

Digitising English Language Learning for Early Childhood Educators in Malaysian Context: The Rationale

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Abstract

Nowadays, many kindergartens in Malaysia are striving toward using English in their daily activities with their children and some even use English language as their medium of instruction. However, some of the early childhood educators were not well equipped with the knowledge of English language. This paper aims to report the rationale for digitising English language learning through the development of Kindy Talk Application in terms of approach, content and design. Kindy Talk Application is a mobile application for Malaysian early childhood educators to utilise accurate language in their daily routine interactions and instructional language typically used at daycare centres. This development of the application stemmed from a series of workshops with 2 modules, namely Communication English and Storytelling techniques. These workshops aimed at increasing 30 Pahang early childhood educators' professional development. To ensure the sustainability of the training, the Kindy Talk Application, which uses augmented reality technology was developed to allow users to practise the daily routine and instructional language using their mobile phones in a safe autonomous learning environment. This enhances the language proficiency and confidence of Malaysian early childhood educators.

Keywords: Early childhood educators, augmented reality, English language learning, digitising language learning.

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Introduction

As statistics have shown that many graduates are unemployed due to poor English communication skills, in 2010, the Ministry of Education of Malaysia decided that English should be used at pre-school level as a language of instruction along with the Malay language and other mother tongues so that young children are better prepared for primary schools (Goh, 2019).

In 2013, the Malaysian Education Blueprint (MEB) was set up by the English Language Standards and Quality Council to develop our students' knowledge and skills to become global citizens of the 21st century through an integrated, comprehensive and timetabled plan for English language education reform known as "the roadmap". According to Don and Abdullah (2019), the roadmap is a 10-year reform plan to improve English language education in Malaysia from preschool to university, taking into account the existing learning environment and the expected communicative needs of our children, and describing in detail what needs to be done to improve teaching and learning at preschool, primary, secondary, post-secondary and university levels, and also in teacher education.

Thus, in the English Language Education Reform in Malaysia: The Roadmap 2015 – 2025 published by the English Language Standards and Quality Council, the Ministry of Education (2015), it was reported that "special attention has to be paid to early learning because this is when the foundations are laid for lifelong learning" (p. 23). Although 0 to 3 years are considered the critical period for children's brain development, the earliest age children are being introduced to English based on the National Preschool Standards-based Curriculum is at kindergartens at the age of 5 (Goh, 2019) and not to the babies and toddlers from the average age of 2 months to 3 years. Regardless of when English is introduced to children, the question is whether the early childhood educators are well equipped to teach or to even use English with the children at nurseries because they themselves have low confidence in using English, many of whom have basic levels of proficiency. Goh (2019) investigated 204 preschool teachers' perceptions of their own language proficiency via survey. Further interviews conducted via phone with 12 preschool teachers found that the preschool teachers' limited verbal ability led to the following anxiety:

Mispronouncing words or hesitating because they have forgotten some words in English, thus believing that they are less competent in the abilities to provide content in English. [They also] did not feel particularly very competent in carrying out tasks related to teaching using English, and therefore, there is a need to consider adequate training in methods of teaching content in English, and simultaneously boost teachers' confidence in their abilities to provide content in English. (Goh, 2019, p. 358)

Goh (2019) also reported that although the preschool teachers she interviewed received adequate training, they stated that “there seemed to be a disconnect in their training regarding what they needed and what was provided. It appeared that most of the training did not help their proficiency although it provided good suggestions of various instructional strategies” (p. 358).

Hence, the objective of this paper is to explain the rationale for digitising English language learning via a supplementary English language teaching mobile application for Malaysian daycare early childhood educators to utilise routine and instructional language. In explaining the rationale, this paper will also briefly discuss the Kindy Talk training that led to the development of the supplementary digital mobile application and accompanying posters.

