

Preschool teachers' use of English as a medium of instruction: A systematic review of barriers and strategies

Pauline Swee Choo Goh, Chee Luen Loy, Norwaliza Abdul Wahab and Raja Nor Safinas Raja Harun

Sultan Idris Education University, Malaysia

Factors which are barriers to preschool teachers' use of English as the medium of instruction and facilitating strategies used to overcome those barriers can be complex. This study investigated those barriers and facilitating strategies through a systematic review using various databases, which resulted in 20 studies being identified. From these studies, barriers and facilitating strategies were found and arranged in two main categories: (1) barriers to, and facilitating strategies of, preschool teachers' use of English during instruction as it relates to the teachers themselves, and (2) barriers to, and facilitating strategies of, preschool teachers' use of English during instruction as it relates to the learning environment. The results provided an overview and a lead into a better understanding of issues faced by preschool teachers in their use of English to teach, whilst also identifying positive strategies to assist them during their instructional tasks. The factors and strategies identified are important as a guide for preschool policy makers towards future planning of practices and further research.

Introduction

The current globalisation phenomenon has motivated Malaysia to maintain English as one of the languages for teaching and learning in schools, but as a second or foreign language. The motivation for this decision was to ensure the readiness of Malaysian pupils to be proficient in the English language and hence, their future academic journey (Azman, 2016). With that in mind, in 2010, the Ministry of Education of Malaysia decided that the use of English as an instructional language, together with the Malay language and other mother tongue, should begin in the preschool level to better prepare young children before they attend the primary schools (Ministry of Education, 2010). Existing research has indicated the importance of English language development and impact of early language use on later proficiency of the language among preschool children (Neuman, 2010; Vellutino, Tunmer, Jaccard & Chen, 2007). Therefore, since 2010, as part of the *National Preschool Standards-based Curriculum 2010* (NPSbC), Malaysian preschool teachers are to instill the use of English at the preschool as a strategy to get children ready to master the English language before Primary One, through their own use in teaching in their classrooms (*The Star*, 2010).

Despite the implementation of the NPSbC in 2010, there have been criticisms that Malaysian pupils still have low proficiency in English (Ministry of Education, 2015; Selvaraj, 2013; Wong, 2014), and that these pupils are struggling with English in schools, especially those in rural areas (Wong, 2014). Many Malay pupils still fail to be able to converse in the English language, despite learning the language from preschool. It appears that preschool teachers do not often use the English language to teach or engage in activities that use the English language for the development of preschool children (Goh,

2019; Pandian, 2006). It would seem that, as always, preschool teachers had to bear the brunt of the blame.

Despite curriculum reform efforts at the preschool level, the problem remains that preschool teachers' competency to use English to teach, and knowledge of strategies for developing the language in the preschool classroom are not well known, including issues faced by these teachers (for not using the English language to teach in the first place) (Cunningham, Zibulsky & Callahan, 2009). It seems Malaysian preschool teachers are not spared from criticisms on this. A former higher education minister, Datuk Seri Idris Jusoh, had once said that about two-thirds of English language teachers in the country lacked competency to teach in the English language (Wong, 2014). Although there may be many issues that are responsible for the low proficiency of the English language among Malaysia's pupils, the competency of the teachers who teach and use the language remains one of the contentions in this issue (Goh, 2019; Pandian, 2006; Khairie Hisyam Aliman, 2013; Wong, 2014).

However, there is little knowledge about whether the issue pertains to preschool teachers' competency to use English, or not wanting to use it to teach, or the teacher education they received, or factors as yet undiscovered. Cunningham, Zibulsky and Callahan (2009) argued that there is a need to better understand the problems encountered by preschool teachers that hinder their use of the English language to teach, and that there is a need also "to recognize their skill deficits", when implementing policies relating to using English as an instructional language. Any changes to language policies for preschool teachers must be informed by a careful review of the research, to avoid inadvertent 'short cut' policy measures. It is one of the aims of this review to ascertain the barriers faced by preschool teachers in their quest to facilitate experiences with English, as well as highlight the significance of those challenges and problems.

