF ENACTMENT OF STANDARD CURRICULUM FOR PRIMARY SCHOOLS (KSSR) POLICY IN MALYSIAN PRIMARY SCHOOLS"
Period of Research Approved	:	4 months (4.5.2017 – 3.9.2017)
<p>2. Please take note that the study should avoid sensitive issues pertaining to local values and norms as well as political elements. At all time, please adhere to the conditions stated by the code of conduct for researchers as attached:</p>		

Appendix C: Letter of Approval to conduct research from the participating schools

Azima Binti Abdul Aziz
School of Education
University of Glasgow
Eldon Street, G3 6NH,
Glasgow, United Kingdom.

Head Teacher
Pasukan Polis Hutan Primary School,
Jalan Pasukan Polis Hutan
31250, Ulu Kinta
Perak Darul Ridzuan.

23rd July 2017

Dear Sir/Madam,

Application to conduct research in Pasukan Polis Hutan Primary School, Ulu Kinta, Perak.

Referring to the matter above, I, Azima Binti Abdul Aziz, a second year PhD student from University of Glasgow would like to seek permission to carry out my data collection process in this school. During the course of my stay, I would like to perform the following research methods that will be used for my research:

- i. Classroom observation followed by semi-structured interviews with 4 teachers teaching Malay Language (Bahasa Melayu), English (Bahasa Inggeris), Mathematics and Science to Year 5 pupils. The participation in this research ultimately relies on the teachers themselves though the head teacher may recommend the names of the teachers whom he/she thinks is suitable. Their willingness to participate in this research is highly appreciated and their participation is kept confidential. Their identity is anonymous including the name of the school in the research output. The teachers are also allowed to withdraw from this research at any time without providing any reasons and the information that they have shared will not be used in the research output. Prior to the classroom observation, a consent letter and the information sheet about this research will be distributed to the teachers as well as the parents/guardians of the pupils to inform them about this research and to seek their consent.
- ii. Semi-structured interviews with the head teacher and a total of 30 pupils from the classrooms that are involved in the observation. Before the interviews are conducted, I will seek consent from the head teacher and the parents/guardians of the pupils to ensure that they are aware of their children's involvement in this research. I would also like to seek cooperation from the head teacher to assign me a teacher/assistant teacher/administration staff during the interview sessions. This is a precaution measure to ensure that the safety of the children is protected in case of any emergency circumstances were to occur. The participation of both the head teacher and the pupils in this research is voluntary and all information are kept confidential. The identity of the participants is kept anonymous including the name of the school in the research output. The participants are allowed to withdraw from this research at any time without providing any reasons and the information that they have shared will not be used in the research output.
- iii. Analysing documents such as the lesson plans of the teachers who are involved in the classroom observation, teaching materials that are related to school-based assessment practice, reports from school inspectors and reports that entail the activities related to the enactment of the KSSR curriculum policy in this school. The purpose of analysing these documents is to serve as hard evidence that illustrates the activities and events that have been carried out as part of the curriculum enactment process.

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Appendix D: Sample of Observation Protocol Form

Azima Binti Abdul Aziz
 School of Education
 University of Glasgow
 Eldon Street, G3 6NH,
 Glasgow, United Kingdom.

Head Teacher
 Tasek Dermawan Primary School,
 Kampung Tersusun Tasek,
 31400, Ipoh,
 Perak Darul Ridzuan.

23rd July 2017

Dear Sir/Madam,

Application to conduct research in Tasek Dermawan Primary School, Ipoh, Perak.

Referring to the matter above, I, Azima Binti Abdul Aziz, a second year PhD student from University of Glasgow would like to seek permission to carry out my data collection process in this school. During the course of my stay, I would like to perform the following research methods that will be used for my research:

