

## **Chapter Two**

### **Literature Review**

#### **2.0 Introduction**

In this chapter, the researcher reviews related literature on how education policy in Malaysian context, in particular, medium of instruction policy has been discussed in previous studies. The policies are also compared with a couple of Asian countries which are taking medium of instruction policy crucial to their education system.

According to Nik Safiah Karim (1994) Bahasa Malaysia (henceforth BM) has managed to function as the dominant language in most of the domains in Malaysia. The development of BM planning has been defined under three different types of language planning activities. Firstly, national language policy, that is, adopting BM as the official language. Secondly, national education policy states that Malay should be the main medium of instruction in all national schools. Thirdly, while BM plays the dominant role, learning of other language is encouraged and English is perceived as the second important language; hence, the making of a bilingual nation is realized.

There are some similarities between Malaysia and Singapore. For instance, both countries use four languages, which are Malay, English, Mandarin and Tamil. Due to historical circumstances and global hegemonic power of English, the language has been retained and encouraged.

In the neighboring country, and previously part of the Federation of Malaya, Singapore, the ethnic diversity comprises Chinese 77%, Malays 15%, Indians 6% and others 2%. The stark contrast between Malaysia and Singapore is: four languages are official in Singapore, unlike Malaysia. Although four languages are considered official, in practice, the younger generation uses English more than other ethnic languages. Llamzon (1977) reports that more than half of the adult population has some competence in Malay, while Tamil is used least. Mandarin is officially accepted, and it

is also the native language for the Chinese community. However, only 1% of the community uses Mandarin, the strongest native dialect is Hokkien (Edwards, 2009). It is perceived that English and Mandarin have greater prestige, Hokkien and Malay are low-status languages, and Tamil plays a minor role.

Due to common history, it is necessary to discuss Singapore's education system. Before 1965, Singapore maintained separate school system for each of the four official languages, under a bilingual educational policy, that is, students were required to study in English with one of the other languages. In fact, English became a more popular medium of instruction in primary school, Chinese was taught only as a subject. On the other hand, Malay and Tamil schools ceased in 1979 because of lack of demand (Watson, 1980). In 1979, the government –sponsored “speak Mandarin” campaign. Because Mandarin possesses cultural prestige, so the government wanted to promote Mandarin and drop other dialects. However, the most important change in the educational policy came with the Prime Minister Lee Kuan Yew's announcement in 1984 that, as of 1986, English would become the sole language of instruction. Mandarin, along with Malay and Tamil, would then be relegated to subject-only status in schools (Parkins, 1984: 179).

To connect with language policy and planning, it is in the hand of the government whether or not to promote Mandarin and English. This is not, in itself, surprising but in Singapore, much of the effort is very centralized around the Prime Minister and his closest advisors (Edwards, 1994:188).

Consider the educational policy in Malaysia, when the British came to the country they brought their culture, language and their beliefs. Education started in BM in the religious schools until the British came to establish English as a medium of instruction in primary and secondary schools. By the 19<sup>th</sup> century, Malaysian education

was available in four languages. Malay, Chinese, Tamil, English (Asiah Abu Samah, 2009).

But in 1956, the 'Razak report' suggested to make Malay the national language of the country, at the same time, to preserve and sustain the growth of the language and cultures of non-Malays living in the country. After independence, this policy has been confirmed by the minister of education Abdul Rahamn Talib (1961) that the BM be the national language, the Rahman Talib Report suggested that by creating a national system of education would promote a unified culture as well as social and political development, on the other hand English was still used as the official language, where Chinese and Tamil primary schools were required to teach national language as a course. English was retained as the medium of instruction until 1970; the medium was gradually converted to BM.

In 1968, in primary school courses of health education, music, art craft and local studies being the first to convert, while the secondary schools were converted completely by the end of 1980. In 1983 all courses in the local universities were progressively converted to BM. However, different corners of the society raised the issue of such conversion. There were suggestions that the government perhaps needs to reconsider its education policies because a stable national identity and equal ethnic status among groups may stimulate national development.

On the other hand, there were reasons why English-education was not encouraged among the Malays. The English schools in Malaysia in its early days were built by Christian missionaries, which were 'forbidden' by the Malay sultanates, because of the fear of conversion into Christianity (Andaya & Andaya 2001). Apart from the issue of conversion, the English school fees set high, also, discouraged Malay parents sending their children to study in English schools.