English Language and Early Childhood Educators

Today, many working parents send their children from as early as 2 months to nurseries not only with the belief that their children will be well taken care of, but also that the children will learn a lot from the social interactions with other children as well as their early childhood educators. Being at the nurseries for more than 8 hours a day may suggest a huge influence of the early childhood educators on the children's social and language development. The early childhood educators are important role models for the children as they are among the closest adults to the children, besides their parents. Therefore, the children will learn a lot from the early childhood educators, for instance, language use. They tend to follow the language used by their early childhood educators without knowing if the language is correct, accurate or otherwise. To ensure the children acquire and learn correct and accurate language (in the case of this paper, the English language), the teachers'

use of English must be correct and accurate. In a study by Rosli and Radzuan (2020) which involved 60 Malaysian pre-school teachers, they found that the majority of teachers believed in their ability to teach English to the children. This could be due to the fact that these pre-school teachers perceived the English used with the children as simple. However, they claimed to have low confidence in using English effectively, especially in terms of English pronunciation. This fact is very worrying because children will learn more from the teachers and trust the teachers better, and not know which is correct or wrong.

This is supported by a study conducted by Dulay et al. (2017) that looked into the role of foreign domestic helpers (FDH) in children's language development. They followed 194 native 5-year old Cantonese-speaking children and their parents for a 5-year period from 2005 to 2009. These children were divided into three categories: those who had an English-speaking helper, those who had a Cantonese-speaking helper, and those who had no helper. Findings showed from the vocabulary tests the researchers administered annually that the vocabulary of children with an English-speaking helper were consistently highest in comparison with the vocabulary of children with a Cantonese-speaking helper and those with no helpers. For example, at age nine, the scores were better for children who had an English-speaking helper (45 % correct), compared with 33 % correct for children who had a Cantonese-speaking helper and those without a helper scored 28 % of the questions correctly. The study done by Dulay et al. (2017) concluded that having English-speaking helpers enhances the development of children's English vocabulary because the extensive time spent together allowed the children to have more opportunities to interact in English in everyday situations.

In the context of teaching practices and approaches in enhancing children's English language, Nikolopoulou, Akriotou and Gialamas (2019) distributed a set of questionnaires to 110 early childhood student teachers in Greece. One of the objectives was to gather the early childhood student teachers' willingness to utilize ICT in enhancing children's English reading literacy and strategies. These student teachers claimed to be excited and looking forward to utilizing ICT in their future reading classes. Majority of the student teachers strongly believed that ICT could develop children's reading competencies, enrich their vocabulary and improve their pronunciation in English language. Being early childhood teachers, they must have awareness that their teaching practices may have strong influence

on children's learning, and in this case, children's language development.

A learner's language proficiency can also be improved through reading and storytelling practices. In a study conducted by Fauzi et al. (2018), a storytelling module was used as part of Kindy Talk training with 30 early childhood educators to enhance their English language competencies. Findings show the module has helped them to boost their confidence level and increase their English language proficiency, hence improving their interaction with the children.

About Kindy Talk

The Kindy Talk programme which was funded by the Ministry of Higher Education Malaysia (MoHE) under the Knowledge Transfer Programme (KTP) started in 2015. Kindy Talk programme is a professional development programme which focuses on the development of English language competencies among early childhood educators in Malaysia. Collaborating with Pahang Early Childhood Educators Association's (PECEA), Kindy Talk programme trained 30 Pahang early childhood educators from 2015 to 2018. To date, Kindy Talk programme has also collaborated with other Early Childhood Educators Associations in other East Coast states like Kelantan and Terengganu where introductory workshops have been conducted for more than 60 registered early childhood educators.

A complete Kindy Talk programme consists of 6 professional development workshops and 2 Training of Trainers. The 30 PECEA early childhood educators went through the 6 professional development workshops and 12 selected participants joined another 2 follow-up Training of Trainers sessions. For each module, there were 3 levels, and each level lasted 18 hours each, totalling to 54 hours per module.

Kindy Talk consisted of two modules, namely Communication English and Effective Storytelling Techniques. Through these 2 modules, it aims to strengthen English language skills of the early childhood educators, advocates the knowledge of English language and enhances storytelling techniques in English language. In addition, Kindy Talk modules also target to increase an individual's confidence in using English language in daily communication, besides introducing and instilling the values of Heart Intelligence (HI) among the participants.

