

The Importance of Using the English Language in Science and Mathematics Subjects for Public Schools in Malaysia

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Abstract: The teaching of science and mathematics subjects in the English language in public schools in Malaysia has been in place since the early 2003 as a government policy. As early as 2012, the policy has undergone much criticism from mainstream groups aligned to using the national language (i.e. Malay language) as a knee-jerk reaction to empowering nationalism in a broader sense. Though there has been much debate over the change in policy and significant controversy in the adopting of the national language as a means to invigorate nationalism to greater heights, the long term goals of the country to achieve developed nation status by the year 2020 also needs due consideration.

Keywords: English language, science and mathematics, Malaysia, public schools, Malay language, developed nation.

I. INTRODUCTION

The Malaysian government had made it compulsory as early as 2003 that the teaching of science and mathematics subjects using the English language in public schools would be a step forward to increase the awareness and encourage reading among students. The primary reason for the government directive to all teachers and government employees in public schools was to emphasize that there is an abundance of easily available reading material published in the English language as compared to the national language (i.e. Bahasa Malaysia) and as such the use of former needs to be cultivated in schooling environment at the earliest opportunity. However, of late the government has reverted back to the age old policy of national pride in the national language and has since nullified the policy of teaching the science and mathematics subjects in the English language. Instead, these subjects should, and must, be taught in the national language to ensure its continued use by vast majority of students enrolled in public and government funded schools.

II. POLICY JUSTIFICATION

In essence, exposing students to key terms and explanations given in English for the science and mathematical related subjects would give them an edge and added advantage in recognizing many of the common scientific and technical terms and references in related literature. And that would save them a lot of time translating them back into Bahasa Malaysia (BM), as a frame of reference, for increased understanding. The time tested method used by many local pupils to translate terms back into a commonly understood base language has on most occasions shown to be ineffective and poor in achieving the desired outcome of increased understanding of the subject matter at hand. Equally undesirable is the fact that it would take an enormous amount of effort, time, energy and resources to translate the vast amount of information published in the latest journals back into the national language (i.e. Bahasa Malaysia).

It has been noted that some advanced non-English speaking nations such as the Japanese and Germans communities have literally taken the task of translating any scientific and technical within 6 months of their maiden publication into well-

known and renowned journals – for the sole purpose of ensuring that the material published is understood in their native languages. The question is – do we as Malaysians have the tenacity and willingness to see a similar objective through? And it's important to note that the idea was mooted by certain quarters (with huge government allocated budgets) in the early 1990's (i.e. to translate all scientific material immediately into the national language). However, the idea never came to be realized in the long term and gradually fizzled out when it became clearly evident to those assigned to the task that the vast and extreme amount of literature to be translated was a physical impossibility. The point illustrated here is not an attempt to belittle their efforts, but an attempt to accept the reality of the situation.

III. IMPLEMENTATION

An attempt to strengthen the understanding of the English language in the hopes that its basic principles are understood better, and will therefore result in a better understanding of Mathematics and Science literature, may actually be too good to be true. In effect, it may have proven to be self-defeating, if many students do not wish to partake in the objective. That would become evident when the students consider the increased effort of learning the English language as merely a stepping stone in increasing the overall standard of the language, and not as an effort aimed at cultivating and enhancing the understanding of science related subjects. The students may not want to take that extra step to go further and let their efforts in learning the language spill-over into other related fields of study, primary science and mathematics as subjects in public schools.

It is equally important to note that a majority of the local and private universities in Malaysia have put in place policies to ensure that the teaching of materials for subjects and courses at the undergraduate and postgraduate levels are primarily in English. Clearly, it would point to the fact that strengthening the understanding of the English Language at the primary and secondary levels of public school would be beneficial to some extent for students that wish to pursue tertiary education. It would be especially useful to those students that wish to pursue areas of study in the sciences since they would have had the advantage of early exposure to using these technical terms in the English language at an early age in public school. Though there is definitely the issue of maintaining national pride in the national language, it should not be confused with the vision and objectives of the country to be a fully developed nation by the year 2020. That vision was put into place in the early 1990's and streamlined with the policy of teaching science and mathematics in English. The main objective would be so that technological advancements can be easily grasped by the younger generation of citizens and hopefully be sowed with fruitful endeavors of international trade and partnerships with advanced nations and also realize the long term economic goals of the nation.

IV. CONCLUSION

These are many points to consider before back-tracking on the objective to teach science and mathematics in English. Before adopting a "one size fits all" approach to solve the problem of using the Malay language as a sense of national pride in public schools, perhaps there are other options to consider, many of which have been fourth of the various parties and groups. There needs to be a balance in achieving increased mastery of the English language for scientific achievement and maintaining pride in the use of the national language in public schools. It is definitely a possibility for the government to arrive at a solution acceptable to all if the approach taken is both practical and aimed at the overall goals of the nation in the long term. However, maintaining a sense of pride in the use of the national language for science and mathematics subjects in public schools may indeed give the necessary acknowledgement to certain groups that have their specific interests to achieve at the negotiating table. But the government of the day is perceived to be both mature and intellectual enough to realize if its own objectives may be compromised in the changing a policy that has been in place for the betterment of the nation. It is important to note that the policy to teach science and mathematics in the English language was also mooted and made into policy by a former premier of the nation. And as such, the policy would definitely have its own set of merits it was adopted and implemented as a government policy for education in public schools.

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