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Gaining Linguistic Capital through a Bilingual Language Policy Innovation

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Abstract. Linguistic capital provides leverage to Malaysia which relies extensively on human resources to maximise productivity to meet changing economic and social needs. This poses a challenge to her policy implementers who would need to institute a sound language education policy to meet the nation's goals. Investing in linguistic capital is a long-term endeavour and returns are seldom immediate. However, urgent action and attention has to be given to initiate a paradigm shift in approaching these desired goals. With this in mind, a daring policy innovation was made in 2003 which actualised in the introduction of teaching Mathematics and Science in English in Malaysian schools. This 'boardroom' decision created ripples and waves across stratums of stakeholders. The 'market forces' at play provides indices of the policy efficacy. A survey conducted reveals strong reservations among the different stakeholders who are aligned to three major ethnic groups in Malaysia. This paper examines and discusses the concerns expressed by the three ethnic groups on the implementation and impact of the language policy change. These concerns have deep-seated effects on the linguistic capital under cultivation in the Malaysian language environment.

Introduction

In the current Malaysian school system, the medium of instruction officially is Bahasa Melayu (the national language). The public elementary school system is broadly organised along the concept of national schools and national-type schools in which national schools are those that follow a curriculum that is conducted in the

national language. National-type schools on the other hand allow for the use of vernacular languages (Chinese and Tamil) to be used as medium of instruction. This division ceases to apply at the secondary level where all subjects are taught in the national language except for English and religious subjects.

This educational scenario has come about due to several reasons. Among them, the most exerting was that post- independent Malaysia saw a need to develop Bahasa Melayu as the national language as it was the language of the largest ethnic group and also the language of unity among the diverse races. The change from English to Bahasa Melayu as the medium of instruction in national schools was complete by 1970 and English then became a language subject for all schools. However, provisions were made for the learning of the other major ethnic languages (Chinese and Tamil) at the primary level national-type schools, which historically, could be viewed as a political manifestation to appease the major communities in the national effort of establishing native sovereignty in a country long dominated by the British. Minority language rights were thus safeguarded and perpetuated and this actualised the policy that "every child should have the right to become literate in his or her mother tongue" (Wiley, 2002:41). This subscription has resulted in today's coexistence of national primary schools and the national-type primary schools. The current 'anomaly' has led to a divergent development of the various languages. In the event, English has suffered a major setback as many of the students lack proficiency in the language -- a fact generally recognised by all quarters concerned.

Thirty-three years from 1970, in a dramatic turn-about, the Government adopted English for teaching Mathematics and Science to Primary 1 and Secondary 1 students, who would continue to receive instruction for the subjects in English until they complete their secondary education in the national schools. This change is unprecedented and viewed as drastic by many. Much talk has gone on to arrest the decline of English competence, but the new policy innovation was hardly envisioned by most. As a result of the 'sudden' implementation of the new policy, many were caught by surprise. At the initial stage, various opinions were expressed – some in support of the policy, many opposed it, and a few offered alternative options.

In this paper, we will focus on the public concerns with regard to the "linguistic situation" that arose from the adoption of English to teach Mathematics and Science in all Malaysian schools. We will examine the basis for public apprehension expressed by the community at large and in particular by the three major ethnic groups in Malaysia (Malay, Chinese and Indian). It also discusses the implicatures of the policy change.

Language Planning and Policy in Malaysia

Language planning and policy often invites controversy, and contentious public discussion, as it involves complex relationships between "cultural politics, curriculum, education practice and the modes of surveillance of the liberal state" (Pennycook, 1994:108). In order to understand, describe and analyse the current Malaysian "linguistic situation", Cooper's approach of discussing language planning in relation to three closely interrelated and interdependent sub-dimensions provides a useful starting point. He elaborates on: 1) corpus planning, which refers to intervention in the forms of a language; 2) status planning, which concerns choices in terms of status of a language vis-à-vis other languages; and 3) acquisition planning, which relates to the teaching and learning of national as well as second or foreign languages.

In addition, Brulard (1997:37) argues that language policy planning is usually founded along two different views of language namely:

1. Language as a pragmatic tool of communication for specific functions; and
2. Language as an embodiment of some extrinsic values and symbolic of a particular ideology.

