Illuminating School Administrators’ Solicitude On Dual-Language Programme

Ashairi Suliman, Mohamed Yusoff Mohd Nor, Melor Md Yunus, Azlin Norhaini Mansor

Abstract: Dual Language Programme (DLP) is becoming more acceptable in the global education system. Many countries have started to employ this practice in their schooling system due to the benefits harvested from the programme. Prior to this, the Dual-Language Programme (DLP) in the Malaysian education system has commenced since the year of 2016. Resembling the previous controversial educational policy PPSMI, this programme highlights the use of English as a means of instruction in the teaching and learning of Science and Mathematics. To accentuate, the programme requires four main criteria for it to commence. School readiness has been one of the concerns in implementing DLP. Hence, this study divulges into the school administrators’ lenses focusing on their understanding of the programme objectives and acceptance towards the programme. Given survey research design, this study employed questionnaire embedded with open-ended questions to gather the data. The study roped into a sample of 80 DLP school administrators nationwide. The results have disclosed positive outcomes from the respondents pertaining to the two constructs studied. The open-ended responses have also unearthed some significant and essential issues concerning the implementation of DLP. To recapitulate, the implementation of DLP needs to be taken into serious consideration by everyone involved. The availability of resources and facilities, human resource development as well as DLP students' welfare are some of the crucial elements that may progress its implementation should they are given utmost priority.

Key Words: Dual-Language Programme (DLP), education, English as second language, programme acceptance, school administrators, Science and Mathematics

1. INTRODUCTION

Dual Language Programme (DLP) entitles for the teaching and learning of content subjects using the national language and target language. It allows for the development of academic learning besides nurturing literacy in which the target language is utilised half of the time (Watzinger-Tharp, Rubia & Tharp, 2018; Freire & Valdez, 2017). This means half of the instructional time will be conducted using the national language whereas the target language will accommodate the remaining time. The target language chosen depends on the context of the schooling system. In the global view, Mandarin, Korean and Spanish are among the languages commonly partnered with English in the context of United States DLP (Chen, Yang & Chen, 2017; Lindholm-Leary, 2016; Palmer & Henderson, 2016; Lee & Jeong, 2013). Besides the aforementioned languages, there is a growing pressure in utilising other languages in DLP. As elucidated by Christian (2016), Russian, Arabic and Vietnamese are among the languages commencing to be introduced in DLP but facing such obstacles in terms of scarcity of resources and experience. With that growing proliferation, the spread of DLP is also affecting the Malaysian education system. In the global context, DLP is very prominent and prevalent in the context of United States education system. As defined by the US Department of Education (2015),

dual language education is a bilingual education programme for which literacy and academic content are taught in two languages, English and a partner language. In addition, dual language immersion schools have demonstrated a rapid growth in the United states and become very essential all over America (Steele et al., 2017; Tran et al., 2015). On another note, Japan has also begun to implement this programme which is a means to promote the International Baccalaureate diploma programme in Japan secondary schools (Yamamoto, 2016). Indubitably, in discussing the implementation of DLP, it is imperative to understand the situation faced other countries enforcing the teaching of science and mathematics in English particularly for countries in which English is not the first language. Many countries have also introduced English as the main instructional medium in the teaching of these two subjects. This replicates Education First (2016) whereby English proficiency tends to be on a high level in regions which have language history to English. This includes South Africa (Mthiyane, 2016), Hong Kong (Pun & Macaro, 2019), Vietnam (Nguyen & Thi Kieu, 2015), Phillipines (Racca & Lasaten, 2016) and Malta (Mifsud & Farrugia, 2016). These studies have disclosed the experience undergone in the teaching of these subjects using English. Before DLP commences in the Malaysian education system, there was a policy resembled the context of this programme regulated earlier. The policy of Teaching Science and Mathematics in English or commonly known as PPSMI was introduced in 2002. Aiming at maximising the human capital and reaching the standard of a developed nation (Suliman, Nor & Yunus, 2017), the policy regulated the teaching of all science and mathematics subjects using English as the instructional medium. This somehow in agreement with Dearden (2014), English serves as the instructional language used in the content subjects especially for countries in which English is not the first language. The PPSMI policy was conducted in all levels of education, since primary school up to the tertiary level. Prior to this, the policy was also introduced as the government intended to acknowledge the decline in the English mastery among Malaysians and accelerate the interest in science and mathematics fields (Azman, 2016; Yunus & Sukri, 2017). Furthermore, Samah (2008) proposed that in order to visualise Vision 2020, it requires the mastery of English language