- i. Classroom observation followed by semi-structured interviews with 4 teachers teaching Malay Language (Bahasa Melayu), English (Bahasa Inggeris), Mathematics and Science to Year 5 pupils. The participation in this research ultimately relies on the teachers themselves though the head teacher may recommend the names of the teachers whom he/she thinks is suitable. Their willingness to participate in this research is highly appreciated and their participation is kept confidential. Their identity is anonymous including the name of the school in the research output. The teachers are also allowed to withdraw from this research at any time without providing any reasons and the information that they have shared will not be used in the research output. Prior to the classroom observation, a consent letter and the information sheet about this research will be distributed to the teachers as well as the parents/guardians of the pupils to inform them about this research and to seek their consent.
- ii. Semi-structured interviews with the head teacher and a total of 30 pupils from the classrooms that are involved in the observation. Before the interviews are conducted, I will seek consent from the head teacher and the parents/guardians of the pupils to ensure that they are aware of their children's involvement in this research. I would also like to seek cooperation from the head teacher to assign me a teacher/assistant teacher/administration staff during the interview sessions. This is a precaution measure to ensure that the safety of the children is protected in case of any emergency circumstances were to occur. The participation of both the head teacher and the pupils in this research is voluntary and all information are kept confidential. The identity of the participants is kept anonymous including the name of the school in the research output. The participants are allowed to withdraw from this research at any time without providing any reasons and the information that they have shared will not be used in the research output.
- iii. Analysing documents such as the lesson plans of the teachers who are involved in the classroom observation, teaching materials that are related to school-based assessment practice, reports from school inspectors and reports that entail the activities related to the enactment of the KSSR curriculum policy in this school. The purpose of analysing these documents is to serve as hard evidence that illustrates the activities and events that have been carried out as part of the curriculum enactment process.

2. I intend to complete the data collection process using the methods described above within **three** months (July-October 2017). This is to ensure that all the required documents and information needed for this research are sufficient. During the stipulated period, I would also discuss and seek clarification in regards to the information recorded during the observations, interviews and document analysis with the participants to ensure that they are legit and true before they are published in the research output.

Scanned by CamScanner

Observation protocol form

Purpose of the observation: To observe the teacher conduct lessons in order to evaluate if they use the approaches of assessment for learning to reflect the practice of school-based assessment in the classroom.

Teacher's name: Puan Norhasina

Subject: Bahasa Melayu

Date: 8th August 2017

Class: 5 Inovatif (51)

No. of students: 29 / Present: 27

Time: 11am-12pm

Topic: Aku Anak Merdeka

Visit No:1

IMPORTANT: The observation is considered complete after the information about AFL approaches have been recorded and at least one assessment has been carried out.

Approaches	Is it performed?	Remarks	Teaching/learning activities
Clarify learning objectives	Yes / No	Write on the board: Membaca petikan / mendeklamasi sajak	<ul style="list-style-type: none"> T displayed a video on poem recitation from Youtube Reading skill – textbook pg 141 T assigns pupils to read out the texts from the textbook Comprehension questions – respond verbally Group activity – discuss the questions given in the groups <ol style="list-style-type: none"> Apakah harapan Pak Halim kepada cucunya, Zamri? Apakah maksud rangkap kedua sajak "Aku Anak Malaysia"? Apakah persamaan idea/isi penting yang terdapat dalam sajak dan cerpen? Pada pendapat kamu, mengapakah sambutan

1

			<p>Hari Kemerdekaan diadakan di peringkat sekolah?</p> <ul style="list-style-type: none"> Students showed their outcome of the discussion – a representative from each group presented their answers to the rest of the class
Questioning	Yes / No	<p>Pada pendapat kamu, apakah pekerjaan Pak Abu pada waktu itu? Siapa Zamri? Apakah harapan Pak Halim kepada cucunya Zamri? Apakah cara untuk kamu mencurah bakti kepada negara pada masa akan datang? Apakah maksud rangkap kedua sajak yang dibacakan tadi?</p>	<p>Ask questions in regards to the video: to lead to the learning objective</p> <p>Comprehension questions – respond verbally</p>
Waiting time for students to think or discuss with their partner before responding to the question	Yes / No	<p>The waiting time is short because the students are responding to the questions actively.</p> <p>Group activity – the time given was 10 minutes</p>	
Initiating an impromptu discussion	Yes / No		
Defining success criteria <i>*before assessment</i>	Yes / No	<p>These are displayed on the board to outline the success criteria for today's lesson</p> <p>- Membaca petikan dan mendeklamasi</p>	

2

		<p>sajak dengan sebutan dan intonasi yang betul dan jelas.</p> <p>- Menjawab soal-an pemahaman.</p>	
Feedback <i>*after assessment</i>	Yes / No		
Peer- assessment	Yes / No		
Self-assessment	Yes / No		
Student's participation in the learning activities	Yes / No		<ul style="list-style-type: none"> • Students take turn to read out the texts (cerpen/sajak) from the textbook – voluntary participation from students + assign by the teacher • Group activity – discussion and presentation of the responses to the rest of the class