The core of both modules is HI which aims to enhance and realign one's relationship with the Creator. This would enhance job engagement, increase sincerity in their work, making them better early childhood educators. Both modules also integrated the concept of *Tahalli*, which means to decorate and instil with beautiful characteristics and was used by Islamic scholar Imam Ghazali in heart purification (Yusuf, 2004) to know and to feel Allah the Creator and to insert good ethics in our life.

Literature Review

Digitising Language Learning

Digitising is the conversion of pictures or sound from the physical form into a digital form that can be processed by a computer (Oxford University Press, n.d.), and in this era of the Industrial Revolution 4.0 (IR 4.0), this includes mobile devices, particularly mobile phones. In enhancing one's language proficiency in the era of advanced information technology, learners have various platforms to choose from through various mobile applications. Innovations in the era of IR 4.0 have helped to spark the opportunity of building an ecosystem which welcomes personalized learning which is not bound by time and space (Haseeb, 2018). The innovation of mobile technology and mobile apps, for example, have benefited both learners and instructors alike as they can further explore other opportunities for enhancing the learning of a language. The rapid adoption of mobile technology for language learning opportunities can be seen through the growing number of research in the area of Mobile-assisted Language Learning (MALL) (Gangaiamaran & Pasupathi, 2017).

The benefits of MALL are also evident through the availability of various mobile apps which show learners that learning a language at any level can be a fun process as well as an educational one. Mobile applications have now gained a strong foothold in education as they are used as one of the tools in learning where users can be actively engaged in the learning process.

Literature shows many skills have been successfully learned through the use of mobile

phones; such as listening (Zhang, 2016) and vocabulary learning (Stockwell, 2010). Furthermore, research studies (Khan et al., 2019; Khan et al., 2018; Oz, 2015) also show that language instructors and language learners hold positive attitudes towards the use of MALL in classrooms. The application of mobile learning in classrooms also provides better learners' engagement with the rich digital media technology, peers and teachers (Khan et al., 2019, Khan et al., 2018).

In a research by Zou and Li (2015) which explored the impact of mobile apps on college students' English language teaching and learning activities to gauge the current practice of mobile learning and future use as well as to identify the design criteria for good English learning mobile applications found that the majority of the participants viewed mobile learning positively, with many of them making frequent use of a variety of learning practices on their mobile gadgets. Furthermore, it was also found that mobile devices have great potential to foster learning among the children provided that the early childhood educators or parents assist them while using the device (Radesky et al., 2015). This indicates that mobile applications support lifelong and independent learning, and are a great platform for learning and sustaining the learning that has taken place.

However, according to Heil et al. (2016) whose research evaluated fifty most popular commercially-available language learning mobile applications based on a grounded set of criteria such as areas of instruction, assessment and feedback, found that first, the applications tend to teach vocabulary in isolated units rather than in relevant contexts. Secondly, Heil et al. (2016) found that the applications minimally adapt to suit the skill sets of individual learners; and third, applications rarely offer explanatory corrective feedback to learners. They recommended that language learning mobile applications should incorporate more contextualised text, adaptive technology and explanatory feedback to be more aligned with Second Language Acquisition (SLA) and L2 pedagogical research. Heil et al.'s (2016) review showed that in order to assist early childhood educators acquire meaningful language that they could use, the content has to be specific to their needs.

The rationale for digitising English language learning in a mobile application

This section will first describe the Kindy Talk Application and this is followed by the

rationale to digitise English language learning in a mobile application in terms of approach, content and design of the mobile application.

About Kindy Talk Application

The Kindy Talk Application is actually a triggered innovation stemming from the needs of early childhood educators after having gone through the Kindy Talk training. In Radzuan et al. (2016), feedback was very positive as all the educators found the training relevant to their work. Their language knowledge and confidence were vastly improved compared to when they first joined the workshop series and they acknowledged the benefits of using English with the children at their day care centres (Abdulghani et al., 2018). However, data from the pre- and post-tests conducted showed that there were still mistakes in language used, particularly in word choice, and syntax (Radzuan et al., 2016). Thus, to sustain the knowledge that was transferred, it was decided that there should be a way that continuous guidance could be provided to sustain the use of English. This led to the conception of the Kindy Talk Application and Talking posters.