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besides excellence in the domains of science, mathematics and information technology. Holding to these notions, PPSMI was executed. Conversely, the policy was not able to cater to everyone’s needs. After going through debates and refutes for a period of a decade, the policy was fully abolished in 2014. The PPSMI implementation is perceived to be a decade of failure from the macro, meso and micro levels of context (Ha, Kho & Chng, 2013; Mohandhas, 2015). Prior to this, Sumintono (2015) contended that the decline in the TIMSS result was clearly an evidence of the impact brought by the PPSMI policy. The post-PPSMI era has witnessed that dissatisfaction was still prevalent among parents who disagreed with English not being used as the instructional medium in science and mathematics as revealed by Habuan (2018). This implies that some groups still prefer for these two subjects to be taught in English. Hence, to cater to that needs, the government introduced an educational programme which has resemblance to the PPSMI policy, named as Dual Language Programme (DLP). The Malaysian Dual Language Programme (DLP) was introduced in the year of 2016. With 300 schools involved in the pilot project, the number has doubled up over the years. Though it is commonly perceived as the rebirth of PPSMI, it is different in terms of the implementation aspect (Suliman, Nor & Yunus, 2017). Two major aspects resemble PPSMI would be the subjects involved in the programme and the target language utilised in carrying out the teaching and learning process. Malaysian DLP advocates the use of either Malay or English as the language used in the teaching and learning of science and mathematics subjects (Suliman, Nor & Yunus, 2017; Shamsudin, Abdullah & Noh, 2018; Bullah & Yunus, 2019). The programme opens the opportunities for the interest group (schools, teachers, parents and students) to opt to their preferred language of instruction in the learning of science and mathematics. One prevalent thing is that both PPSMI and DLP espouse on the use of English as the means to disseminate science and mathematics knowledge and information. Adhering to four main rules, the programme works on a voluntary basis unlike PPSMI which was a compulsory educational policy. Few studies have been conducted since the inception of Dual Language Programme in the Malaysian setting. These studies unravel the implementation from the lenses of teachers and students involved with the programme. As unearthed by Bullah and Yunus (2019), the urban DLP teachers displayed positivism towards the implementation but disclosed their worries regarding the lack of facilities and resources which may dampen the programme. This somehow reiterates Uniting and Yamat (2017) which suggested for more support and guidance to be given to the DLP teachers. Shamsudin, Abdullah and Noh (2018) on the other hand claimed that teachers were moderately ready with their skills, knowledge and interest. Suliman, Nor & Yunus (2017) in their preliminary study revealed that language mastery influenced the DLP students’ moderate level of readiness and confidence. Two years after the preliminary study, Suliman, Nor & Yunus (2019) found positivity among DLP students but language mastery and ineptitude of understanding still persist as the main hindrance confronting them. This opposed Suliman, Nor & Yunus (2018) in their study involving non-DLP students who displayed positivity in their language capabilities and attitudes to learn using English. As more past researches zoomed into the lenses of students and teachers and little is known pertaining to the school administrators’ views. More studies also contextualised into the leadership practice employed by DLP administrators such as Mashur and Wahab (2019); Ghozali and Wahab (2019); Shah and Nor (2018). Hence, this study aims to unravel the administrators’ perceptions who plays a fundamental role in the implementation of DLP in their respective schools. The following are the research questions aimed to be elucidated via this study.

i. What are the administrators’ understanding and acceptance towards the programme?

ii. Why do the school decide to take part in the programme?

iii. What are the challenges encountered by the school in the programme?

iv. What are the suggestions to improve the programme?