With respect to *Bahasa Melayu* in Malaysia, the three types of planning mentioned by Cooper appear to have been given the same level of emphasis. Under the Federal Constitution, *Bahasa Melayu* is "the national language" of the country, for "official uses", that is to say, for "any purpose of the Government, whether Federal or State, and includes any purpose of a public authority" (Federal Constitution, Article 152, (1) & (6)). The Constitution has thus elevated the status of *Bahasa Melayu* as well as defined the

domains of its functions. In other words, the Constitution has provided both corpus and status planning for the language. In a similar vein, the Government now has done the same thing for English.

In language planning policy, a major influence may be ideology, though it may also be influenced by pragmatics. Often, in fact, there is a complementary relationship between both views, as language policy is usually a result of ideological and pragmatic (or instrumental) considerations. The debate between the ethnic groups, and policy makers concerning the teaching of Mathematics and Science in English had resulted from the dual consideration of ideology and pragmatics in language planning. The differing emphasis accorded on the functions could lead to the language planning initiatives being misunderstood, misconstrued, or exploited for specific purposes. In addition, the current approach of Critical Linguistics is gaining ground. The stand taken is that approaches to the study of language can now be hardly apolitical. Studying the interrelationships between language, power and inequality are central to the understanding of language and society (Tollefson 2002: 4). Thus, studying the social and political effects of particular language policies and practices form the necessary ingredients, which in turn, pave the way to elucidate linguistic phenomena in the context of social change. Wright (2004:166) believes that such studies cannot be reported dispassionately. The manner in which change is instituted is often laden with overtures of emotion and passion as the processes of the language policy unfold in multicultural and multiethnic Malaysia where sensitivities to race relations are of prior importance in good governance.

The Policy Innovation

The bi-lingual policy innovation was ushered on the initiative, or rather political will, of the then Prime Minister, Dr. Mahathir Mohammad, who though, once known as a 'Malay Ultra', has in fact been consistently pushing for the necessity to master English. The timing was provided by the growing unemployment among graduates.

The unemployment situation was no doubt exacerbated by a dampened economy which had not quite recovered from the

recession which hit Malaysia (and the whole Asian region) in the late nineties. On 4 May 2002, Dr Mahathir Mohammad confirmed the alarming number of unemployed graduates, attributing the cause to their fields of studies and their poor proficiency in English. He added that Malaysians must be competent in the English language if they were to compete in the international market, and he focused on the need to give more attention to English in schools and universities. He even floated the idea of re-introducing English-medium schools, but left the decision on the matter to UMNO (the United Malay National Organsiation, a political party which forms the dominant party in the ruling coalition). (New Straits Times, 5 May 2002).

After 48 years of independence, *Bahasa Melayu's* position as the national language is now secure. This translates into a lesser political risk in wanting to re-emphasize the mastery of English. However (and not unexpectedly), the idea of returning to English-medium schools was rejected outright by the UMNO Supreme Council. It considered the move as contrary to the National Education Policy, which was to phase in the use of *Bahasa Melayu* as the medium of instruction for education. Instead, as an alternative, the Supreme Council proposed that English be used in the teaching of Mathematics and Science. This was the consensus that Dr. Mahathir perhaps was aiming at in the first place, with the suggestion of resuscitating English schools only as a strategic ploy. The Ministry of Education subsequently announced a change as proposed by the Council, that the two subjects would be taught in English with effect from 2003, to be implemented beginning from the first year of primary and secondary schooling (: New Straits Times, 12 May 2002.)

The use of English is prevalent at tertiary level, either out of necessity or convenience. This natural gravitation has been a matter of course for the past many years, though from time to time, the issue of the prominent (unnecessary) use of English has been raised especially by segments of the Malay intellectual community. The decisions by the UMNO Cabinet, and the Ministry of Education, are not only an apparent reversal of the National Education Policy, but are also seen as contravening Section 17 (1) of the Education Act 1996 , which is very specific on the language for teaching. The Act says:

> The national language shall be the main medium of instruction in all educational institutions in the National Education System except National-Type schools established under section 28 or any other educational institution exempted by the Minister from this subsection.