Appendix E: Sample of interview transcription

Respondent (R)	:	I was in the <u>Department of Education Technology, Perak</u> for 5 years.	previous department	Career background: ICT
Interviewer (I)	:	So, you have been in the management for about 10 years?	years of experience in managerial positions	Career background: managerial position
Respondent (R)	:	Yes.		
Interviewer (I)	:	It's out from your core business, as a teacher.		
Respondent (R)	:	As a teacher		
Interviewer (I)	:	And you've been involved in the management for 10 years.		
Respondent (R)	:	Actually, <u>15 years because before this I was in the Technology Department at the Teacher Activity Centre.</u>	total number of years in managerial positions	Career background: managerial position
Interviewer (I)	:	Okay.		
Respondent (R)	:	It's the same. I was the <u>Education Technology Officer, Teacher Activity Centre, Seri Manjung</u> for 5 years.	Specific location as IT officer	Career background: ICT
Interviewer (I)	:	No wonder you're interested in IT-related activities or events because you're well-exposed to them.		
Respondent (R)	:	I <u>received a specific training on IT</u> when I became the Technology Officer. Then, when I was at the Department of Educational Technology, I <u>was in-charge of ICT matters in Perak</u> . I was the ICT officer in Perak. I can say that I'm <u>competent with ICT</u> .	- trainings related to ICT - special role as an ICT officer - personal belief about ICT skills and knowledge	Career background: ICT Embodiment – positive reflection of personal ability
Interviewer (I)	:	So, that was your experience being in the management for 15 years. So, what is your opinion as someone who has been in the management and the head teacher of this		

Appendix F: Consent form (Policy makers/Head Teachers)



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Consent Form (Administrator)

Title of Project: "An exploration of the relationship between policy and practice in the process of enactment of Standard Curriculum for Primary Schools (KSSR) policy in Malaysian primary schools"

Name of Researcher: Azima Binti Abdul Aziz

Contact details:

Please circle your responses for the following statements.

Statements	Response
1. I confirm that I have read and understood the Plain Language Statement for the above study and have had the opportunity to ask questions to the researcher.	Yes / No
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.	Yes / No
3. I understand that the decision not to participate in the research will have no effect on employment.	Yes / No
4. I agree to take part in the interview session with the researcher.	Yes / No
5. I hereby agree to the interview being audio-recorded.	Yes / No
6. I clearly understand how my identity and the identity of the schools will be protected in the research output.	Yes / No
7. I agree to be an anonymous pseudonym in the research output.	Yes / No

Name of Participant _____

Date _____

Signature _____

Researcher _____

Date _____

Signature _____

Appendix G: Consent form (Parents/Guardians)



College of Social
Sciences

Consent Form (Parents / Guardians)

Title of Project: "An exploration of the relationship between policy and practice in the process of enactment of Standard Curriculum for Primary Schools (KSSR) policy in Malaysian primary schools"

Name of Researcher: Azima Binti Abdul Aziz

1. I confirm that I have read and understand the Plain Language Statement for the above study and have had the opportunity to ask questions.
2. I understand that my daughter/son's participation is voluntary and that she/he is free to withdraw at any time, without giving any reason.
3. I understand that refusal to participate or non-participation in the research will have no effect on my daughter / son's academic quality.
4. I understand that refusal to participate or non-participation in the research will have no effect on my child even though there will be some lessons that are video recorded for the purpose of this research. The purpose of the video-recording is to observe the teachers and the pupils are not going to be identified.
5. I understand that the interview will be audio-recorded.
6. I agree/do not agree (delete as applicable) that I clearly understand how the identity of my daughter / son will be protected in the research output.
7. I agree to allow my daughter / son to take part in the above study on the following basis (delete as appropriate):
 - a) He / she is being identified by an anonymous pseudonym in the output of the research.
 - b) His / her participation is given consent provided that his / her identity agree is not stored in the research data, in which case his / her data will be referenced in the research output anonymously.
8. I agree / do not agree (delete as applicable) to allow my daughter / son to take part in this study.