2. LITERATURE REVIEW

Dual Language Programme (DLP) may vary in structure, implementation, and enrolled student populations according to the context and situation. This is indeed applicable to the context of DLP in Malaysia, which may seem to differ from what is practised in the Western countries. The US Department of Education (2015) has generally categorised it into two main models. The first one is two-way dual language programme (also known as two-way immersion programme), in which English learners who are fluent in the partner language and English-speaking peers are integrated to receive instruction in both English and the partner language. Prior to that, one-way dual language programme depicts students from predominantly one language group receive instruction in both English and a partner language. One-way dual language programme may serve predominantly English learners (also known as developmental or maintenance bilingual programs); predominantly English-speaking students (also known as one-way/world language immersion programme); or predominantly students with a family background or cultural connection to the partner language (also known as heritage or native language programme). In the context of Malaysian DLP, the teaching and learning of the content subjects are taught using two different languages (Malay and English) and students are given the flexibility to choose their preferred instructional medium in the lesson. Developing proficiency in both mother tongue and target language is one of the aims of dual language. When students are enrolled in dual language programme, they will be able to engage themselves more in the target language besides upholding their own mother tongue or the national language. As an example, Malaysian students will have more contact hours with the English language when taking part in DLP. This would mean more if the students who are non-Malay engage in DLP. Besides enhancing the national language (Malay), they would also nurture the competency in the English language. Learning science and mathematics entitles students to keep abreast with the advancement in science and technology, with is easily accessible in English (Yahaya et al., 2009). The rapid globalisation has to be discovered and English is seen as the avenue to assist the discovery. DL students were regarded as proficient in two languages and made outstanding performance in both languages across the grade levels in both types of DL programme (Lindholm-Leary & Howard, 2008). On another point of view, Lindholm-Leary (2012) affirmed that English language learners were identified
as being proficient in the English language when they participated in the DL programme rather than enrolled in the mainstream programmes. Thus, DL is regarded as a promising tool that would indirectly assist and nurture the language proficiency level of an individual.

3. METHODOLOGY
This study employed mixed-method approach. Questionnaires and open-ended questions were executed to gather the data. To begin with, questionnaires were distributed to the respondents to understand their perceptions of the programme. To further consolidate the findings, open-ended questions would unearth the challenges faced by the school in the implementation of the programme.

3.1 Research Instrument
The survey questionnaire is a four-point Likert-scale questionnaire. The questionnaire was developed by the researcher based on the Malaysian DLP guidelines and with reference to Besar (2007). It consisted of three sections; the demographic profile of the respondents, understanding of the programme objectives and acceptance towards the programme. The total number of items in the questionnaire was 14. To further validate the instrument, it was sent to three experts of different fields such as language, psychometric and content. After amendments were made based on the experts' recommendations, the instrument was piloted with a sample of twenty respondents. Reliability test was generated and the Cronbach alpha value was 0.838. This indicates the reliability of the instrument. As for the open-ended questions, respondents were inquired three questions regarding (i) the reasons of school participation in the programme, (ii) the challenges faced by the school in the implementation of DLP and (iii) suggestions for the programme improvement. These were designed to unravel respondents’ unheard voices and support the findings from the questionnaire. Furthermore, it is meant to gather more information pertaining to the implementation of the programme in the DLP schools.

3.2 Sample
This study involved the administrators from the DLP schools. Hence, eighty administrators participated in the data collection process based on the purposive sampling technique. Initially, ninety-two respondents received the questionnaire but due to certain unexpected circumstances, the final valid responses were only eighty. They represented eighty secondary schools all over Malaysia involved with DLP. This includes national secondary schools (SMK), national religious secondary schools (SMKA) and fully residential schools (SBP). The following table describes the details of the respondents.

| TABLE 1 |
| PROFILE OF THE RESPONDENTS |
| Gender | Male 16 (20%) |
| Female | 64 (80%) |
| Type of School | SMK 35 (44%) |
| SMKA | 21 (26%) |
| SBP | 24 (30%) |
| Locality | Urban 44 (55%) |
| Rural | 36 (45%) |