(Note: The National Education System includes government, government-aided, and private schools from pre-school education to higher education, but it does not include expatriate schools. Pre-schools may use languages other than the national language, in which case, the latter becomes a compulsory subject – ss. 15, 16 & 23, Education Act 1996).

Despite opposition from some quarters and the seeming contravention, the new language policy has not been challenged in a court of law, and thus deemed a fait accompli.

What then is the driving force, other than the issue of graduate unemployment that could effect such a radical change or innovation? One well-touted reason is that the Malaysian Government, or at least Dr. Mahathir, was skeptical of Bahasa Melayu as being able to keep apace with the rapid development of knowledge, especially in the fields of science and technology. It was strongly feared that the goal of becoming a developed nation with a competitive knowledge-based economy and a world-class work force, would be compromised if a linguistic advantage is not evident.

Dewan Bahasa dan Pustaka (the national body entrusted with the task of propagating and developing the national language), and individual writers and translators, have contributed enormously in expanding materials in the national language. However, the evolution of new knowledge has undergone a fast–paced revolutionary change. The daunting task of having to keep abreast with rapid current changes and the need to publish in *Bahasa Melayu*, has resulted in an increasingly widening gap of availability of translated materials. An avalance of new information, new discoveries, and new knowledge, are an onslaught that reaches shore and the time taken is shorter by the day. The Internet and computer technology connect people and engaged minds in a way never envisaged before, and in most cases, in real or almost real time. Globalisation and the use of English as a global language

have come to stay. The nation could not remain in a state of denial deflating the importance of, or her dependence on English if she is to move forward and compete internationally. Given the social and linguistic climate, what then are the responses to a new policy change that invites repercussions with long range implications, especially the building up linguistic capital?

Effects of the Change

General Perspectives

The growing importance of English has generally been well accepted and the public articulates that the move towards a stronger emphasis of English in schools as a right step in language education. However, there were some strong reservations on the proposed use of English in the teaching of Mathematics and Science, especially from advocates and supporters of the National Language.

First and foremost, there was a practical concern as to whether there are sufficient teachers fluent in English to teach these subjects within such a short notice of policy implementation. The issue of insufficient teachers to teach English as a subject, especially in rural schools, is a recurrent one. However, the problem would now be compounded by an acute shortage of teachers capable of teaching Mathematics and Science in English. There is a fear across the racial divide that there were insufficient teachers to implement the change, and more seriously, the children were not ready to learn the subjects in a new language.

The concern over how the new policy would affect the learning of Mathematics and Science is not without merit. The performance in Mathematics and Science has been worrying as demonstrated in the results of national public examinations over the years. The data (Table 1) shows an increasing percentage of students who are doing very poorly and even failing in those subjects as they progress through their school years. However, students in the national-type (Chinese) schools are performing somewhat better than their counterparts in the national schools. These figures

support the expressed concern that the policy innovation would only serve to worsen the situation rather than improve the performance in English, Mathematics and Science. Contrary to popular perception, poor performance in these subjects is in fact a national problem rather than confined along racial interpretation.

Table 1. Students attaining Marginal Pass or Fail Grades for English, Mathematics and Science Subjects in UPSR, PMR, and SPM Examinations in 1998

Serial	**Exam Level /**	**Sekolah Kebangsaan (National Schools)**			**Sekolah Jenis Kebangsaan (Cina) (National– Type Chinese Schools)**		
	Poor & Fail Grades	Candidate	Fail/Poor	%	Candidate	Fail/ Poor	%
1	**UPSR / D & E**						
1.1	English	355,667	158,272	**44.5**	91,243	32,939	**36.1**
1.2	Maths	356,301	80,168	**22.5**	91,161	8,022	**8.8**
1.3	Science	358,194	85,487	**24.0**	91,145	18,229	**20.0**
2	**PMR / D & F**						
2.1	English	236,044	≅154,373	**65.4**	146,359	≅ 61,032	**41.7**
2.2	Maths	236,027	≅11,541	**48.9**	146,263	≅ 44,463	**30.4**
2.3	Science	236,001	≅138,768	**58.8**	146,197	≅ 71,490	**48.9**
3	**SPM / 7 – 9**						
3.1	English	187,121	≅ 143,522	**76.7**	92,239	≅ 49,256	**53.4**
3.2	Maths	187,121	122,378	**65.4**	92,239	36,619	**39.7**
3.3	Physics	38,881	23,562	**60.6**	31,295	9,326	**29.8**
3.4	Chemis-try	39,758	25,732	**64.7**	31,460	10,540	**33.5**
3.5	Biology	26,578	14,858	**55.9**	28,486	13,656	**35.3**

