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Language-in-Education Policy: A Study of Policy Adjustment Strategy in Malaysia

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Abstract— In the first 10 years after Malaysia's independence from Britain, English and Malay language were the media of instruction particularly in the education sector. However, from 1970s onwards, English language was gradually phased out in the education sector, but not in other sectors, especially the economic sector. Ironically in 1993, the Prime Minister Mahathir Mohamad (term of office 1980-2003) announced the reimplementation of English as a medium of instruction for science and technology courses in public higher education institutions (PHEIs). This study focuses on the knowledge shared, utilized and created by Malaysian policy makers for developing an adjustment strategy, particularly at the agenda-setting and formulation stages of English language for science and technology courses in PHEIs. Our review of the relevant literature suggest that knowledge shared, utilized and created by policy makers in Malaysia is not just influenced by bureaucratic top–down system, globalization and colonialism; but also is strongly influenced by the Federal government, the highest of the three levels of the government system. Malay language is the national language for all sectors, whereas in reality, English language still continues to be a medium of instruction, particularly in higher education institutions.

Keywords—knowledge creation, knowledge sharing, knowledge utilization, policy-making process.

I. INTRODUCTION

MALAYSIA was one of the British ex-colonial countries that gained independence, first in 1957 as Malaya, and in 1963 when it formed a new union with Sabah, Sarawak and Singapore. Singapore opted out later in 1965 to become an independent country. English language for 10 years continued to be one of the official languages, along with the national language (Malay language) after the first independence. From 1970 onwards English became the second language. However, English is widely used in the business sector until the present, and public universities such as University of Malaya (UM), still continue teaching technology courses in English for some of the science courses.

Globalization since 1990s forced Malaysia's leaders to embrace globalization as a force that would allow Malaysia to be integrated into the rest of the world and boost its national economy [61]. Malaysia is a multi-racial, multi-ethnic and multi-religious society. Any policy adjustment strategy to prepare Malaysia for globalization must be geared towards nation-building for national identity and national unity, as well as economic equality within the multi-racial society. In 1992 'Wawasan 2020' was launched, stating Malaysia's intention to become a developed country by the year 2020. 'Wawasan 2020' laid out nine challenges. The sixth challenge of these nine challenges emphasizes:

> …*establishing a scientific and progressive society, a society that is innovative and forward-looking, one that is not only a consumer of technology but also a contributor to the scientific and technological civilization of the future.*

As a result, beginning in 1993, the Prime Minister of Malaysia Mahathir Mohamad (term of office 1981-2003) publicly announced the implementation of using English as a medium of instruction for science and technology courses in public higher education institutions (PHEIs).

A. Knowledge and policy-making process in developing countries

In developing countries, the knowledge link to the policy process is widely studied in the development domain [17], [34], [38], [63]. The main focus is on the importance of research in policy-making.

Hezri [1] did a study on the sustainability indicator system and policy process in Malaysia. He elaborated that there are constraints in the policy-making process in Malaysia, consisting of meta-policy issues, technical issues, communication issues and theoretical constraints. He put forward a framework of knowledge utilization and learning as an option to overcome implementation constraints.

The bureaucratic top-down system that is still practiced by many developing countries reflects the interests of the

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authorities in public policy. In addition, international relations, in terms of aid, politics, economic and social influence, would also be reflected in the public policies of the developing countries.

Ashford, Smith, Roger-Mark, Fikree and Yinger [49] explain that the policy process is complicated, and policy makers draw information from multiple sources. In addition, different policy makers are influenced by their beliefs and values, and by various prominent individuals with competing ideologies and long-standing practices. Because the policy environment in developing countries, for example, in Malaysia, is highly centralized, a new idea must go through a complicated process of exchange and selection before it penetrates through the policy environment, gets accepted by policy makers, and becomes part of an institutional agenda.

B. Language Policy

One of the study areas in language policy is language-in-education policy. Tollefson [43], [44] wrote that language policies in education are shaped and influenced by many factors, for instance social forces; political conflicts, changes in government, migration, changes in the structure of local economies, globalization and elite competition.