Although it is called the Kindy Talk Application, there are two parts to this application: the mobile application itself and the Kindy Talk Talking posters. The Talking posters are also of two types. The first type consists of ten Daily Routine Language (DRL) Posters and the second type is the Body Talking Poster. Thus far, there is only one poster for this second category.

The Kindy Talk Application is the first of its kind mobile application which uses augmented reality technology that is developed to be used with the Kindy Talk Talking Posters. When these special posters, which use augmented reality markers, are paired with the mobile application, users can have access to correct language and correct pronunciation related to the content of the poster. Figure 1 below shows the user interface of the Kindy Talk Application in which users get to choose between two options: DRL or the Talking poster upon which, users will go into camera mode to detect the AR markers on the poster(s).



Figure 1. User interface of Kindy Talk Application#

Lastly, the application was also designed to be accessed offline, so that it is independent of the Internet once it has been downloaded into the mobile device.

Daily Routine Language Posters

The DRL Talking Posters contain selected simple daily routine language to kick-start learners' language repertoire in eight daily routine situations in ten posters. The situations were chosen based on observations at the day care centres. At the core of the language content is the *Tahalli* element as can be seen in Table 1 below.

The educators are expected to put the posters where they would usually use the language; for example, to put the "Arrival Time" poster and/ or "Going home time" poster on the wall at the doorway. Each sentence or utterance is tagged with a QR code which when paired with the application, will be activated when the camera mode is on. Then they can practise using the language by listening to any of the sentences that they are not confident with. A sample of a DRL poster is shown in Figure 2.

Table 1. *Description of Daily Routine Talking Posters with Tahalli elements*

Daily Routine Language Situations	Description	Tahalli
Greeting	Routine language that is used when children first arrive at the day care/ kindergarten.	Greet with “ <i>Assamualaikum warahmatullah</i> children”
Before starting a class	Routine language that is used before starting a class, like asking children how they are.	Start with “ <i>Bismillahir rahmanir rahim</i> ”
Meal time (1): Reciting Du’a and Meal time (2): Washing Hands	Routine language that is used before meals teaching young children how to recite prayer, to teach table manners and to get children to wash their hands before and after meals	Recite prayer before and after eating
Pee and poo time	Routine language that is used to get children to use the toilet/washroom as children tend to wait till the very last minute	Recite <i>du’a</i> (provided in the DRL poster manual) and enter with the left foot first
Circle time	Routine language used when children gather together for activities	Start with “ <i>Bismillahir rahmanir rahim</i> ”
WBT Class-Yes	Language used for a highly interactive form of instruction and classroom management	
Storytelling Time (1) and (2)	Language used for telling stories to children and relating the stories to the Creator and His attributes, moral values, as well as good and bad behaviours	Introduce Allah’s name - The Creator, Islamic values
Going home time	Daily routine language used to see children off	Leave by saying “ <i>Assamualaikum warahmatullah</i> ”



Figure 2. Sample Daily Routine Language Poster for Pee and Poo Time

Body Talking Poster

The Body Talking poster introduces body parts such as hair, eyes, nose, ears, mouth, hands, and feet using augmented reality technology. While the DRL posters are ideally suited for the educators, this Body Talking poster is more suitable to be used with the children. This poster is more than the eye can see. On the surface, it looks like any regular Body poster, but when paired with the application, it is a Talking poster! Children will be learning body parts at sentence level, and not isolated words. They will also see matching images to the sentences they hear spoken by an actual boy and girl; for example, an image of a girl with brown hair will appear for “I have brown hair” or an image of a boy picking his nose appearing for “I can pick my nose!”. Like the DRL posters, the Body Talking poster also features *Tahalli* elements, when the Creator is thanked for giving us hair, eyes, nose, ears, mouth, hands and feet. The application allows children to associate the images to the sentences, and learn the language, including the *Tahalli* element, which is repeated for every body part. By the time they have gone through all the body parts, the children would be able to say, “Thank you *Allah*, *Alhamdulillah!*”. The parts of the body became the

first chosen Talking Poster because educators often identify body parts with the children and oftentimes, the words were mispronounced.

At present, only the DRL posters come with a manual on how to use them. The poster manual also provides alternative phrases or sentences that can be used in these daily routine situations. Although the main target audience is early childhood educators, the applicability of the application can be extended to other users, such as young parents who would like to begin using English at home and primary school teachers.