Source: Extracted and adapted from Professor Dato' Isahak Haron, Laporan Kongres Pendidikan Melayu, 2001, pp. 103, 105, & 107 based on data provided by Lembaga Peperiksaan, Kementerian Pendidikan Malaysia.

Notes:≅ estimated only, based on % of poor/failure from total number of candidates.

UPRS (Ujian Penilaian Rendah Sekolah): Primary School Leaving Assessment Examination

PMR (Penilaian Menengah Rendah): Secondary Three School Leaving Assessment Examination

SPM (Sijil Penilaian Menengah): Upper Secondary School Leaving Assessment Examination

The Malay Perspective

Generally, the ethnic Malays are fervent advocates and supporters of the National Language. Malay opposition to the policy change came in particular from those who see the return to English as undermining efforts to make *Bahasa Melayu* truly a language for teaching at all educational levels and for all subjects. The total turnabout from English to *Bahasa Melayu* for the teaching of the specific subjects was not only aligned to the issue of establishing a language for education. It was also associated with the nationalistic spirit of independence from colonial domination. Thus, a national language is symbolic of identity and that chosen language is *Bahasa Melayu*. There is national pride in developing a language that provides a marker for ethnic identity.

Bahasa Melayu is well-established at all levels of use. The position of Bahasa Melayu is also entrenched by the Constitution of the Federation of Malaya which became the supreme law of the land with the attainment of independence of Malaya on 31 August 1957. The constitution contained fundamental provisions that were enacted, inter alias, the law governing the National Language.

With the formation of Malaysia in 1963, the Constitution of the Federation of Malaya was introduced as Malaysia's Constitution. Article 152(1) of the Constitution proclaims that the National Language shall be the Malay Language. Article 152 (1) states:

> The national language shall be the Malay Language and shall be in such script as Parliament may by law provide: Provided that: (a) no person shall be prohibited or prevented from using (otherwise than for official purposes), or from teaching or learning, any other language; and (b) nothing in this clause shall prejudice the right of the Federal Government or of any State Government to preserve and sustain the use and study

> of the language of any other community in the Federation. (Federal Constitution, 2000: 186)

Work on the development of the national language is closely aligned with *Dewan Bahasa dan Pustaka*, a nationally funded agency which was established to promote the use and development of *Bahasa Melayu*. Through the years, the Malay intellectuals have contributed expansively in materials and knowledge of the language through *Dewan Bahasa dan Pustaka*. Any changes in the status quo of a language policy are viewed as a threat to the stated mission of *Dewan Bahasa dan Pustaka* and by proxy, *Bahasa Melayu* and Malay civilization.

The Malay intellectuals who champion the development of the national language harbour great reserve about the new policy change to use English in the teaching of Science and Mathematics. They exerted their views and indirect influence through the media and organised national-level meetings of non-governmental organizations. Their concerns are inevitably accompanied with political nuances. To neutralise the effects, the Malaysian government had constantly issued strong assurances about the unequivocal support given towards maintaining the dominant role of *Bahasa Melayu* as the national and official language (the latest was in a speech given by the Minister of Education at the EteMS (English for the teaching of Mathematics and Science) Conference on 24 November 2005). This move is seen to address serious misgivings of this major ethnic group. In no uncertain terms, the promotion of English must be seen as a move that does not threaten the status and development of the national language. The Minister of Education had also promised full support for the EteMs programme and at the moment had instituted numerous innovations to enhance pedagogy, particularly through the English Language Teaching Centre that concentrates on providing the necessary scaffolding for policy implementation by teachers in the classroom.