Although most educational policies continue to be national or local decisions, language policy-making is also internationalized, especially at the end of the colonial period and the beginning of the globalization period. Globalization has brought about unprecedented spread of English, and the spread of English has posed a serious challenge to non-English-speaking countries [3], [51]. The challenges are related to sociopolitical, economic and cultural impacts for non-English-speaking countries, most of which are developing countries. The foreign presence is both accommodated and resisted in ways that shaped the non-English-speaking countries' language policies. The steps in the policy are to increase and improve language education as part of broad economic development, and English promotion policies have begun to dominate educational language policies in many countries in the world [43], [44].

Kaplan [61] added that language does not have a will of its own to become dominant, it is the English speakers who underlie the spread of English. The English speakers range from journal editors, reviewers and other gatekeepers in science and technology, to include English-speaking scientists. And most importantly, people who govern a country also can instigate the spread of English through policy. In Thailand, the government has made English language the second major language due to Thailand's increasing involvement in international trade [21]. In China, the government allows an adjustment strategy of the level structure in China's higher education, in the form of Sino-foreign cooperation [48].

In Malaysia, though Malay language is for nation building, the re-adoption of English as the medium of instruction for science and technology courses in PHEIs in 1993, and in 2003, for teaching science and mathematics at primary and secondary educational levels, has been decided. This reflects the fact that decision-making in the Malaysian education system is a highly centralized and bureaucratic top-down system [59]. In addition, the Education Act of 1995 gives the Minister of Education (MoE) greater powers than before in many educational matters [64].

Since this is the case, the present study investigates the knowledge shared, utilized and created by policy makers for developing an adjustment strategy for policy related to English as a medium of instruction for science and technology courses in PHEIs.

II. OBJECTIVES

Our case study investigates language-in-education policy in Malaysia. The focus of the study is on agenda-setting and policy formulation, that is, on the process of developing an adjustment strategy in policy of using English as a medium of instruction for science and technology in PHEIs in Malaysia since 1993. Therefore, the objectives of our research are:

- To analyze the process of developing an adjustment strategy for English language use as a medium of instruction for science and technology in PHEIs
- To identify the problems during the implementation of English usage as a medium of instruction for science and technology in PHEIs

A. Methodology

The research strategy followed in this study is a case study of language-in-education policy in Malaysia, focusing on English as a medium of instruction for science and technology courses in Malaysian PHEIs. This paper describes the initial stage of our research, therefore, a literature review on the knowledge link to policy process, policy process and language-in-education policy in Malaysia, and secondary data from 1993 to 2010, have been collected to analyze policy-making process in Malaysia.

III. KNOWLEDGE AND POLICY PROCESS

A. Knowledge and Policy Process

Western philosophers view knowledge as explicit. It can be articulated, codified and stored. For Japanese, knowledge is both explicit and tacit [37]. Tacit knowledge is difficult to transfer. It is in the mind of the individual that knowledge turns into wisdom, intuition, experience, judgment and expertise. It is also implicit, a previous experience embedded in mind, aiding improvement of all action [45]. Knowledge is know-how, applied information, influence with judgment expressed in action, decision making and innovation [25], [45], [37].

As for policy, Anderson defined it, as a purposive course of action by an actor or actors when dealing with public matters concern [40]. Ranney, described policy as a selected line of action or declared intent. And Dye viewed policy as what governments' do, why they do it and what difference it makes [40]. The focus of this study is on public policy.

Public policy is a process or series or pattern of governmental activities or decisions that are designed to remedy some public

problem, either real or imagined. It is a form implemented and evaluated by authorities in a political system [40].

Policy process involves knowledge sharing, utilization and creation. Nevertheless, knowledge is only productive with management responsibility [55]. There is a need to define knowledge management, since it concerns the management of these three processes.

B. Management of Knowledge

Knowledge management in the organization includes, focus on knowledge sharing, knowledge acquisition, and knowledge utilization [19], [25]. The three processes in knowledge management (Fig. 1) are the catalysts of knowledge creation. Knowledge sharing is disseminating. Knowledge acquisition is developing and creating intellectual capital, which includes internal and external knowledge; and knowledge utilization, occurs when knowledge is applied [55].
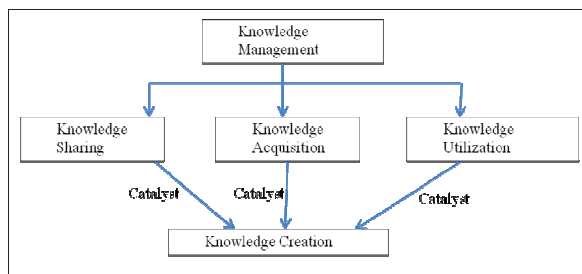