In sum, the Kindy Talk Application and posters are novel due to being the first of their kind posters with application for early childhood educators that uses Augmented Reality (AR) technology, that function as a scaffold for users, through the use of authentic adult's and children's voice talents to provide correct language and pronunciation. Furthermore, they contain attractive graphics, easy to use and accessible language that is enriched with Tahalli elements to promote autonomous learning among users.

The Rationale for Mobile Assisted Language Learning Approach

This section explains the rationale for using the MALL approach. The researchers were guided by three fundamental principles. They are Mayer's Cognitive Theory of Multimedia Learning, Krashen's Affective Filter Hypothesis and Knowles' Self-directed learning theory.

Mayer's Cognitive Theory of Multimedia Learning explains how multimedia learning works and how it can best be used. Mayer (2006 cited in Knight, 2009, p. 13) believes "people learn more deeply when appropriate pictures are combined with the text". The theory is founded on three fundamental assumptions which explains how the brain processes information: (1) There are two separate channels (auditory and visual) for processing information; (2) Each channel has a limited (finite) capacity; (3) Learning is an active process of filtering, selecting, organizing, and integrating information based upon prior knowledge (Mayer, 2014a).

Mayer (2014b) expounded that multimedia instructional messages must be compatible with how people learn, which means understanding how the brain processes information. Mayer explained that the brain receives the information and processes it in multiple

channels (auditory and visual), according to how that information is presented. Auditory information refers to spoken words in a narration and other non-verbal sounds. Visual information refers to pictures, videos, charts, or printed words. As both sets of information are processed by the brain separately in separate channels, learners are able to make sense of incoming information and produce multiple logical mental constructs. The learning of new information thus then takes place when integrated with prior knowledge.

Next is Krashen's (1982) affective filter hypothesis, which is one of five hypotheses that account for second language acquisition in the Monitor Model. In the affective filter hypothesis, emotional factors, such as motivation, self-esteem and anxiety may influence the process of language learning and acquisition. In acquiring a language, the affective filter hypothesis is stating that language can only be learned if learners embrace the learning process. The lower the affective filter, the higher the chance of effective language learning. Mobile apps would provide a non-threatening environment in which learners, especially adult learners, feel safe, comfortable and pressure-free as they can learn using the application as many times as they like without the fear of being judged. As such, a well-designed mobile application would lower users' affective filter, reducing their anxieties and self-consciousness, thus, actively engaging them in the given tasks, increasing the likelihood of learning. This leads to the next grounding principle, Knowles' Self-Directed Learning.

Malcolm Knowles (1975), known for his theory of Andragogy, a theory specifically for adult learning, underscores that adults are self-directed and are expected to take responsibility for the decisions they make. He describes self-directed learning as "a process in which individuals take the initiative without the help of others in diagnosing their learning needs, formulating goals, identifying human and material resources, and evaluating learning outcomes" (p. 18). There are five reasons for self-directed learning identified by Knowles (1975, pp. 20-21) as follows:

1. Self-directed learning assumes that the human being grows in capacity and needs to be self-directing as an essential component in maturing.
2. Self-directed learning assumes that the learners' experiences become an increasingly rich resource for learning that should be exploited along with the resources of experts.
3. Self-directed learning assumes that individuals become ready to learn what is required

to perform their evolving life tasks or to cope more adequately with their life problems.

4. Self-directed learning assumes that the natural orientation of individuals is task or problem-centred.
5. Self-directed learning assumes that learners are motivated by internal incentives such as the need for self-esteem.

All these theories illustrate that digitising content specific language incorporating appropriate and impactful multimedia via augmented reality technology mobile application would be the most effective and appropriate approach to sustaining language learned by the participants. These AR-supported posters can be used by the early childhood educators not only as language for teaching but also as learning aids to improve their own English language proficiency. By developing the application, a non-threatening, pressure free environment is created for the early childhood educators. They are able to use at their own pace, at their own time repeatedly till they are happy with their own production, and move on to the next poster, or learn all the posters simultaneously.