Another aim for this review is providing effective suggestions for interventions, professional development and future preparation, and improved understanding of the instructional decisions that preschool teachers make. Discerning these factors can help provide an in-depth understanding of outcomes from using English as a medium of instruction. After all, preschool teachers play an important role towards laying the foundation for learning and setting the stage for successful engagement in formal education for preschool children. To the researchers' knowledge, no systematic review has been conducted or published which has examined the barriers towards using English as a medium of instruction in preschools. By carrying out a systematic review, readers and researchers may also be able to ascertain the extent to which the research community has attempted to discover the issues plaguing preschool teachers' use of English as a medium of instruction. The answers, if they exist, should then be brought to the attention of stakeholders (teachers, students, institutional managers, and policy makers).

Method

Aims of the review

This review focuses on factors which hinder and challenge pre-school teachers' English language use in the classroom. It aims to review existing evidence to inform future program development and policy-making and to provide evidence about pre-school teachers' use of the English language in teaching and learning, and factors that may impact their use of the language in teaching and learning tasks.

Process of systematic review

It is important that a review is systematic, transparent and repeatable. One way of achieving this is by conducting the review as a process defined by a series of steps. Each of these steps should explain how the review should be carried out to enable the best possible answers to the research questions. This study adopts and adapts features from Petticrew and Roberts (2006), who suggested the creation of a systematic review protocol to drive the research.

Systematic review protocol

The protocol aims to explain the review's conceptual framework as well as to ensure openness and transparency in relation to the methodological choices made. The protocol describes the basic issues and the conceptual arrangements applied in the systematic review. It explains the key decisions relating to the search strategy, criteria for exclusion and inclusion of studies (e.g year, the country, type of studies, research design, and specific topics) and criteria for synthesising. The protocol acts as a document control process in the review and is thus a tool for those involved in the project. It is central to the systematic review due to the requirement for transparency and repeatability. As the review process progresses, it may become necessary to revise the protocol, and some decisions may be affected by the result of the prior processes.

This review uses the protocols as listed by Petticrew and Roberts (2006). The steps are the basis for the methodological choices made in this research. The core points from Petticrew and Roberts' protocol for review can be summarised as:

1. Formulation of the review question;
2. Definition of core concepts and explanation of the theoretical and scientific context in which the questions are asked;
3. Statement of applied search strategy and synthesis methods;
4. Description and definition of specific research methods;
5. Criteria for the composition of the review group;
6. Assessment of studies in relation to the exclusion and inclusion criteria;
7. Critical assessment of the selected studies;
8. Synthesis of selected studies.

Review questions

The formulation of the review question sets the framework for all other phases of the review process. The question is not whether a particular intervention in teaching methodology is effective or not, but the factors that hinder or are barriers to preschool teachers' use of the English language in their teaching; and the strategies or approaches that preschool teachers use when faced with these barriers to improve their use of the language. Thus, this research is not a "what works" review only. The focus of this systematic review is also how a strategy or an approach is used to overcome the lack of English language use. In pedagogical importance, it can be greater than the case of complex teaching interventions and processes that take place because it looks at the root cause.

A pluralistic approach method in which all types of research design principles can be included is used. In practice, this means that the included studies are likely to be very heterogeneous. Emphasis is therefore upon including both qualitative and quantitative research designs. To this end, the following questions are addressed in the study:

1. What are the barriers to, and facilitating strategies of, preschool teachers' use of English during instruction as it relates to the teachers themselves?
2. What are the barriers to, and facilitating strategies of, preschool teachers' use of English during instruction as it relates to the learning environment?

Conceptual delimitations

A review question contains implicit assumptions about the subject, therefore it is important to define the concepts involved in the review question. The conceptual clarification of the review question is important in terms of making informed choices regarding search strategies for identifying primary studies, as well as the establishment of criteria for screening and assessment of primary studies. The review maintains an open approach so that different understandings of theory / practice relations in the empirical studies are included in the review.