Fig. 1 Management of knowledge

Knowledge is created internally and externally. Internally, an environment fosters supports and sustains organizational knowledge whenever it arises. Externally, knowledge is based on success stories of other organizations or countries. Knowledge can only be achieved, when knowledge is generated, for example through formal group discussion and informal discussion through social networks. These approaches allow connections among individuals to create new ideas. The individuals can be within or outside organizations or countries. This process is continuous, as displayed in SECI model (Fig. 2). SECI model was developed by Nonaka and Takeuchi. In reality, knowledge creation is much more complicated. This process is not only in the form of a spiral. SECI model is just one model to explain the knowledge created in the policy process.
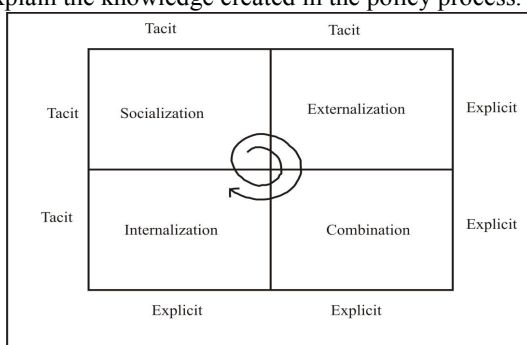

Fig. 2 SECI model (adapted from Nonaka & Takeuchi [35], [37])

C. Knowledge in the Policy Process

Scholars have emphasized the role of knowledge in the policy process, especially in the domain of public policy. The different theoretical approaches have shared the belief that a knowledge perspective on the policy process provides many advantages [23].

Radaelli[23] highlighted findings by Heclo[33] and King [13] that knowledge is an independent and highly significant variable in the investigation of the policy process. Research in knowledge utilization and evaluation, epistemic communities, studies in the diffusion of economic paradigms, agenda-setting and policy change and learning, are the approaches which constitute a 'knowledge perspective' on the policy process [23].

Some scholars view knowledge positively in the policy process. They use metaphors, for example 'evolution' [57] and 'learning' [33], [54], whereas some scholars view knowledge negatively. They used metaphors such as 'unending social enquiry' [22], 'collective puzzlement' [33] and 'garbage-can with policy windows' [42].

Pollard and Court [17] elaborated that knowledge occurs in all public policy processes. It is found in agenda-setting, policy formulation, policy implementation and evaluation. It is noted that a linear policy process is ideally a frame to assist in policy analysis, whereas in reality it is more complex.

Knowledge is useful when knowledge sharing, utilization and creation occur at the right time and at the right location. Knowledge of the economy, for example, is useful when the world is experiencing economic crisis, and basic economics is not sufficient anymore. External knowledge adaptation to local settings allows more comprehension and a greater sense of responsibility of the policy makers [38]. Formulation and implementation of policies become more effective and efficient. As for the evaluation stage, it is important to have a feedback system that can be referred to in the learning process, and in any continuous improvement process on the current policy.

D. The Policy-Making Process in Malaysia [18]

Policy-making process in Malaysia commonly begins with agenda-setting and policy formulation simultaneously. A new policy is initiated by the appropriate ministry. A Cabinet paper containing the rationale and need for a policy is compiled by the respective ministry. This paper is circulated to the ministries and departments for comments, and the feedback is incorporated into the Cabinet paper prepared by the responsible ministry, which is sent to the Cabinet Division (a division of the Prime Minister's Department, which functions as a secretariat to the Cabinet).

The Cabinet Division prepares copies for circulation at the Cabinet meeting (consisting of all the ministers for the Federal government with the authority to consider and endorse government policies). Policy presentation and exchange of information between the government and the public is the responsibility of the Department of Information. The Department of Information also acquires feedback from the public and persuades the public to accept and participate in the government policies. The communication is in the form of

seminars, documentaries, dialogue sessions, lectures and film shows. The mass media is utilized as a means of publicity, announcement, awareness and providing information.