Since 1920, in order to impede the development of Chinese's political influence in Malaysia, the colonial government provided the Chinese financial assistance and to control the activities of their schools, but the Chinese schools consistently refused the aid from the government, in this way, they could maintain their language and culture so that they may retain their identity (Malaya 1951b; Purcell, 1948: 229).

The national education policy as defined in the education act of 1961 emphasized that the BM would eventually become the medium of instruction in schools and also English would become an important second language in the country. During that period Chinese education association has reacted against this policy by demanding Chinese language should be recognized as an official language and may be a medium of instruction too. Dong Jiao Zong, one of the most influential Chinese associations in the country intensified their campaign to recognize Chinese as an official language and for the equal treatment of Chinese schools. The independent Chinese secondary schools (ICSS) continued to use Chinese as the medium of instruction so as to maintain their identification as a Chinese, while Malay and English remained as compulsory language subjects in school.

1990 saw a major shift in Chinese language education policy in Malaysia. China's growth as an economic power, and a convergence of other factors allowed more freedom in use of Chinese language in public notices and signboards. Regionalization had an impact on education system in many countries throughout the world (Lee Hock Guan, 2009).

After independence, as Malay nationalism grew its prominence, education policy makers believed that establishing Malay as the national language would promote a unified culture, as well as the social ,political development, but for economic needs, many individuals believed to have continued the bilingual study. It is often suggested

that a bilingual education system for all would be the “best” option for Malaysia (Saran 2007: 110).

Education policies can be seen as a direct effect of hegemonic intervention by the state (Lin Wei Li, 2005). In January 2003 Malaysia government announced to use English as a medium of instruction for mathematics and science in order to ensure that Malaysians are able to keep abreast with scientific and technological development that is mostly recorded in the English language and to provide opportunities for students to use the English language so as to increase their proficiency in the language. However, studies show that teaching instruction in the mother tongue or the first language may not impede the development of the second language (Bacherman, 2007). As a matter of fact, a number of problems ensued due to the change in the education policy; problems are encountered both by the students and the teachers in using English in the classroom and the availability of language support systems besides appropriate reference books, among others (Mohamad Fadhili Bin Yahaya, 2009, Badral Isa, 2006: 15; Ong, 2004).

The government changed the educational policy in 2009 reverting back to Malay to teach mathematics and sciences. In the new educational policy, the primary level schools may use mother tongue to teach but in secondary level the school's medium of instruction have to be changed to BM. It is widely believed that the change of political environment affect the society deeply, because the different administrations have different understanding of national aspirations in order to consolidate the role of long-term domination. Malaysian Chinese Association vice president Liow Tiong Lai agrees that English should be used to teach mathematics and sciences at secondary level but mother tongue at primary level (see *YouTube* at <http://www.youtube.com/watch?v=Gelwim7exko>).

In a plural society like Malaysia, the need to find a common ground has always been sought since or before independence. This is because; the homogeneity of the state

is a necessary precondition for any effective administration to sustain the hegemony of the state. For Gramsci (2007), to govern effectively, the system must contain a common language, common sense translated into variety of civil, religious and education policies; hence, it is easy to reach the projected hegemony. The homogeneity is not necessarily living with the state administration, but is going to be constructed (Lin Wei Li, 2005: 18). In Malaysia where the Malay is the largest ethnic group that comprises 57% of the whole population, in order to earn the hegemonic consent of the largest vote bank the government needs to consider the perspectives of the majority of the citizens. Looking at the new educational policy it is often indicated that only the Malays might be benefitted as in secondary schools also they can use BM to learn mathematics and science. As such they should not have any ‘connection’ problem from primary to secondary level (*Sin Chew Daily*, 08 May 2009). Hence, United Malay National Organization (UMNO) that represents the Malays within Barisan Nasional (BN), Malaysia’s coalition government, may bend the policy towards the benefit of the majority vote bank to continue their hegemonic role in the country (*Sin Chew Daily*, 14 March 2009). However, the official ideology in Malaysia, propagated by the country’s Prime Minister’s office and his personal blog at <http://www.1malaysia.com.my/>, it is obvious that the hegemonic attempt has also to resonate with such national ideology or commonly referred to, country’s common principles, developed to construct unity and development. Hence, it is expected that the educational system must promote a united, just, democratic, liberal and progressive society.