3.3 Data Collection and Analysis
The questionnaires were distributed to the respondents and clarifications were made to enlighten them. The data collection took almost three months as the distribution of the samples varied from one state to another. The researcher also sought help from some friends who were teaching in the DLP schools to gather the respondents’ participation. The findings from the questionnaire were analysed using a statistical software, SPSS Version 20. As this is a survey research design study, descriptive statistics involving frequency, percentage and mean were employed. There was no inferential statistical test conducted in this study. The mean score for each item was interpreted based on four levels (very negative, negative, positive and very positive). On top of that, responses from the open-ended section were analysed by using content analysis approach. Then, the researcher extracted the codes and categories that would provide meaningful data to the study. In the end, few themes were identified to answer the second, third and fourth research question.

4. FINDINGS AND DISCUSSION
4.1 Administrators’ Understanding and Acceptance towards Dual Language Programme
The administrators’ perspectives were scrutinised via two aspects: understanding of the programme objectives and acceptance towards the programme. Results will be displayed in terms of the mean score and interpretation of the score. The following table describes the respondents’ understanding of the programme objectives.

| TABLE 2 |
| RESPONDENTS’ UNDERSTANDING OF THE PROGRAMME OBJECTIVES |
| No. | Item | Mean | Interpretation |
| 1 | DLP increases the interest in Science | 2.88 | Positive |
| 2 | DLP increases the interest in Mathematics | 2.77 | Positive |
| 3 | DLP increases the exposure to the English language in the classroom | 3.40 | Very Positive |
| 4 | DLP strengthens English mastery | 3.35 | Very Positive |
| 5 | DLP eases students in getting Science and Mathematics exposure at the international level | 3.39 | Very Positive |
| 6 | DLP broadens students’ marketability in the employment sector | 3.23 | Positive |

As illustrated from the table, the respondents were found to be positive with the objectives of the programme as outlined by the Ministry of Education. The four highest scoring item reflected the respondents’ agreement on how DLP is highly related to the English mastery issue besides for the purpose of global marketability. However, when relating to developing the interest in science and mathematics, the result was not as promising as the other four items. With only 65% and 71% agreement, that shows the respondents were less likely to agree with this objective. It can be concluded that the respondents were inclined to perceive DLP would attain the objectives on English language more than developing science and mathematics interest. The following table displays the result for acceptance towards DLP.
Based on the above table, the respondents have disclosed positive acceptance towards DLP. In spite of their positivity, it is interesting to note that the highest scoring item was ‘DLP should be improved’. This implies that DLP is not a perfect programme and requires for improvements from various aspects. Resembling the finding from the previous section, the respondents’ acceptance towards the programme is also associated to the needs of enhancing language mastery as indicated by item (1), (4) and (5). The respondents affirmed that DLP would assist the development of English among the students as well as teachers indirectly. Even though the respondents contended that DLP should be improved, they still believed that it should be continued as it is well-received by the administrators. As revealed earlier, respondents’ acceptance towards DLP as a means to develop science and mathematics recorded the lowest mean score. Hence, it can be ascertained that DLP would improve English skills more than science and mathematics skill.

4.2 Reasons to Take Part in the Programme

The qualitative part of the study intends to discover the reasons leading to the school’s decision to take part in DLP. Irrefutably, the school has to adhere to the four regulations before they could commence DLP. However, it is imperative to fathom what underlies the school to implement the programme. From the open-ended responses, it can be concluded that developing English language as the main reason leading to the schools deciding to take part in DLP. Majority of the respondents affirmed the needs to improve English among the students as well as the teachers have indirectly affected the choice. To further illustrate this, respondents claimed that “Teachers and students are exposed more to the use of English language and given the chance to explore beyond the subjects like math, science and English”, “We see this as an effort to improve English proficiency”, “The English result improved as DLP programme implemented”, “Teachers could enhance their English skills via the courses provided by the Ministry” and “Students gained more confidence in communicating in English”. These excerpts have indicated that improving the proficiency in English language has somehow led to the school’s decision to enrol in DLP. As reinforced by Aziz and Nair (2015), mastering English is an essential prerequisite for Malaysia to move towards becoming a developed nation as English is the country’s second language. Hence, it is not surprising to reckon the influence of English language in the education system that leads to the DLP participation by the schools.