The Malaysian Civil Service Link (MCSL) provides a single main gateway linking to all government websites, and providing access to government information and various government policies. The Implementation and Coordination Unit (ICU) of the Prime Minister's department monitors the implementation of program components. Policy evaluation is undertaken by the respective ministries, the implementers, and the Macro and Evaluation Division of the Economic Planning Unit (EPU) of the Prime Minister's Department. The ministry and the implementing institutions evaluated the outcome of the policy; EPU evaluates the impact of government policy on the quality of life and the country as the whole.

Malaysia is a federation country. Therefore, policy-making takes place at the Federal, State and Local government levels. However, on certain matters such as language, the Federal government has the sole prerogative (Fig. 3).
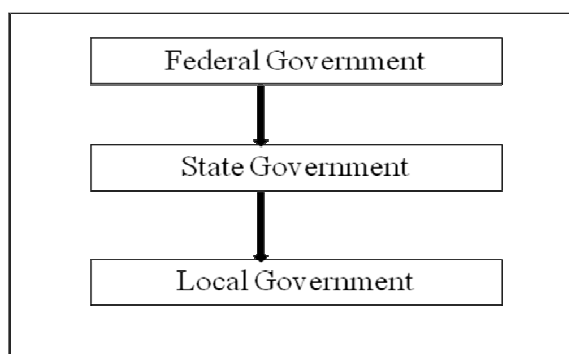

Fig. 3 The government system in Malaysia

Malaysian policy-making is a combination of liberal and procedural approach. The liberal approach is reflected at the concentration of power. It is at the highest level of the government system. National issues, for example education and defense issues, are of Federal jurisdiction. This creates problems in the public policy-making process. The Federal government makes policy to bring about social change for the whole country, for example, language policy and economic policy. In the procedural approach, the Federal government also sets guidelines on how something is to be done and who is responsible to take action.

IV. LANGAUGE-IN-EDUCATION IN MALAYSIA

A. Colonial Period

Since Malaysia was a British colony, English language was already associated with power and prestige [67]. The English schools were located in the urban areas where the English, the non-Malays (mostly Chinese businessmen and a few Indians) and Malay elite enrolled their children in the schools. The

schools also gave opportunities for further education, employment in the government and access to scholarships. The vernacular school system (Malays, Chinese and Tamil schools respectively), was located in the rural areas, except that some Chinese schools were located in the urban areas (because some Chinese were engaged in the business sector).

On the eve of Malaysia's independence, the British formed the Barnes committee. The Barnes Report recommended a national school system instead of vernacular school system, for 6 years at the primary education level in two languages i.e. Malay and English language. This system eventually would ensure that English language continued to be one of the official languages, and over a period of time, the need to have separate schools in Chinese and Tamil would slowly disappear. The community agreed with Malay being treated as the principal language, but they felt that there should be some provisions to acknowledge Chinese and Tamil as important components of a new definition of Malaysia's national identity. As a result, the Barnes report was opposed by the Chinese and Tamil communities. The Barnes report was replaced by the Razak report. The Razak report endorsed Malay language (national language) as the medium of instruction for the national schools. This was incorporated in 1957 Education Act. There was no opposition from the Chinese and Indian communities, since the vernacular schools (Chinese and Indian schools) known as national-type schools, continue until present.

B. Early Independence

The direction of language policy was toward the national sentiment, since the new independent government was predominantly ruled by Malay leaders, even though the ruling party was an alliance of 3 major parties. The Alliance consisted of UMNO (United Malays National Organization), MCA (Malaysian Chinese Association) and MIC (Malaysian Indian Congress).

To Malay leaders, Malay language was indisputable choice, because Malays are the majority in Malaysia, and also because of its role as a lingua franca, its position as the main interethnic communication tool before and after independence, its possession of high literature, and its previous use as a language of diplomacy and administration in the Malay archipelago [4],[8]. Furthermore, for the Malay leaders, such move is important to symbolize the Malay political predominance in the country. This belief was explicitly incorporated in the Federal Constitution. Malay as the national and official language, and Malays' rights, were secured since independence in 1957. In order to ensure that the Malay language was widely accepted, it was mandated for a wide range of activities, including media, government and most importantly, education.