Malaysian preschool

Malaysian preschool context: 4-6 years-olds (including Ministry of Education preschools and preschools operated by private sector and non-governmental organisations) and uses the NPSbC 2010. In some instances, primary school levels are also looked at (for example 4-9 year olds). It is estimated that whether primary school studies are relevant for this review depends on whether they were carried out in a context or a society, namely the Malaysian society and the Malaysian education system, where English is not the mother-tongue.

International preschool context

4-6 years-olds and in certain circumstances 7-9 year olds. Although it is understood that cultural and educational differences will be present from other countries, this review nevertheless included results from other countries where English is not the mother tongue

and/or where the studies come from, for example, Singapore, United States of America, Australia, Canada or New Zealand, but the preschool children are migrants and are taught by teachers whose mother tongue is not English.

Factors that hinder or are barriers to

Obstacles to the use of the English language in the classroom.

Pedagogical approaches (or strategy)

The concept of pedagogical approaches is the 'strategy' used in pedagogic tasks. The term 'strategy' is used in practice at the preschool level. In reference to 'strategy', it must therefore be an approach or a way used by preschool teachers, which intends or allows them to improve their use of the English language to teach.

Search strategy

The search for eligible studies was undertaken using *ERIC*, *Science Direct*, *SAGE Journal*, *DOAJ*, *Scopus*, *Emerald*, *Proquest*, *Cochrane* and *PsycINFO*. PsycINFO is an international database, if the subject matter is mainly psychology, but it also covers areas in pedagogy and sociology. The Malaysian database was *MyJournal*. Although the present research aimed to explore factors which are barriers to preschool teachers' use of English for instructional tasks, due to a limited number of relevant studies, the search was extended to barriers experienced by teachers in the primary schools with pupils aged between 9-10 years old. A manual search of the reference lists in any article selected was made to search for additional studies. The manual search strategy was extended by the use of publisher's search provisions such as Taylor & Francis' *People also read*.

Study selection

A pilot search of the selected resources was conducted partly to get an overview of how much research is in the area and to find conceptual terms and synonyms for 'early childhood', 'preschools', 'barriers', 'strategies', and 'English language'. The use of other strategies to search, for example, the use of thesaurus, helped to ensure that the researchers did not overlook similar terms and for reliability purposes. Take for example 'barriers', other similar words such as 'obstacles' or 'hindrances' were also used. In addition, search strategies were also refined by reviewing the abstracts of each articles and inserting or deleting different search terms which were possible related terms.

A large part of the references were located in *ERIC* (96,283), while the others were *Proquest* (77,884), *Science Direct* (58,101), *SAGE Journal* (45,692), *Scopus* (19,706), and *Emerald* (9,461). Smaller portions were found in *DOAJ* (922), *MyJournal* (90), *PsycINFO* (58), and *Cochrane* (41). Such detailed searches were the preliminary stage to ensure that, using the selected search terms, all relevant literature was identified. At this point, many items found were not necessarily relevant to the study, and there were also many duplicates.

Various inclusion and exclusion criteria were used in this systematic review study to refine the search. First, only documents and journal articles which were peer reviewed and

published from 1999 to 2019 were recorded. It was not possible to put an exact date, but it was initially estimated that 20 years was a manageable time frame. Anything before 1999 could be considered as out of date, or superseded by more recent references. Second, those studies selected and analysed had to be directly related to the research questions. The most important concerns were whether the study targeted the phenomena to be investigated in the review and whether the study targeted the appropriate audience. There were a number of research articles dealing with factors or deficiencies concerning the use of English to teach in secondary and higher education. These studies were considered not to have met the inclusion criteria, as they are not dealing with factors that relate to preschool level. However, in some circumstances, the students in higher education investigations concerned preschool teachers and research on their attempts to overcome barriers in teaching in English. Such studies were included. Third, only studies published in English with a detailed description of method were considered. This was deemed imperative to enable the research team to ascertain the quality of the chosen study. The other acceptable language was *Bahasa Melayu* (the Malay language) as it was understood by all the researchers in the team. There were no exclusion criteria concerning methodology, and therefore all types of research designs could be represented. Finally, it must also be noted that editorials, comments, book reviews, manuals, bibliographies and opinion papers were not considered and were therefore excluded. Only studies which met the above criteria were included in the systematic review.