Name of Participant

Date

Signature

Name of Parent / Guardian

Date

Signature

Researcher

Date

Signature

Appendix I: Plain Language Statement / Consent form (Students)



College of Social Sciences

Plain Language Statement and Consent Form for Primary School Pupils

This form is prepared in two languages, English and Malay Language (the official language in Malaysia). There are two sections in this form; Section A and Section B. After reading carefully the information and filling up the necessary information in this form, please tear off this form at the end of Section A. You keep the Section A portion and please return to me the Section B portion.

Borang ini disediakan dalam dua bahasa, Bahasa Inggeris dan Bahasa Melayu (bahasa rasmi yang digunakan di Malaysia). Di dalam borang ini, terdapat DUA bahagian; Bahagian A dan Bahagian B. Selepas kamu membaca maklumat yang terkandung di dalam borang ini serta mengisi semua maklumat yang diperlukan, sila koyakkan borang ini di ruangan akhir Bahagian A. Sila simpan maklumat yang terkandung di Bahagian A and sila pulangkan Bahagian B kepada saya.

Section A / Bahagian A

Title of this research: "An exploration of the relationship between policy and practice in the process of enactment of Standard Curriculum for Primary Schools (KSSR) policy in Malaysian primary schools"

Tajuk kajian ini: "Sebuah kajian tentang hubungan antara polisi dan praktis semasa proses pelaksanaan KSSR (Kurikulum Standard bagi Sekolah Rendah) di sekolah rendah di Malaysia".

- Here are the details about myself as the person who is doing this research / *Di ruangan bawah ini adalah maklumat diri saya sebagai orang yang bertanggungjawab membuat kajian ini:*

Name / *Nama*: Azima Binti Abdul Aziz

The name of the university I am studying / *Nama universiti*: University of Glasgow, United Kingdom

- What is the objective of this research? / *Apakah objektif kajian ini?*

The objective of this research is to investigate how schools including teachers have been carrying out teaching plans using the new curriculum content, KSSR (Standard Curriculum for Primary Schools).

Objektif kajian ini adalah untuk menyiasat bagaimana pihak sekolah termasuk guru-guru merancang pengajaran mereka dan mengajar menggunakan kandungan yang terkandung di dalam kurikulum baru ini.

- What will happen if you take part? / *Apakah yang akan berlaku jikalau kamu mengambil bahagian di dalam kajian ini?*

If you agree to take part in this research, you are involved in either or both following situations:

Jikalau kamu bersetuju untuk mengambil bahagian di dalam kajian ini, kamu akan terlibat di dalam satu atau kedua-dua situasi berikut:

Situation 1 / *Situasi 1*

You are the learner in the classroom: I am going to do an observation where I sit at the back of your classroom to observe your teacher teaching. During this observation, I will also observe how your teacher talks to you such as the way he/she asks you questions. I will not ask you anything during the observation, but I need to let you know that you are also indirectly involved during this time. The focus here is your teacher who is teaching you.

Kamu adalah murid di dalam kelas yang saya pantau: Saya akan melakukan pemerhatian di mana saya akan duduk di bahagian belakang kelas kamu untuk memerhatikan guru kamu mengajar. Sepanjang proses ini, saya akan mencatat cara guru kamu bercakap dengan kamu seperti jenis-jenis soalan yang ditanyakan kepada kamu. Saya tidak akan bertanyakan kamu apa-apa soalan semasa proses ini, namun saya perlu memastikan bahawa kamu sedar yang secara tidak langsung, kamu juga terlibat dalam proses pemerhatian tersebut. Fokus saya adalah terhadap guru yang sedang mengajar kamu.

Situation 2 / *Situasi 2*

You are selected to be in an interview session: I am going to have an interview with you in a special room in this school. Your teacher is going to help me select anyone of you or you can volunteer to take part in this interview. During this interview session, I will ask you some questions about your study, your homework and your tests and exams. You may respond to the question if you know the answer or you can just keep quiet if you don't know the answer or if you don't have anything to say. If after we have started the conversation, you don't want to be involved in the interview anymore, you can inform me and I will not punish you or tell your teacher about it. If you allow, I will use a tape recorder to record our conversations so that I can listen to them again to write my essay.