However, English was allowed to share official language status with Malay for a period of ten years (1957-1967). This was a period to be used to develop Malay language materials containing explicit knowledge in the form of textbooks, terminologies and translations [50]. The transition from English to Malay was slow in the education system, which allowed the continuation of the English system of education along with the

Malay system of education and the vernacular system of education. This had allowed the belief shared during the colonial period that English associated with power and prestige to continue in the early period of independent.

The English-educated Malaysians continued to find employment in the public and private sectors. The Chinese-educated Malaysians were involved in the business sector. The Malay-educated students either worked as teachers or continued their ancestors' work (fishermen and farmers). The Indian-educated students worked in the rubber plantations. The outcome of this situation led to wide income disparity among the three ethnic groups, and between urban and rural areas. Despite all the evidence, the government only seriously began implementing the transition from English to Malay in the education system in 1970, only after 1969 election. The Alliance party did not win election in most of the main cities in Malaysia. The outcome of the election led to riots between the Chinese and Malays.

In 1969, a declaration of a state of national emergency led to a suspension of parliament, and the National Operation Council governed the country from 1969 to 1971. The outcome after 1969 was a transition from English to Malay at all levels of the education system. The transition only affected all English schools and some Chinese and Indian schools. There are still Chinese and Tamil vernacular schools until present.

Aggressive affirmative action policies were implemented. For example, New Economic Policy, and racial quota for public university enrollment, were implemented to address income imbalance, and emphasizing development for the Malays beginning in the 1970s.

1970s was the beginning of education policy in Malaysia being directly or indirectly linked to economic policy. At this period, internal crisis influenced the direction of policy-making, and foreign economic approach was applied to resolve the problems.

C. Public Higher Education Institutions 1960s-1980s

University of Malaya (UM), which was set up during the colonial period, still continues teaching all courses in English (except those in Malay, Chinese and Indian studies) since independence in 1957. In 1965 UM and the Ministry of Education formed an examination board for admission examinations to be conducted in Malay. In 1965, the first entering class of Malay-speaking students was admitted into UM. The transition was gradual, and science courses were still in English. The Faculty of Arts and the Faculty of Economics and Administration conducted their courses in both languages.

There was a need to set up more public universities in order for Malay to replace English as the medium of instruction at higher education institutions by 1983. In 1970, National University of Malaysia was formed, followed by the University of Technology Malaysia, University of Agriculture Malaysia, and the Science University of Malaysia. Three new universities used Malay as the medium of instruction, while UM and Science University of Malaysia largely used English language. The reason the two universities continued to use English as a medium of instruction was stated in Malaysia's second five-year plan (1970-1975). "….This acceptance of a foreign language, particularly the English language, is meant to promote the development of the nation via science and technology" [4].

D. The Reemergence of English as a Language for Science and Technology in Malaysia, 1990s onwards

The implementation process of conversion from English to Malay had reached the state that from 1988 onwards, for university entrance, a credit in English was not required, and in 1995 English was removed from the list of compulsory subjects to obtain the *Secondary School Leaving Certificate*. English syllabus gradually focused more on communicative skill. As Malay continues to have strength in national education, these changes led to a decline in mastery of the English language by Malaysians.

This scenario became a barrier for graduates from PHEIs to seek jobs in the workforce, where the public sector is shrinking and the private sector is expanding due to the privatization policy. Beyond the borders of the national education sector, English language is widely used. This created a new problem. The government needed to create an effective language-in-education policy to overcome the increasing unemployment of graduates from the public universities.

This problem was taken seriously when Malaysian industries were suffering from the world economic crisis at the end of the 1980s and early 1990s. In 1993, the Prime Minister (Mahathir Mohamad) announced the teaching of science in English in universities and colleges [62]. National University of Malaysia 2004/2005 academic session began using English for all science and technology courses [73]. Malaysia University English Test (MUET) was a requirement to enroll in higher education institutions.

The private higher education institutions however, preferred IELTS or TOEFL for transnational programs. In 1995 a guideline was issued by the Mo E, allowing the use of English in tutorials, seminars, assignments, foreign language classes and other similar activities. This resurgence is a means to advance in scientific and technological matters, and to assist Malaysia in its quest to become part of a global community, in order to achieve Malaysian Vision 2020 (an idea by Mahathir Mohamad) which envisions Malaysia as an industrialized nation [62].