A final two-stage screening was used, first through, title and abstract screening, followed by a full text screening. Although the studies selected through this two stage screening were selected and coded by the first author, discussions were held with the team of researchers to avoid problems with bias. The *EPPI-Centre Data Extraction and Coding Tool for Education Studies V2.0* framework (EPPI-Center, 2017) was used to evaluate and to code the background information such author, date, sample size, research design, and outcomes. Any study that did not adhere to quality dimensions as outlined by the framework was excluded. Altogether, 20 studies reached final consideration (Appendix).

Results

A total of 308,238 records were retrieved during the pilot search, of which 5,724 were recorded using the inclusion and exclusion criteria. The final two stage screening process produced 20 studies for the final systematic review (Figure 1). Details about author, year, nationality, research design, research title, and relevant factors and facilitating strategies relating to preschool teachers use of English to teach for each of the selected studies are found in the Appendix.

With reference to the Appendix, Column 3 shows that most of the articles originated from Africa and Asia. Column 4 shows the research designs. Qualitative designs (8 articles, 40%) were used most frequently, followed by quantitative (4 articles, 20%) and mixed-methods designs (3 articles, 15%). Interviewing (10 articles) was the method most used. In four articles, interviews were combined with classroom observations while two articles were accompanied by questionnaires and one of the interview studies was combined with both a document review and observations. There were four questionnaire

studies, of which one combined the questionnaire with interviews. The other methods used in the articles were critical analyses. There were no intervention types of articles. In one article (see column 4, no.13), the perspective of the parents was investigated.

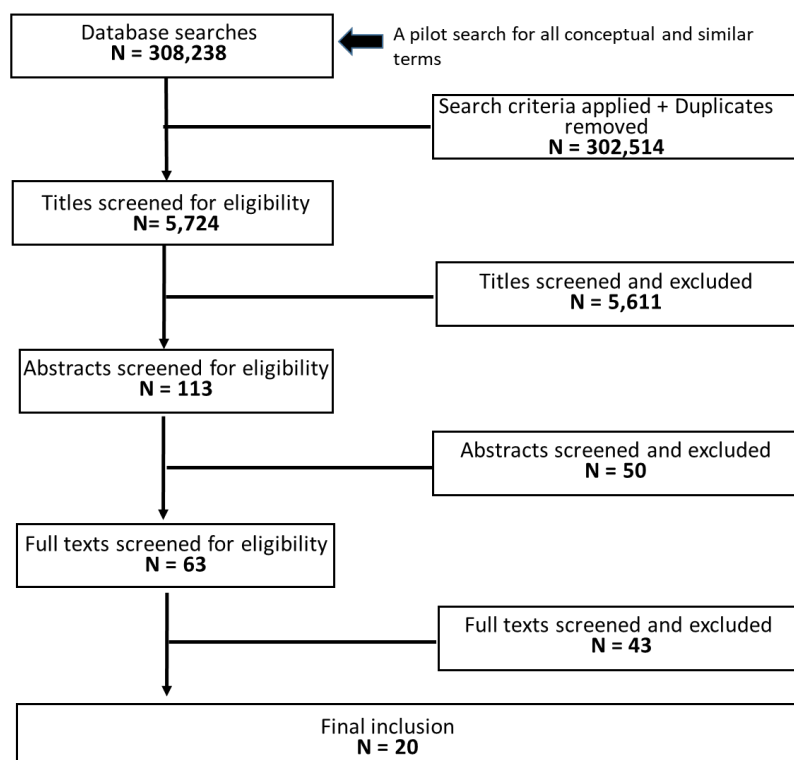


Figure 1: Flowchart detailing flow of studies through the review.