Brown and Ganguly (2003:254) cited an oft-quoted opinion of the Malay nationalists who draw on a comparison with Japan who had made striking industrial progress (both before and after World War Two) without the widespread adoption of English. Malaysia, likewise, should be able to do so without resorting to a bilingual language policy change which gives eminent accord to English,

which in the current context, is the reverting to teaching Science and Mathematics in English.

In addition, critics pointed to the problem of apathy to learning English especially among rural Malay students (which is shared to a lesser degree by Chinese students). This apathy is said to have manifested in psychological barriers to learning Mathematics and Science, which would be further aggravated by the new policy initiative. The rural-urban divide will also be further stretched by the policy change with further ramifications on equity of wealth distribution along geographical and racial demarcates. The demographic distribution of the Malaysian population demonstrates a congregation of Malays located largely in rural areas. As such, there are serious implicatures detrimental to the Malay race. Any upsets to the existing status quo runs counter to the national economic policy with the stated aim of redressing economic imbalance, which is still seen to be in progress.

The Chinese Perspective

The Chinese community formed the most vocal group, objecting strongly to the new policy. Influential associations see themselves as custodians of Chinese education; Dong Zhong (The United Chinese School Committees' Association of Malaysia) and Jiao Zhong (The United Chinese Teachers' Association of Malaysia), opposed the policy to use English for teaching Science in Mathematics categorically. They claimed that Mandarin as a medium of instruction, as well as a vehicle for the teaching of ethnic Chinese culture in the Chinese schools, have resulted in better grades for their students. They also reflected the sentiment of the community by saying that using English to teach Mathematics in Chinese schools is as bad as using Greek, especially for the Year One and Two pupils. They believed strongly that the best medium of instruction is still the mother tongue.

In support, Dr. Lim Keng Yaik, the then Minister for Primary Industries, also argued against the policy. He said, "There is very strong evidence from many studies throughout the world that Science and Mathematics are most effectively learned in the child's mother tongue/first language at the primary school". Quoting the experience of Japan, Korea, Taiwan and Germany, which are

advanced in Science and technology, he added, "… a student must first establish a basic command in his/her first language (mother tongue/community language) and use it to learn basic concepts in various subjects before effectively making the transition to learning Science and Mathematics or other subjects in a second language …" (Malay Mail, August 5, 2003). Dr. Lim forecasted that the Ministry of Education's proposal would pose serious problems, which were as follows:

1. Except for bright students and those from the upper middle urban class, most students would not be able learn Mathematics and Science effectively because English does not provide the continuity of learning from mother tongue in the home environment. Most affected would be students of various races from the lower-middle class and from the rural areas, new villages, estates and urban poor areas.
2. A majority from the coming generations would not be able to use their mother tongue to perform arithmetic operations, logical reasoning or understand and relate to their living environment – including common appliances and objects. In other words, they would not be able to communicate effectively in their own mother tongue. Neither would they be able to learn English effectively.

Chinese educationists clearly did not subscribe to the belief that using English to teach Science and Mathematics at the primary level was the most effective method to improve a pupil's level of English, or for that matter, Science and Mathematics. The controversy was fuelled by a perceived failure on the part of the Ministry of Education to provide a sound educational principle for the change – reinforcing the view that the move was politically-motivated rather than educationally-oriented. The Chinese community was not convinced that the authorities had provided a strong, plausible justification for using English to teach Science and Mathematics. The usual rhetoric, such as English was important in the era of Information Communication Technology (ICT), and the need to prepare students to face the challenge of globalization were deemed inadequate to explain such a major paradigmatic shift. If the stated intentions are to improve English competence, then they argued that the move should focus more on the teaching and learning of the language. From an educational perspective, they

disputed that studying Mathematics and Science in English can arrest the continuing decline in English competency.