## **2.1 Problems faced by the students since the educational policy has been implemented in 2003**

Aziz Bin Nordin (2004) identifies a few of the problems suffered by schools as he studied students’ perceptions on teaching and learning mathematics. The respondents

in the study consist of 279 lower secondary school students from three schools in rural area of Johor. The research has defined the importance of English language, however using English to learn mathematics and sciences was difficult because lack of ability to use English to understand the subjects. The author thought that students' performance and background may contribute to the problems in learning mathematics with English, found that students have problems in understanding of the teachers' teaching in English language. And only 6.5% student agreed that they could speak English well and fluently. The result also shows that the majority of the students think in *Bahasa Malaysia* before they produce the answer in English, besides, they like to read subtitles in BM when they are watching English programs; they are more comfortable read the storybooks in BM rather than in English.

The result showed that the students had hardly the ability to learn mathematics and sciences in English. Although the majority of the students felt that English is very important for their future careers; they preferred to learn science and mathematics in BM because it was easier for them to comprehend the subject matter in mother tongue (Aziz Bin Nordin, 2004: 6).

The issues raised in the above study has been echoed in some of the clips sent to *YouTube* show, depicting mainly that those who support the use of English to learn mathematics and sciences have a strong background in English and also have the chance to speak and practice the language on regular basis. One of the opinions published on *YouTube*, supposed by a student, states:

*"its soooooo easy using english to learn sc and math in english , To those who take " weak english" as the reason of agreeing changing it to bm , please think twice before you say so because english is v.important , plus it is an international language. Y must v pamper them? we come to school to learn what v are weak, so "weak english" is not a reason!!!! (Jiawern at www.youtube.com)*

The voice of the students heard reveals that one of the main problems with the students is their level of English. Hence, instead of rewriting the policy of medium of

instruction, the government may concentrate on enhancing students' levels of English, in a way, it is much more important than using English just to teach mathematics and sciences from primary level. More problems may occur if they are forced to learn mathematics and sciences with their poor English at the primary level. Another student on YouTube passed her opinion as follows:

*even worse, some of students already think that math and science are tough subjects and they are forced to learn them, so ppsmi will worsen the situation. so for me it's better to improve the teaching of English first before abruptly implement the new system and suddenly withdraw it. it's just waste of time and also money. there must be something wrong why some students cannot master english even though they have learned them since standard 1. just 2 cent from me (Aikokyoshi87 at www.youtube.com)*

Some of the students still believed that the problems did not arise from which language to use to teach mathematics and science; but the problem arose due to existing practices within the educational system. Another remark from *YouTube*, noteworthy to be mentioned here:

*personally, i think to learn science and math in English is very-very good.but the actual flaw is the system itself. our education system is more to examination purpose and not for the sake of knowledge. thus we think it's better to get a good result than the knowledge itself (knowledge here means english, math and science), that's why the non-English speakers are worried by the time they are good in English, they already have been left behind (Akiokyoshi87 at www.youtube.com)*

A study on the teachers in a Chinese vernacular school in a rural area (Pagjono Kaur and Nasib Singh, 2003), shows the problems faced by the teachers during the ETeMS (Teaching of mathematics and Sciences in English) courses. In this study most of the subjects came from Chinese speaking homes or Chinese environment where English is used, hardly. The result showed that the students had problems comprehending sentences, their level of English was very low; most of the teachers needed to translate each sentence to make students understand. The teachers found that the students had problems also in speaking; hence, it was 'impractical' that they studied such subjects in a language that they did not understand very little or not at all.



## **2.2 The problems not just faced by the students, but also by the teachers**

In Malaysia the issue of which language should be used for teaching in schools has become a key issue at the national level. There are arguments suggesting that more subjects should be taught in Malay, the national language, while others argue that English should be used (*AL Jazeera English* 24 March, 2009 at <http://www.youtube.com/watch?v=HY9pdFKgafg&feature=fvw>).

Studies show that teachers are facing problems not only with the language, but also with the content and pedagogy. Fadhili Yahaya et al. (2009) report the concerns felt by the teachers in relation to this medium of instruction controversy. According to the researchers, 80.8% of the respondents had problem in adjusting with the number of 'new' English words to be learnt as a result of the change in policy, 92.3% of the respondents had problems using these terms or words correctly; while, 88.5% of the teachers found that it difficult to express themselves correctly in English. The teachers felt that the textbook was too brief with inadequate examples and descriptions; hence, less useful, especially, for low English proficiency students. Therefore, the training of the teachers has to focus on the development of language skills.