Through this systematic review, a range of factors which are barriers to preschool teachers' use of the English language in instructional tasks were identified, together with facilitating strategies which may be used to overcome the barriers and challenges. It must be noted that this study does not calculate the frequency of factors identified, as the number of occurrences is not perceived as an accurate measurement towards determining the importance of each factor (Bowles & Brindle, 2017). Nevertheless, the factors identified are important as a guide for preschool policy makers towards future planning and for policies and practices.

Discussion

Although more studies to explore factors which could explicitly explain reasons why some preschool teachers were more successful in using English as the instructional task compared to others would be ideal, the findings from this investigation would still be applicable to the preschool teacher populations. This is essential to bring the intent and objective of any curriculum that uses English as a medium of instruction to reality.

Barriers to, and facilitating strategies of, preschool teachers' use of English during instruction as it relates to the teachers themselves

Lack of confidence and fear of using the language

Reasons for teachers' 'lack of confidence' showed that they 'feared using the language' or that they 'felt anxious' (e.g. Bell & Bogan, 2013). On the other hand, for example, Chee et al. (2015) and Machida (2016) found that the lack of experience in using the language also made them feel anxious about using the language in the classroom and thus rather diffident towards the language use in their teaching. Coupled with the tension between code switching (English to mother tongue and vice versa), this could cause teachers to completely avoid using English (e.g. Clegg & Afitska, 2011; Feza, 2016; Palviainen, et al., 2016; Tackie-Ofosu et al., 2015). Some studies reported that there were preschool teachers who did not go into the classroom prepared for the day, possibly due to the lack of confidence (e.g. Bell & Bogan, 2013; Chee, 2015). 'Fear of failure', 'feeling anxious', 'feeling tensed about code switching' together with the lack of preparation could have created a vicious cycle, indirectly influencing preschool teachers' confidence (or lack of) to use the language in the classroom. However, there were no correlation study found on this conjecture.

Lack of proficiency in English

Findings from the identified studies have reported teachers' lack of proficiency to be the main barrier to their acceptance and subsequent adoption of English (e.g. Chee, 2015; du Plessis & Louw, 2008; Goh, 2019; Machida, 2016; Mustafa et al., 2018; Shankar & Gunashekar, 2016; Tan, 2007; Vella, Mifsud & Muscat, 2018). The findings show that teachers who do not use English in the classrooms tend to claim that a low level of proficiency is a constraining factor. It would appear that many preschool teachers still choose not to use English in teaching situations because of proficiency issues rather than pedagogical reasons. Although there are no studies to show a direct relationship, some have alluded that low language proficiency is a barrier, which could hamper teachers' confidence in using English in teaching (e.g. Machida, 2016; Mustafa et al., 2018). Nunan (2003) stated that, "... a major problem is that many English teachers simply do not have the proficiency, and therefore the confidence, to teach in English" (p.601). However, this study did not inquire into teachers' confidence in teaching in English, in their own context. Nunan's (2003) study also failed to provide any causal relationship between language proficiency and/or its relationship with teacher confidence. There is also a possibility that a deficiency in English created a situation in which preschool teachers tended to rush through the syllabus rather than focus on the individual child's language and learning abilities (Isa et al., 2013). As the systematic review did not provide literature to show a relationship, nevertheless, it would be worth giving some thoughts to this relationship to assist early childhood providers in their efforts to educate children.

Preschool teachers' confidence had a strong impact on their use of English in their teaching and learning. The widespread acknowledgement of English as a "global language" has led Malaysia, like other countries, to some radical changes in its policies and practices concerning English use and education (Butler, 2004). This decision was made based on the belief that longer exposure to English would improve children's