The discontent towards the policy change resulted in strongly worded memorandums sent to the government, calling for an immediate withdrawal of the policy. However, their action did not achieve the desired intentions rather a compromise was reached whereby a "special formula" was introduced for the teaching of Mathematics and Science in the national-type schools. This formula entailed the allocation of three classroom periods (120 minutes) of teaching Science in English and another three in Chinese per school week. As for Mathematics, six classroom periods are taught in Chinese and four in English per school week. In addition, two extra periods were allocated for the learning of English. However, the formula, while addressing the issue of instructional change, might not have taken into consideration the incessant complaints that children were already overburdened by the tight school schedule and heavy curriculum (before the policy change). The additional hours under the Special Formula could be an extra burden and also at the sacrifice of co-curriculum activities which are considered important in the holistic approach to education. Nonetheless, increasing the amount of time allocated for the learning of English is seen as an appropriate move towards addressing the need to improve English proficiency of Chinese school children.

The rhetoric against the language policy change could also be associated with chauvinistic leanings. There has been a deep-rooted sense of duty in the Chinese community to preserve the exclusive character and features of the Chinese schools. The language policy change was seen as an "intrusion" into the exclusive identity of Chinese schools. As gatekeepers who are tasked to ensure the promotion and maintenance of Chinese cultural heritage, the elders in the Chinese ethnic community feared that the policy change would ostensibly erode the function of Chinese schools in perpetuating the Chinese value system. This erosion goes against the essence of the establishment of Chinese schools which have been funded largely by the Chinese community.

Another argument forwarded against the implementation of using English to teach Science and Mathematics was supported by the attainment of excellent grades for English, Mathematics and

Science subjects in the UPSR, PMR, and SPM Examinations (see Table 2).

Table 2. Students attaining Excellent Grades for English, Mathematics and Science Subjects in UPSR, PMR, and SPM Examinations in 1998.

Serial	**Exam Level / Excellent Grade**	**Sekolah Kebangsaan (National Schools)**			**Sekolah Jenis Kebangsaan (Cina) National –Type Chinese Schools**		
		Candidate	Excellent	%	Candidate	Excellent	%
1	**UPSR / A**						
1.1	English	355,667	41,613	**11.7**	91,243	18,705	**20.5**
1.2	Maths	356,301	90,144	**25.3**	91,161	49,318	**54.1**
1.3	Science	358,194	46,661	**13.1**	91,145	17,318	**19.0**
2	**PMR / A**						
2.1	English	236,044	≅ 19,356	**8.2**	146,359	≅ 29,711	**20.3**
2.2	Maths	236,027	≅ 37,764	**16.0**	146,263	≅ 59,529	**40.7**
2.3	Science	236,001	≅ 27,376	**11.6**	146,197	≅ 36,403	**24.9**
3	**SPM / A1 & A2**						
3.1	English	187,121	≅ 6,362	**3.4**	92,239	≅ 13,744	**14.9**
3.2	Maths	187,121	30,500	**16.3**	92,239	38,002	**41.2**
3.3	Physics	38,881	1,010	**2.6**	31,295	5,414	**17.3**
3.4	Chemistry	39,758	1,669	**4.2**	31,460	7,235	**23.0**
3.5	Biology	26,578	1,142	**4.3**	28,486	4,928	**17.3**

Source: Extracted and adapted from Professor Dato' Isahak Haron, Laporan Kongres Pendidikan Melayu, 2001, pp. 103, 105, & 107 based on data provided by Lembaga Peperiksaan, Kementerian Pendidikan Malaysia.

Notes: ≅ estimated only, based on % of total number of candidates

Chinese educationists felt that student performance especially in Mathematics and Science is already at a commendable level and therefore the introduction of a 'foreign' language to teach these subjects could be detrimental.

As noted those who scored excellent grades for Mathematics already constituted 54.1% (UPSR), 40.7% (PMR) and 41.2 (SPM). Despite the policy implementation and the special formula, some teachers in Chinese schools were reportedly adamant that they would use English only when they absolutely had to, that is, when a Ministry of Education official comes a visiting. The teachers highlighted the meaningless practice of translating and repeating lessons. The policy change is seen as wasting valuable human resources which can be put to better use. Not only do the teachers see themselves as being taxed unnecessarily in terms of work load, they also regard it as lowering workplace efficiency.