4.3 Challenges Faced in the Programme

In answering the third research question, two major challenges have been found concerning the implementation of this programme. The first one deals with students’ language mastery. Although some schools streamed the students in the DLP class, a number of them were still gasping with their own language competency and proficiency. In fact, some students were not fundamentally strong in their language mastery. Majority of the students were not English-spoken at home and they were not learning science and mathematics in English during their primary education. As language skill deals with productive (speaking and writing) and receptive (listening and reading), some students might be good at the former one as compared to the latter one. Therefore, it is not alarming to acknowledge this challenge. On the other hand, the situation is different for schools which implement DLP in all classes. The pressure will be more as even those students from the end classes might face problems in reading and spelling. Hence, this may be a serious challenge to the school as students who are weak in English might not be able to comprehend the DLP lessons well. These are explained by “Not all students who involve in this programme can understand or speak fluently”, “Students’ background who are Malay-oriented and weak in English”, “As students’ English mastery is weak, it makes students difficult to understand the terms in English” and “Students come from primary schools in which the instructional medium was Malay for science and mathematics”. To further illustrate the challenge, respondents asserted that “The current social status of students from Kelantan and Terengganu who are less mastering the English language”, “Students who excel in their UPSR are not necessarily capable to follow the DLP lessons well”, “Students transfer in from non-English speaking school/background face difficulties in the class”, “There is quite a big gap in terms of English foundation usage among the form one students” and “Rural area students face culture shock in the lessons and difficult to understand certain words in English”. Besides students’ language mastery, another issue faced by the school is regarding the teachers’ competency. As these are non-language teachers, schools are facing problems in recruiting science and mathematics teachers who are competent in English as revealed by “A retired DLP teacher was replaced by a young teacher who is not able to teach using English”, “Low level of English language proficiency among the teachers”, “The main challenge is to appoint DLP teachers as not all teachers want to teach DLP”, “Trained teachers who can teach these subjects well and well-versed in English” and “We don’t have enough teachers who are proficient in teaching science in English”. They were confronted with the issue of appointing which teacher to teach the DLP class. Some teachers were found reluctant to teach DLP class due to their English incompetency as indicated by “We lack of teachers who are willing to teach science and mathematics fully in English”, “Not many teachers are able and willing to teach in English”, “Lack of science and mathematics teachers who are competent in English” and “Insufficient teachers who are skillful in teaching in English”. As a consequence, some administrators would randomly assign teachers to teach in

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Mean</th>
<th>Interpretation</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>DLP is a good programme to increase English mastery</td>
<td>3.29</td>
<td>Very Positive</td>
</tr>
<tr>
<td>2</td>
<td>DLP is a good programme to develop Science knowledge</td>
<td>3.05</td>
<td>Positive</td>
</tr>
<tr>
<td>3</td>
<td>DLP is a good programme to improve Mathematics skill</td>
<td>2.91</td>
<td>Positive</td>
</tr>
<tr>
<td>4</td>
<td>DLP provides professional workers for the country’s development</td>
<td>3.29</td>
<td>Very Positive</td>
</tr>
<tr>
<td>5</td>
<td>DLP implementation is relevant now when knowledge develops rapidly in English</td>
<td>3.34</td>
<td>Very Positive</td>
</tr>
<tr>
<td>6</td>
<td>DLP implementation is well received by school administrators</td>
<td>3.21</td>
<td>Positive</td>
</tr>
<tr>
<td>7</td>
<td>DLP implementation should be continued</td>
<td>3.15</td>
<td>Positive</td>
</tr>
<tr>
<td>8</td>
<td>DLP implementation should be improved</td>
<td>3.49</td>
<td>Very Positive</td>
</tr>
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English. Some would appoint overseas graduate teachers believing they are competent in English although they had graduated for more than a decade. Despite the fact that some were previously teaching under PPSMI policy, the competency might be questioned as it was in the history. To curb this issue, some schools would send their DLP teachers to courses aiming to develop their language competency. Similarly, the English panel teachers would be lending their help to the science and mathematics teachers in setting the exam questions or on any random occasion.