communicative ability. However, it seemed that concerns surrounding the ‘teacher factor’ were still very strong, particularly those related to teachers’ lack of English language proficiency. The literature reported that preschool teachers lacked the proficiency to use the language competently (e.g. Chee, 2015) and thus lacked the ability to differentiate instruction while using the language (e.g. Leung, Lim & Li, 2013; Mudzielwana, 2017). Due to this lack of proficiency, preschool teachers might not feel enthusiastic about the need to integrate changes and supplementary learning into their teaching practices (e.g. Mwalongo, 2016). However, the literature search also found that the issue was not so much the proficiency of the teachers but rather pupils’ low proficiency, for example in the study reported by Owu-Ewie and Eshun (2015). Due to the low proficiency level of the pupils, teachers had to struggle to teach in the language. Almost similar, for example, de Mejia (2008) and Kyeyune (2003) reported that pupils were not interested in learning when teachers use English to teach. However, the biggest challenge, by far, remained the level of English proficiency among the teachers for the successful use of English in teaching and learning. The literature indicated that governments were aware of this issue and have initiated various in-service training programs on the use of English in teaching (e.g. Bell & Bogan, 2013; Tan, 2007; Vella, Mifsud & Muscat, 2018).

Preschool teachers’ beliefs and attitudes

Although the lack of language proficiency may be one of the strong hindrances towards the use of English in the classroom, preschool teachers’ beliefs and attitudes towards the language may also be one of the factors that teachers shun its use (Goh & Loy, in press). It would appear that teachers’ own attitudes can lead to an inherent resistance to use English in the classroom (e.g. Clegg, & Afitska, 2011; Leung, Lim & Li, 2013; Mulovhedzi, Ngobeli & Mudzielwana, 2017).

Teachers’ attitudes and beliefs can have a powerful influence on how they behave and what they choose to do in the classroom (Goh & Loy, in press). It is their attitudes and beliefs that will determine whether the use of English to teach is advantageous and will benefit their teaching and their children’s learning (e.g. Goh, 2019). Therefore, if these preschool teachers feel that the use of English provides no additional advantage to the children’s learning, then they are unlikely to use it (Sak, Erden & Morrison, 2016). If preschool teachers believe that they are not being supported, guided, or rewarded when asked to use English in teaching, these circumstances may adversely affect their attitudes towards its use in the first place (e.g. Goh, 2019; Tan, 2007; Vella, Mifsud & Muscat, 2018).

However, negative attitudes and beliefs are not necessarily a barrier (Ambotang & Hashim, 2010), but could be a ‘red-flag’ to indicate that something needs to be done, and therefore reasons for such negativity should be teased out (Fu, 2015). Changes in professional practices and ongoing dialogue about improvements in learning outcomes could help alleviate doubts about using English as a medium of instruction (Syed Ali Rethza & Jamaluddin, 2010). Chances are preschool teachers are not necessarily rejecting outright the use of English, but it could be a case of teachers needing further assistance through training and to be given enough time to make sense of the new policies for themselves (Syed Ali Rethza & Jamaluddin, 2010)

Facilitating strategies

From the review, it is reported that issues with confidence and the lack of proficiency in using the language have culminated in materials being developed to assist preschool teachers through modules and manuals (e.g. Leung, Lim & Li, 2013). However, studies have been raised to question whether using scripted modules and manuals can instead act as a constraining factor, limiting preschool teachers in their creativity and innovating in their teaching (Ng & Yeo, 2014; Gort & Sembiente, 2015; Puteh & Ali, 2013). Dresser (2012) argued that the use of such structured approaches can stifle teacher creativity and reduce teacher autonomy with rules and order. He described it succinctly as akin to keeping “education and learning at a superficial level” and that it cannot provide “opportunities for teachers and students to be innovative” (p. 82). Nevertheless, the debate continues, as there are advocates (for example, Barber, Chijiokoe & Mourshed, 2010; Piper et al., 2018) who see it as a way to provide teachers with the essential elements of effective instruction.

Advocates seeking to overcome issues of confidence and proficiency suggest training and workshops (development of language, teaching) to provide effective and comprehensive professional development for preschool teachers (e.g. de Mejia, 2008; Mwalongo, 2016; Vella, Mifsud & Muscat, 2018). Support from parents is deemed necessary as well as administrative support to provide encouragement (e.g. Leung, Lim & Li, 2013; Machida, 2016; Palviainen et al., 2016).