Kamu terpilih untuk terlibat dalam sesi temu bual dengan saya: Saya akan menjalankan satu sesi temu bual dengan kamu di dalam sebuah bilik khas di sekolah ini. Guru kamu akan membantu saya memilih salah seorang dari kamu atau kamu sendiri boleh mengambil bahagian secara suka rela. Sepanjang proses temu bual ini, saya akan bertanyakan kamu beberapa soalan mengenai pengalaman pembelajaran kamu, kerja-kerja sekolah dan ujian-ujian yang kamu lakukan sewaktu di sekolah. Kamu boleh menjawab soalan saya atau berdiam diri jikalau kamu tidak mahu menjawab soalan saya. Jikalau kamu berasa tidak selesa dan ingin menarik diri selepas kita memulakan sesi temu bual, kamu boleh beritahu saya dan kamu tidak akan didenda. Guru kamu juga tidak akan diberitahu mengenai perkara ini. Jika kamu setuju, saya akan merekod perbualan kita menggunakan alat perakam suara supaya saya dapat mendengar semula perbualan kita sewaktu saya menulis karangan saya nanti.

Furthermore, the content of our conversation and the events that I write down during the interview will be revised and written in my long essay.

Saya akan menggunakan kandungan perbualan kita yang telah diolah semula di dalam karangan saya nanti.

Must I participate in this research? / ***Adakah wajib untuk saya mengambil bahagian di dalam kajian ini?***

Your participation in this research is not compulsory. You can discuss with your parents/guardian and decide if you want to participate. The information that you share with me is highly confidential and will not be shared with others. If you do not wish to participate, you do not need to provide any reasons. If you wish to participate but later on decide to withdraw from this research, you don't need to give any reasons for your actions and all the information that have been shared will not be used in the research output.

Kamu tidak wajib untuk mengambil bahagian di dalam kajian ini. Kamu boleh berbincang dengan ibu bapa atau penjaga kamu sebelum membuat keputusan untuk mengambil bahagian di dalam kajian ini. Sebarang maklumat yang kamu kongsi adalah rahsia dan tidak akan dikongsi dengan orang lain. Jikalau kamu bersetuju untuk mengambil bahagian tetapi ingin menarik diri pada masa akan datang, kamu boleh melakukannya tanpa perlu memberikan sebarang sebab. Jika itu berlaku, semua maklumat yang telah kamu kongsi dengan saya tidak akan digunakan di dalam kajian saya.

• Will I write your name in my research? / ***Adakah nama kamu akan ditulis di dalam kajian saya?***

No, I will not write your real name, but I will give you a new name. You may suggest to me your new name if you prefer. I will not tell your details to other people especially your friends and other teachers inside and outside of this school.

Tidak, saya tidak akan menulis nama sebenar kamu, akan tetapi saya akan menggantikan nama kamu dengan panggilan yang baru. Kamu juga boleh mencadangkan pada saya nama gantian yang kamu suka. Semua maklumat yang kamu kongsi dengan saya tidak akan dikongsi dengan orang lain terutama sekali rakan-rakan kamu atau guru-guru kamu baik yang berada di sekolah ini ataupun yang berada di sekolah lain.

-----TEAR-OFF HERE / KOYAK DI SINI-----



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Section B / Bahagian B

Here is the section where you indicate your agreement or disagreement to take part in this research. / **Bahagian ini adalah ruang untuk kamu menyatakan persetujuan untuk mengambil bahagian di dalam kajian ini.**

Pupil's name / **Nama murid:** _____

Class / **Kelas:** _____

Subject / **Matapelajaran:** _____

Please circle your option for the following questions. / **Sila bulatkan pilihan jawapan kamu bagi soalan-soalan di bawah.**

1. Do you agree to take part in this research as the learner in the classroom during the observation process?
Adakah kamu bersetuju untuk mengambil bahagian sebagai murid di dalam kelas sewaktu proses pemerhatian berjalan? Yes Ya / No Tidak
2. Do you agree to be part of this research in the interview session?
Adakah kamu bersetuju untuk mengambil bahagian di dalam sesi temu bual? Yes Ya / No Tidak
3. Do you agree for our conversation to be recorded using a tape recorder?
Adakah kamu bersetuju untuk saya merekodkan perbualan kita menggunakan alat perakam suara? Yes Ya / No Tidak

Thank you for your cooperation. / **Terima kasih di atas kerjasama yang kamu berikan.**

Signature / **Tandatangan:** _____

Name / **Nama:** _____

Date / **Tarikh:** _____

Appendix J: Plain Language Statement (Administrators/Teachers)



College of Social
Sciences

Plain Language Statement: Administrators / Teachers

Study title: "An exploration of the relationship between policy and practice in the process of enactment of Standard Curriculum for Primary Schools (KSSR) policy in Malaysian primary schools"

Researcher Details

Name : Azima Binti Abdul Aziz

Email

Invitation paragraph

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please do not hesitate to ask me if there is anything that is not clear or if you would like more information, and please take time to decide whether or not you wish to take part in this research study.