The Indian Perspective

There were mixed responses from the ethnic Indian community (which formed the smallest of the three ethnic groups under discussion) towards the bilingual language policy change. The Indian-based political party, Malaysian Indian Congress (MIC) officially supported the policy change. In what looked like a quid pro quo deal, they asked for full government aid for Tamil schools. Many of them are in dire need of financial help for the past many years and the enrolment of students in these schools is far from encouraging. The Tamil schools, unlike its Chinese counterpart, had never developed in tandem. The Indian schools face inadequate financial and community support while the opposite is true for the Chinese schools. As a result, facilities in Tamil facilities are not as well-developed compared to the schools of the other two ethnic groups.

There is also less fervour among the ethnic group to associate Tamil as the community's mother tongue. In fact, the language generally imbibes low economic and cultural values. Tamil, unlike Mandarin, also has little widespread appeal. The ethnic Indians on the whole are not strong supporters of mother-tongue education. Nonetheless, the Tamil schools also adopted the special formula used by the Chinese schools in which Tamil is used to teach

Mathematics and Science alongside the use of English. However, the arguments for the adaptation cannot be seen as encompassing similar salience as those forwarded by the Chinese schools.

Conclusion

The decision to elevate *Bahasa Melayu* as the national language was a consensus by the founding fathers of the nation, who agreed that the language was to be the principal tool for unity and nation-building. Malay nationalists are acutely aware of the social contract implicit in the Federal Constitution, and they guard jealously against any efforts to dilute the contract. *Bahasa Melayu* has steadily asserted itself as the national language and today its status and role is not questioned. In fact, the national language is very much promoted in all spheres of life in Malaysia.

However change is often the constant. The teaching of Mathematics and Science in English was introduced to counter detriments seen in the inability to keep up with the pace of global development in Science and technology and to reinvent the language wheel for gaining linguistic capital which is seen as a pragmatic way forward. Repercussions are a natural extension of change and it is this awareness that generates a healthy open atmosphere for settling issues and discontent.

The initiative gave rise to the expression that the new policy of teaching Mathematics and Science in English as a signal to return English to its position of pre-eminence during the era of the post-1957 through the early 1970s. This could lead to the abandoning of national aspirations and betraying the cause of Bahasa *Melayu*, and by extension, that of the Malays as a whole.

The National Education System has allowed Chinese schools to develop into a fairly "close" enclave of their own. The comparatively better performance of Chinese schools vis-à-vis the national schools in specific subjects in the public examinations had perpetuated an aura of superiority particularly in Mathematics. Enhanced by their so-called independence, the Chinese schools became a symbolic icon in embodying Chinese culture and heritage. Thus, the bilingual language policy change is construed as an infiltration or intrusion into an essentially private Chinese domain. Behind the position taken to safeguard the "special

character of Chinese schools" lies, perhaps, the same passion and jealousy that many races attach to their respective languages as an identity marker, made more cogent perhaps by the multiracial, multicultural and multilingual context that may threaten language maintenance.

Despite the concerns and opposition to the policy, there is concordance that English is important for access to higher knowledge, especially in Science and technology, and in the context of commerce, international relationship, and communication. English as the language of industrialisation and globalisation will continue to dominate, despite opposition or claims to the contrary. Wright (2004:151), in fact, concluded that there is little challenge to the hegemony of English in the scientific community and it is fast becoming the lingua franca of twenty-first century technology almost without comment. Towards this pursuit of language improvement, there have been numerous efforts and proposals on enhancing students' proficiency in English and creating an English speaking environment both in schools and in public. There were suggestions for more English language classes, more well-trained English teachers, and better syllabus design and content. There was also the proposal to re-open English-medium schools.

Previous efforts in promoting English have not resulted in distinct gains in linguistic capital to a standard deemed efficient for international utilization. The challenge now is to embrace a policy and harness a full-hearted support for more English language use in specific domains, and it should not seem to threaten national language goals. The sensitivities addressed are part and parcel of social reality and ignoring them is at the peril of language education success. There is much more evidence needed to convince the nation (and the world) that learning Mathematics and Science in English is a wise linguistic investment in human capital with extenuating effects on economic prosperity and political credibility. The way forward is to give a chance for the new policy to mature.

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