However in 1997, the Asian economic crisis hit Malaysia. Instead of continuing to create a better implementation of teaching science and technology courses in English for PHEIs, the government created a new policy to assist those who could not afford to study abroad [64]. The new policy was to set up private higher education institutions. The private educational sector was largely driven by funding from corporations and wealthy individuals. The government realized that private education flourished through freedom to select the medium of instruction.

To legitimize this freedom, the Education Act 1996 and the 1996 Private Higher Education Institution Act were introduced. The former implicitly approved the use of English language in science and technology courses in PHEIs. The latter approved English language in dual programs with overseas institutions

and offshore campuses.

The Education Act 1996 also included the point that Malay language would be a compulsory subject in private education institutions, if the medium of instruction was other than the national language.

The liberalization of the higher education institutions also led to the corporatization of PHEIs. Higher education institutions in Malaysia are not just institutions to produce educated Malaysians, but they also need to commercialize their activities and to utilize their expertise for Malaysian economic development [53].

The liberalization of higher education policies also led to two streams of higher education: public universities with medium of instruction in Malay language (except science and technology courses), and private universities with English as medium of instruction. The private universities are expensive, so the enrollment is mostly middle class and Chinese. The public universities are subsidized by the government. The enrollment is mostly working class group and Malays. This has divided the country along socioeconomic lines and ethnic lines. The outcome of these two streams was that in 2002 there were about the 44000 university graduates unemployed [67], [70]. Instead of improving the 1993 implementation of teaching science and technology in English for higher education institutions, the government announced the implementation of teaching science and mathematics in English at the primary and secondary levels of education in 2003.

2003 marked the beginning of the implementation of teaching science and mathematics in English for all primary and secondary education. Technology was introduced to the teachers [28]. The teachers are supplied with portable computers as teaching aids. This has not improved the PHEIs graduates' proficiency in English. All these policy adjustments focus mainly on economic development. The following year, in 2004, Ministry of Higher Education (MOHE) and Department of higher Education (DHE) were formed.

In 2009, a big rally was held to protest against the use of English language for science and mathematics in primary and secondary education, and with the change of leadership, the focus has been on addressing the effectiveness of the language policy. It was decided that the teaching of science and mathematics in English at the primary and secondary educational levels will be phased out by 2012. The government plan is to improve the teaching of English at the primary and secondary levels to ensure that the implementation of teaching science and technology in English at the higher education institutions will become more effective. At the initial stage, the MoE signed a Memorandum of Understanding with Edith Cowan of West Australia for curriculum development and training of teachers [31]. In addition, qualified and experienced foreign teachers, English laboratories and books are in place [56].

The cabinet, in 1993, endorsed teaching science and technology courses in English in higher education institutions. The initial policy was to address the problem of unemployed graduates who are unable to seek employment mainly because of their inability to speak English. Presently, the matter has not been resolved. The Federation of Malaysian Manufacturers did a survey that confirmed that the inability to speak English is one of the main reasons for graduates' unsuccessful attempts to gain employment [47]. This can be attributed to the fact that after the 1993 announcement, the government only dealt with the legality of the policy.

V. DISCUSSION

From the knowledge perspective, based on SECI model, for the socialization process, policy making for teaching science and technology courses in English language at PHEIs only took place at the MoE (a Federal government ministry) (Fig. 4). Though there was input from the mass media, the public, higher education institutions, and the Federal and State governments, the finalization of the agenda setting and the formulation only occurred at MoE.

As for externalization, combination and internalization processes, the processes are rather ambiguous because all three processes overlap all throughout the policy making process (Fig. 4). Once the policy was drafted, MoE circulated the policy draft to other relevant Federal ministries and departments (for example Ministry of Human Resources and Economic Planning Unit) for feedback and suggestions. At this stage externalization, combination and internalization processes occurred simultaneously.

MoE revised the policy draft based on feedback and suggestions. The final policy draft was submitted to the cabinet for approval. If the Cabinet was not satisfied, MoE would revise and resubmit until the Cabinet finally approved the policy. At this stage, again the three processes occurred simultaneously.