Members of the civil society have written passionately about the issue of teaching in English but not to forget the importance of the national language. There are suggestions that "continue teaching science and mathematics in English" so that the learners are able to read, write and even dream in Malay and English. That is the only way to make Malaysian graduates competitive (Bakri Musa, 2008).

Most of the teachers were educated in BM from primary to university level; hence, it was not easy for them to teach in English. At the same time, due to their lack of exposure in the language the students are hardly able to give the response to the teachers in English. Teachers considered they will need more training in preparing themselves to teach sciences and mathematics in English. What they need are the

followings: firstly, speaking in English; Secondly delivering instruction of science and mathematics in English; thirdly, conducting question and answer session with students in English; fourthly, devising strategies for teaching science and mathematics in English; fifthly, guiding students to use English in learning science and mathematics (Noraini Idris et al., 2007: 10).

Language as an instruction, a skill to students, is a very important tool used by the teachers to deliver knowledge. The ability to use the language by the teacher helps the students not only to understand the subjects but also to help to many other traits related to teaching and learning. For instance, raise interest of the students on the subject under study, and to inculcate the right attitude towards the discipline. Having said so, Noor Zohori a science teacher being interviewed by the news station *AL Jazeera* said that “Last year only 7 students got “A” in sciences, 7 out of 132. If we use BM, more students will get “A” in sciences (<http://www.youtube.com/watch?v=HY9pdFKgafg&feature=fvww>), 24 March 2009).

Under the global effect, the developments and advances in scientific and technological advances began to make English more and more popular. More and more graduates found it difficult to get a job because they were not proficient in English. In order to capture the international fervor, the Malaysian government changed the educational policy in 2003, and made English as a medium of instruction in primary and secondary school to study mathematics and sciences. Other countries in this region also brought changes in their education policy. For instance, to capture the global market, Hong Kong made significant policy changes. The Hong Kong government fully supported Chinese-medium education by mandating that Putonghua, the national language of mainland china, should be a compulsory subject in primary and secondary schools. The policy caused a big deal of controversy; there were a lot of complaints from teachers, students and parents. Because English remained as the medium of

instruction in most schools which is rooted in the world of commerce, and many Chinese-English bilingual have been trained in this educational system.

After the British control of Hong Kong for half a century, mother tongue teaching is still to be restored. The reason of changing language policy from English to Chinese in Hong Kong is that Hong Kong has become an integral part of China. Besides, for more than a hundred years, Chinese has used as a medium of instruction in schools in Hong Kong (Dan Lu, 2003). The reason why Hong Kong government decided to use Chinese as the medium of instruction is, English is mostly unsuitable for most students because of their lack of proficiency in the language. To facilitate students' learning, it was propped that students' mother tongue be used as the medium of instruction. According to some studies mother tongue education can best serve the students' needs for acquiring commonsense knowledge, educational knowledge and technical knowledge (Dan Lu, 2003) and that mother tongue education does not hinder the growth of the students' English (Chan, 1991).

### **2.3 Media coverage of the issue of teaching and learning mathematics and science**

Media in Malaysia, especially the print media provides a substantial amount of space to discuss language policy in the country. Various schools and educational association are supporting to use mother tongue in primary school and to maintain English in secondary schools, which has been reported widely in the newspapers.

It is necessary to identify who gets the coverage and to what extent it emphasizes a particular position. Dong Jiao Zong is reported in *Sin Chew Daily* to request the cabinet to revive Chinese primary school using their mother tongue to teach mathematics and sciences. The report stated that "We support the government committed to enhancing the national policy in English, but it must be based on

principles of teaching including curriculum, teaching equipment, teaching methods and teacher training” (*Sin Chew Daily*, 08 January 2009).