4.4 Suggestions to Improve the Programme
As for the final research question, two major suggestions have been collated. They ascertained that the programme would be better if the teachers’ proficiency is developed in line to the supposed standard. When the teachers are given and equipped with the courses and trainings to enhance their language mastery, they would be able to deliver the lessons better and more effective. Lacking of confidence would somehow lower down their confidence and self-esteem in the class. Initially, the respondents also alluded that by attending language classes the teachers would be able to enrich their vocabulary and other language skills necessary to teach the lessons in the target language. Among the excerpts garnered from the responses include ‘teachers should be properly trained when they were in universities or IPG’, ‘teachers must be provided with opportunities to improve their English’, ‘ongoing training for teachers as they are supposed to master well in English’, ‘teachers teaching science and mathematics need to increase their English proficiency with the help of English teachers’ and ‘give more English workshops for the teachers to develop their skills’. In addition, respondents also believed that resources and materials need to be improved as they serve as the main learning texts for the teaching and learning process. The provision of the resources and materials to the schools needs to be improved in terms of its time. Respondents affirmed that the supply should be available before the semester commences to ease the distribution to both teachers and students. Similarly, they suggested for variety of resources and materials available in the bookstores to assist the teaching and learning process better. This is highlighted via ‘a module to be prepared to aid teachers such as workbooks or teaching aids that will help a lot’, ‘prepare more reference books and materials’, ‘provide more science and mathematics references in the English language’, ‘prepare bank questions for the students’, ‘books, resources and materials for the ease of teachers to be provided’ and ‘more additional materials that may assist teachers and students’. Administrators believed that the supply and provision of these materials would ease teachers’ burden in preparing for the lessons.

5. CONCLUSION
The study has revealed that the school administrators were found display their positivism in regards to the implementation of DLP. They believed that DLP should be continued, yet improvements are inevitable. Prior to that, the school perceives DLP as a means to develop and improve English language mastery among the students in particular as well as the teachers indirectly. However, without doubt, both teachers and students’ competency and proficiency may pose a great challenge in the implementation of this programme. Therefore, more actions and provisions are needed to render to solidify the current situation. More efforts would be deemed in enhancing the language mastery among the teachers and students. School administrators would need to organise more courses and trainings that may assist the teachers besides boosting their confidence to teach in English. Similarly, schools need to promote more English language usage among the students via outdoor activities to engage them more with the language. Otherwise, the issue of language mastery will never be rectified. Besides, issues on materials and references need to be solved to ensure the smoothness of the teaching and learning process. It is imperative that this study has its own limitations. Relying only on eighty respondents whereby there are more than a thousand Malaysian secondary schools involved in DLP might not suffice to really understand the existing situation. In addition, focusing on administrators’ views solely may not address other issues that confront the school. Hence, it is suggested for future research to engage with more administrators of DLP schools. Furthermore, it is also recommended to investigate the administrators’ perceptions on more administrative part such as the school facilities, resources, exam matters besides parents’ responses towards DLP. That would somehow triangulate the data in a more comprehensive and detailed overview. Last but not least, interview sessions with teachers and students of the same school with the administrators may help to triangulate the data provided by the respondents. In encapsulation, Dual Language Programme will be a successful programme should more considerations and remedies are given to solidify its implementation. As this is the fourth year of its implementation, DLP has a long way to go to prove that it can be a sustainable educational programme. With the history of PPSMI policy, we should not repeat the same mistake. Improving the implementation of the programme will eventually assist the programme to be a better one benefitting the nation. The goal of the programme is very straight-forward, aiming to develop the interest in science and mathematics while at the same time enhance the English language. Hence, it takes everyone in the education system to work hand in hand to ensure the success of the programme.

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