Furthermore, as adult learners, they are believed to be experienced, internally motivated, willing to grow, and ready to learn. However, sometimes, anxiety and lack of confidence hinder them from learning. Hence, digitalising the learning of English language gives the learners a safe space to learn the language without feeling shy about how they are perceived by others. What the MALL approach does is ultimately promote autonomous safe learning space for users.

In addition, the MALL approach also promotes autonomous learning due to the portability of mobile devices as opposed to other devices such as laptops. Mobile devices also provide touchscreen features, possibilities for social interaction, multimedia input, and more advanced language processing tools such as speech recognition and translation (Booton et al., 2021).

The Rationale for Kindy Talk Application Content

As Heil et al. (2016) recommended that language learning mobile applications should

incorporate more contextualised text to assist early childhood educators acquire meaningful language that they could use, the content in the Kindy Talk Application is actually very much related to the two modules which were developed based on the needs of early childhood educators as specified by PECEA in 2015. Communication English, the first module, focuses on daily routine language in dealing with the children and language used for classroom management and instructions incorporating Whole Brain Teaching (WBT) approach. WBT was presented in the modules as a classroom management system that keeps the children focused, and the energy high through ‘Class-Yes’ and WBT Cheers among others. The storytelling part from the second module is also incorporated into the Storytelling posters 1 and 2 of the DRL talking posters. Needless to say, this application also integrated with the *Tahalli* concept that was the bloodline in both modules. *Tahalli* concept added in this application meets the national education philosophy in developing holistic and integrated manner, intellectual, spiritually, emotionally and physically balanced (<https://www.moe.gov.my/en/dasarmenu/falsafah-pendidikan-kebangsaan>). It is based on firm belief in and devotion to God that must be instilled in the early stage of education. This is where early childhood educators play a great role in introducing God in their activities.

Therefore, the Kindy Talk Application can be described as a by-product of the Kindy Talk Modules and serves as a supplementary English language teaching aid for day care educators to utilise routine English language at their day care centres. It is research driven because it is grounded in the needs of day care educators (*i.e.*, triggered innovation) who were participants of Kindy Talk training and workshops. Although this mobile application was developed for a particular group of early childhood educators, it was designed to be used independently of the Kindy Talk modules, which means any early childhood educator would benefit from it. as well as primary school teachers or young parents who want to begin using English at home as a medium of interaction as mentioned earlier. That is why the manual that comes with the DRL talking posters provides video links and information to fill in the gaps if the users are new to what is presented in the application and poster content such as the WBT ‘Class-Yes’ and cheers.

Furthermore, the application was developed with the aim to emulate as much as possible the way in which the teacher/educator would talk to a child. The provided language in the

content of the posters are given in full sentences and not at word level or phrase level. The development of the content is grounded in Krashen's Comprehension Hypothesis which states that language is acquired and literacy developed when the messages are understood (Krashen, 2003) This means the messages become comprehensible input when we understand what we read and what we hear, which is what the application and posters do. The language is simple, clear and in an easy to follow manner.

This is also in line with Krashen's Input Hypothesis which emphasizes the fact that only comprehensible input will result in acquisition of learners' target language. The input conveyed to learners, especially for learners at a very basic level of proficiency, should be just beyond their current level of knowledge for them to make further progress in learning the language. This is not only true for the DRL Talking posters, but particularly even more applicable for the Body Talking poster, when the target users are not only the early childhood educators to use as a teaching visual aid but the children, who are in their critical years, just acquiring the language. The concept of 'i+1' of Input Hypothesis is applied in this application and posters as the content used has been carefully selected to ensure the materials used are suitable for their current level of knowledge and challenging enough for them to use independently. Choosing appropriate content is also important to make self-learning on mobile applications more inviting, fun and at the same time motivating. Not only that, it also incorporated authentic voice talents and correct pronunciation and intonation. This will be explained further in the next subsection of design.

The Rationale of the Kindy Talk Application Design

In terms of design, the main components discussed here would be the use of authentic adult's and children's voice talents using correct pronunciation and appropriate intonation and attractive graphics.