The newspaper also published statements produced by Chinese political leaders and other influential members of the civil society. For instance, Democratic Action Party (DAP) state secretary Wen SinJie (*Sin Chew Daily*, 09 January 2009) and (*Sin Chew Daily*, Woo RongYuan 23 February 2009) stated in their statements that if an “efficient” and “effective” language education should be a priority it should be in their mother tongue. Referring to the United States, Sweden and Canada, they opined that these countries follow mother tongue education and they have excelled other countries in many respects which certainly show the importance of mother tongue education. The reports published in *Sin Chew* often referred to Singapore among other countries. Singapore’s too much emphasis on English language teaching, besides acquiring fluency in Mandarin, *Sin Chew* states, is on to catch china’s ‘economy train,’ hence, Singapore is actively exploring the language talent people. If the Malaysian Chinese Association (MCA) can quickly and successfully fought to restore native language to teach mathematics and science, not to forget the importance of English, we can truly win back the trust and support of the Chinese community (Woo Hon Cai, *Sin Chew Daily*, 11 January 2009).

However, this issue has been opposed by Mahathir Mohamad, the long-serving former Prime Minister of Malaysia who thinks English should be the medium of instruction even though after more than 6 years of this policy’s ‘failure’ (*Sin Chew Daily*, 27 April 2009). Mahathir believed that the progress of the country and nation is more important than safeguarding the language, because the implementation of English to teach mathematics and science policy and will not negate the importance and the existence of any language; it is to ensure that Malaysian can keep up with the pace of

the world. But his view has been argued against by others that he has not taken account on its own national conditions.

In a bid to attain public consent, Mahathir Mohamad, in his blog (<http://chedet.co.cc/chedetblog/2009/07/the-teaching-of-maths-and-scie.html>), asked visitors to vote whether they supported or opposed the decision to teach mathematics and sciences in BM, 64,400 had voted, with 86% opposed to the move and the rest supportive of BM (*The Star*, 12 July 2009). Mahathir's position towards English has been echoed by Wee Jiaxiang, the Deputy Education Minister, who said,

“The general consensus is that the standard of English must be upgraded. There should be more emphasis on grammar, construction of sentences and literature. It is about learning English as a subject. There is a need for a better curriculum to enable pupils to master the language grammatically. Part of the time used to teach Mathematics and Science in English, for example, could be used to teach English (*The Star*, 21 December 2008).

When the government's stance has been re-stated through some key ministries, the Chinese vernacular newspapers translated the views *literally* in Chinese. For instance, the minister of foreign affairs Rais Yatim's view has been stated as: *The Education Act has made it clear that in school mother tongue should be the medium of instruction for the study of all subjects, so I am against the use English as a medium of instruction* (Minister of Foreign Affairs Datu Seri Rais Yatim, 09 March 2009). This is a view which went in parallel with Dong Jiao Zong's has been reported in *Sin Chew*. It is noteworthy to mention that Dong Jiao Zong with other seven Chinese groups declared that they are fully supporting the government's decision to enhance national's English level, but it must based on the principles of language teaching, including the curriculum design, Teaching Equipment, teacher training, etc. in order to achieve the goal of enhancing the students' level of English (Eight Chinese United Group, *Sin Chew Daily* 07 May 2009).

The policy was reported, discussed and evaluated in English newspapers besides the vernacular ones. For instance, *The Star* reports:

Any new policy will demand a strong political will in terms of the challenges and difficulties in making changes. We anticipated there would be hiccups, resistance and problems in this magnitude. Obviously, the main problem is teachers' proficiency in the English language (*The star*, 14 December 2008).

On the other hand, in one of the editorials the *New Straits Times* writes,

Well, let's hope that the Ministry of Education shows us how this can be done—that our children have a good command of English, be excellent in Bahasa Malaysia and be able to compete successfully on the international stage. (*NST*, 05 July 2009).

Hence, it is obvious that Malaysian newspapers, both vernacular and English; media outlets, both mainstream and alternative, actively participated in discussing and shaping the medium of controversy debate.

## **2.4 Conclusion**

In Malaysia, the education policy is a major field of contestation among different ethnic groups. Political leaders, policy makers, educationists and the stakeholders from different strata have engaged in a discussion in order to establish their positions vis-à-vis the policy. Media has provided a space to let the contestation grow, whereby the arguments have been constructed as a problem of ethnic identity, culture; but also centering on the 'interests' of the students as well as the 'ability' of the teachers. Issues concerning policy making, political will and cultural identity are discussed in this chapter in order to position the research problem within the paradigm of multidisciplinary research that combines multiple discourses and fields of studies to explicate the discursive formation of the 'teaching of mathematics and science in English' in Malaysia.