Finally, once the Cabinet approved, this policy was announced by the then Prime Minister (Mahathir Mohamad) in 1993. However, the announcement did not amend the Education Act (which stated that Malay is the medium of instruction in PHEIs). The implementation process was not mandatory. Therefore, PHEIs implementations varied in length of time and approaches.
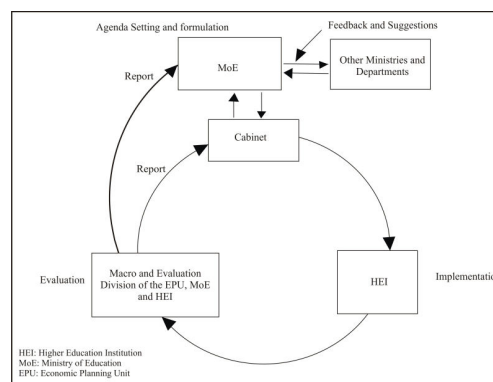

Fig. 4 A Summary of Policy Process of Teaching Science and Technology in English for Higher Education Institutions (1993).

The outcome of the implicit implementation of teaching science and technology in English language for PHEIs made it difficult for the evaluators to identify the progress of the implementation. This led the government to exercise their de jure authority to use procedure and liberal approach to amend the Education Act and create other policies, to encourage PHEIs to use English language as a medium of instruction especially for science and technology courses. The 1997 economic crisis also was a factor to legitimize government action.

In 2004, MOHE was formed. However, the meta-policy remains unchanged (Fig. 5). MOHE and DHE(Federal government ministry and department) are the current ministry and department responsible for the higher education policy. MoE and other Federal ministries and departments can only give feedback and suggestions. The policy-making process related to language is still occurs at the Federal government level. Whereas some issues, are not under the Federal government authority such as land and forest which are under the State government jurisdiction.
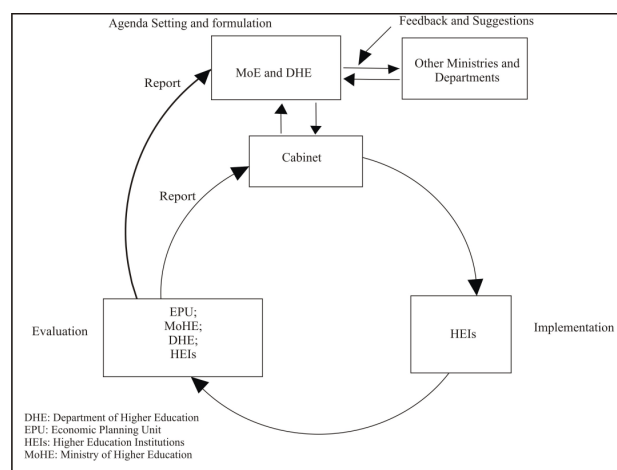

Fig. 5 A Summary of Policy Process (beginning of 2004)

The current policy-making evidently reflects that meta-policy is using bureaucratic top-down system and is being made at the Federal government level only. The agenda-setting and policy formulation are only occurring in the Federal government. This restricts policy matters to the involvement of leaders, politicians and economists at the Federal level only, leaving out the other two government levels. The public policies, for example language policy and economic policy, do not complement each other. Rather the language policy has until now supported the economic policy. The implementation process is the responsibility of PHEIs, and the policy evaluation is the responsibility of PHEIs, MOHE and DHE (since 2004, previously it was the responsibility of MoE) and a division of the Economic Planning Unit.

The current policy-making system in Malaysia clearly prevents knowledge sharing, utilization and creation approaches. Effective knowledge sharing, utilization and creation cannot happen because not all stakeholders are involved in policy-making. Policy makers only utilize the beliefs, values and interests of the individuals responsible for the policy. Government can rectify these problems by including all the stakeholders' knowledge in the database. Therefore, there is a need to address this matter seriously from the knowledge management perspective.

VI. CONCLUSION

The management of the knowledge of all the stakeholders can improve knowledge sharing, utilization and creation in the policy-making process. The database must be managed efficiently and effectively, for policy makers to ensure that the policy process can produce public policy which will benefit all Malaysians.

Field research on the policy process in Malaysia has been done this year, 2010. Analysis of the data will be our next stage to clarify the meta-policy in Malaysia. The findings may help to highlight further the strengths and the weaknesses of the language-in-education policy in Malaysia.

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