The literature has revealed that the problem of children not being interested in the English language could be alleviated with proficient bilingual teachers for pupils who mainly spoke or felt more comfortable with their mother tongue (e.g. Feza, 2016; Palviainen et al., 2016). Moreover, the development of learning materials in English that portray stories more suited to the children’s own culture was also suggested and this could provide familiarity while learning in a new language (e.g. Tackie-Ofosu et al., 2015). Other strategies that should be considered include creating developmentally appropriate learning programs in English with intensities more suited to the ability of the learner, to increase motivation and to maintain and stimulate interests (e.g. Leung, Lim & Li, 2013).

Barriers to, and facilitating strategies of, preschool teachers’ use of English during instruction as it relates to the learning environment

Insufficient time

A few studies reported time limitations as a factor which hindered teachers’ use of the English language in instructional tasks (e.g. Palviainen et al., 2016; Mwalongo, 2016). Time, or rather the lack of it, appears to be a factor which could impede the use of English in teaching, even though preschool teachers may have confidence and proficiency. Common reasons cited in the studies are planning for the lesson, developing different strategies to teach or optimise learning when using English (e.g. Tackie-Ofosu et al., 2015). The problem of lack of time exists for teachers in many aspects of their work as it affects their ability to complete tasks, specifically towards which aspects and how much of the lessons should be taught in English. Tackie-Ofosu (2015) for example, found that preschool teachers also have to grapple with classroom management issues, especially if

the teacher's proficiency is inadequate. The time needed for managing classroom and behavioural issues may use a big portion of a teachers' time. Following closely behind the time issue is the lack of adequate teaching and learning resources, which may interfere with the implementation of English in teaching in preschool classes (e.g. Goh, 2019). Ironically, although the resources are available in preschools, teachers may not find the time to access these resources. The literature (e.g. Goh, 2019) shows that this may be because teachers use up more than the allocated time for one particular lesson over another and thus have to make up time. A combination of an increasing population and a decrease in funding has caused class sizes to increase and can further impede how teachers manage time and their classroom (e.g. Goh, 2019; Tackie-Ofosu et al., 2015).

Insufficient parental involvement

The lack of parental involvement or parents' negative preconception of preschool (e.g. Leung, Lim & Li, 2013) has been reported as a barrier. There is a probability that these parents believe that parents are the first teachers and can best prepare their children with foundational skills at home. The lack of parental encouragement towards the use of English is a possible, complex barrier that discourages preschool teachers from using the language (e.g. Tackie-Ofosu et al., 2015). What would be needed is a three-way discourse between teachers, schools and parents, to help parents become more aware about preschools' role in educating their children and the value of their school involvement. Parents also benefit from being involved in their children's education by getting ideas from school on how to help and support their children, and by learning more about the school's academic program and how it works (e.g. Leung, Lim & Li, 2013; Goh, 2019).

Facilitating strategies

Good administrative support and whole-school resources are needed to overcome the barriers preventing them from using English. Support from school administration encourages preschool teachers' use of the language, but also there is a need for integration of English in other activities in the preschool, such as remedial classes and other linguistic supports for children (e.g. Palviainen et al., 2016; Leung, Lim & Li, 2013), and strategies for adjustments for individual children (e.g. Machida, 2016). Ineffective administration or bureaucratic interferences can potentially hamper preschool teachers who are ready to address the use of English in teaching (e.g. Clegg & Afitska, 2011; Machida, 2016; Vella et al., 2018). A school's administration plays a crucial role in determining the school's culture and, by extension, the way in which preschool teachers experience their work. Administrative support is an important factor (Goh, 2019).