The application and posters also provide i+1 in terms of pronunciation, again, especially for some of the early childhood educators whose level of the language is at a very basic level, as well as for children in the case of the Body Talking poster. Through the application and posters, they are required to use language which is beyond their current knowledge especially when it comes to pronunciation of many English words. English is

not a phonetic language and many words are not pronounced the way they are spelt (Yilmaz, 2014).

Pronunciation, being one of the most basic and needed elements in learning a target language, must be emphasized and demonstrated in both Body Talking Poster and Daily Routine Language posters. As it is strongly recommended that the children are to be exposed to English language at kindergarten or nursery, the ability of the early childhood educators in English language has a notable influence on the children's learning a good and correct English language (Rosli & Radzuan, 2020). In addition, Tyaningsih (2016) stated that the element of correct intonation and emphasis as well as the use of words in context will be helpful for the children to understand the target learning words. As such, instead of using an automated or computer-generated voice, it was decided that actual adult and children's voices would be used. For the DRL Talking posters, the rationale behind using an adult voice talent was to ensure that the right intonation when speaking with children (*i.e.*, firm but gentle), was projected. It is all about fostering good feelings in the children. This is in line with one of the PERMATA curriculum principles in developing well rounded children which is providing a cheerful, friendly and stimulating learning environment for the children (Hafsah & Zahyah, 2020).

For the Body Talking poster, children-voice talents were used and the language in this poster used appropriate intonation and pace to introduce the body parts and what each body part can do in complete sentences. This is to give examples on how to use the words in context. Children-voice talents were also used so that the children at daycares and preschools could relate to them, and perhaps even aspire to speak like the poster characters. The application of using children's cheerful voices also supports Comprehension Hypothesis by Krashen which states that language acquisition occurs better when the language learner is more motivated and the affective filter is lowered (Krashen, 2003). Furthermore, language acquisition will be more successful when the children hear their peers' voices in the posters compared to automated voices which are serious and mundane.

The same concept of introducing words in contexts is also applicable in Daily Routine Language posters. The children would also learn to associate the language to the attractive graphics presented and acquire meaningful language. Furthermore, the language is very repetitive in the Body Talking poster, particularly the *Tahalli* element. Through the

frequent repetitions, children as well as the early childhood educators would acquire the language and the pronunciation with greater speed. It should be reiterated that the language presented in the Kindy Talk Application is at sentence level as the developers did not want the educators and the children to learn words in isolation and not be able to string the words in sentences. Therefore, by learning language at the sentence level, with the right intonation and pronunciation, children will be exposed to accurate language use and hopefully they learn the right language too. (See Table 1).

Attractive graphics are important especially for the Body Talking Poster to attract the attention of the children. This is based on the theory of Constructivism, which emphasizes the fact that learners build meaning through their engagement with authentic experiences and social interactions that incorporates four elements “context, collaboration, conversation and meaning construction” (Qiu, 2019, p. 1167). The graphics in this application and posters provide children learning context for meaning construction and ease for the early childhood educators to guide learners in acquiring knowledge through collaboration and conversation. Thus, the application and posters have allowed interactions in English with confidence between early childhood educators and children that was not possible before.

Conclusion

This paper has discussed at length the rationale of digitising the English language learning for Malaysian early childhood educators via the development of the Kindy Talk Application. At the moment, the application only meets two of the recommendations of Heil et al. (2016) which are relevant context, and that it adapts to enhance target learners’ skill sets. The developers hope to improve the application by including corrective feedback elements and games as well as to get the application on both Android and iOS platforms. At present, the application is compatible with only Android phones. Furthermore, the content is still quite limited, but new content is being developed for both DRL and Talking posters.

The mobile application and posters may appear very niche (English for Specific Purposes) and seem to be primarily created for day care and preschool educators but they can be extended to parents, older siblings, extended family, primary school teachers, and

live-in maids, as long as they interact with children. Although it can be standalone, it is better if users undergo Kindy Talk training workshops as they will have better understanding and retention of the language used. The children whom the target audience interact with will also benefit from the interaction as they acquire a second language at an earlier stage, during the foundation years when their brains are like absorbent sponges. The researchers of the present study believe that if day care educators take to using the application and the talking posters, it is a step closer to making the nation better at English language, starting at home and daycare centres, reinforced by more formal English language exposure in preschools and later primary schools.

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