Thank you for reading this.

What is the purpose of the study?

This research is carried out in order to fulfil the research requirements of the PhD in Education at University of Glasgow. The purpose of this study is to explore the relationship between policy and practice in the enactment process of KSSR (Standard Curriculum for Primary School) in Malaysian primary schools. It is highly important to examine the relationship between policy and practices in schools because the issues faced at the ground level need to be addressed to the higher authority so that plans for future educational reforms can be improved.

Why have I been chosen?

You have been identified due to your role as the individuals who are involved in the enactment process of the policy. One of the strengths of this study is to delve deeper into the thoughts and perceptions of the implementers of policy at school level in order to further understand the situation after the policy is implemented.

Do I have to take part?

Your position within institution and experiences are valuable for the progress of the research. However, you have the option to choose whether to take part or not. You are free to withdraw your consent at any point of participation without providing any explanation.

What will happen to me if I take part?

Once you agree to take part, I will conduct an interview with you in your convenience for a period of approximately 30-45 minutes. This interview is taken place at your job location so you do not have to spend time outside of your working hours. You have the option to provide me with any information you deem relevant to my research and you have the right to stop the interview at any time. With your prior consent, audio recorder is used and all data will be treated as confidential. For your information, I will also interview your colleagues although data gathered from you and them will not be disclosed to your superiors and subordinates in order to ensure the protection and

anonymity of the participation. In addition, I can assure your participation will not affect your current employment position in any way.

Will my taking part in this study be kept confidential?

The data you provided to me in confidence will be kept confidential and all data will be handled with care. Your data will be ~~be~~ treated anonymously in the research output. However, you should also be made aware that there seems to be a risk of your colleagues from the same schools to recognise each other's data in research outputs, even if they are anonymised.

During fieldwork, data will be stored in the personal laptop accessible through password only and field notes will be stored securely in personal locked file cabinet. After that, data will be stored in University computer accessible through student password only and field notes, formal notes and any other notes will be stored in University locked file cabinets. Field notes, audio records and rough notes (not anonymous) will be destroyed at the end of the PhD research. Research data will be kept for a maximum of 10 years according to good research practice.

Please note that assurances on confidentiality will be strictly adhered to unless evidence of wrongdoing or potential harm is uncovered. In such cases the University may be obliged to contact relevant statutory bodies/agencies.

What will happen to the results of the research study?

The results of the research study will be used for the completion of my PhD degree. In addition, it may be included in journal articles and reference papers, and in the future may be used in a book or book chapter. The summary of the results will also be made available upon request by the participants.

My contact details will be given to you, in case you want to provide me with additional details and clarifications. Moreover, if you want, I can provide you with a copy of final manuscript of thesis upon completion.

Who is organising and funding the research? (If relevant)

The research is organised by me with the guidance from two supervisors as a PhD student of School of Education, University of Glasgow. The research is funded for three years as a recipient of Ministry of Higher Education, Malaysia scholarship under the SLAB/SLAI programme.

Who has reviewed the study?

The study has been reviewed by my two PhD supervisors:

Professor Louise Hayward. (E-mail: Louise.Hayward@glasgow.ac.uk)

Dr. Hazel Crichton (E-mail: Hazel.Crichton@glasgow.ac.uk)

This will be also reviewed by the Ethics Committee of the College of Social Sciences at the University of Glasgow.

Contact for Further Information

Researcher contact details:

Azima Binti Abdul Aziz

Email:

Mobile : 011 2311071.

Supervisors contact details

>Principal supervisor: Professor Louise Hayward

Email: Louise.Hayward@glasgow.ac.uk

Phone(UK) +44(0) 01413307501

>Second supervisor: Dr. Hazel Crichton

Email: Hazel.Crichton@glasgow.ac.uk

Phone (UK) +44 (0) 01413306586

If you have any concerns regarding the conduct of this research project, you can contact the College of Social Sciences Ethics Officer Dr Muir Houston, email: Muir.Houston@glasgow.ac.uk