The quality of the relationship that preschool teachers have with their administrator can vary (e.g. Vella et al., 2018). Overzealous administrators may have felt it necessary to constantly monitor these preschool teachers. The 'best administrators' are those who establish and maintain a positive school atmosphere and who are open, consistent and predictable in relating to teachers. Preschool teachers need support and assistance because this assistance may provide them with the encouragement in the new environment where preschool teaching needs to be in English. Inversely, it can be discouraging if preschool teachers feel that they are not being trusted with the role or if there is over interference from the administrators and bureaucrats (e.g. Clegg & Afitska, 2011). Teachers want to

feel that they are being encouraged to contribute their ideas and that their views are taken into consideration in planning (Goh, 2013; Goh & Matthews, 2011; Goh, Saad & Wong, 2012).

Implications for policy, practice and research

Implications of this systematic review must be considered as they pertain to policy, practice and research.

Policy

This systematic review provides an awareness to decision-makers and planners of educational policy, that there are various barriers that can impede their policy of using English during instruction time in the classroom – and therefore an understanding that these barriers can be seen to promote or discourage its use. Therefore, for those involved in preschool education, those who make decisions for the country and politicians who endorse the policy – this review helps to elevate the importance of (1) selection of strategies that could be important for preschool teachers; and (2) effective training or teacher preparation. However, it must be noted that the review results only identify what barriers are fundamental towards impeding preschool teachers' use of English, and to suggest strategies that can be used to overcome those barriers. It cannot answer which strategies are the most effective, or discern causal relationships between barriers and strategies. For such purposes, conducting empirical studies using empirical evidence is needed. The researchers, therefore, recommend that educators, officials and politicians wishing to improve preschool teachers' English language use in instructional tasks, be aware and take heed of those barriers that could curb their use as a basis for evaluating the appropriateness of existing teacher preparation courses and professional development programs, and as bearings for future teacher training courses.

Practice

To recommend that these barriers should be 'reduced' or 'diminished' is more of a task to be dealt with at policy level, and for teacher educators also. Generally, teacher educators, preschool teachers themselves, and school heads need to collaborate to 'overcome' barriers and provide meaningful strategies for success with English in instructional tasks. Nevertheless, the researchers recommend that preschool teachers do take account of these barriers found in this systematic review that has shown to be of significance (not causal) towards their using English in the instructional tasks. At the same time, it has to be noted too, that preschool teachers in this systematic review do have readiness (their own strategies) to take control of their own predicament and have taken initiatives for their own improvement and confidence in using English, for the sake of their preschool children's learning.

Research

The present systematic review has surveyed literature between 1999-2019 into barriers and challenges that hinder preschool teachers' use of English in instructional tasks. It must be noted that there are no randomised, controlled studies identified in this systematic review. It would be valuable if studies are found or conducted to get a better understanding of

those elements considered as barriers and strategies, and any causal relationships between them. Preschool teachers are operating in a complex task of developing and promoting effective practice while using English to teach, therefore, carefully focused research can go a long way towards identifying interventions or teaching strategies. Consideration should also be given to the factors looking beyond the classroom, for example, the preparation of preservice teachers in institutions of higher learning and their preparedness for the classroom when English must be used.

Conclusion and recommendations for future studies

This systematic review has looked for all barriers that impede preschools teachers' use of English as a medium of instruction, together with facilitating strategies that teachers use to overcome those barriers. While a systematic review has several advantages, it has several limitations that must be noted. Although this systematic review was a work by several researchers, the screening and selection of the articles were conducted by the first author. Under such circumstances, it must be noted there is an element of bias associated with the process of selection. The synthesis of the reviewed studies' findings and subsequent interpretations and conclusions were made by the team of researchers and could be the subjective interpretations of these researchers only.

Another notable limitation arises from the selection criteria. This study selected only published documents or peer-reviewed articles. The authors note that there are also publications from theses, book chapters, magazines, blogposts or government documents that may have added to the pool of selected studies. Future studies could cast a wider net for published documents and also documents in other languages, as much as possible. This study has been particularly strict with the inclusion criteria and found articles mainly from the continent of Africa and Asia. There is an over-representation of studies originating from the African continent. Selection of articles from broader cross-cultural perspectives is important.

The search concluded in late 2018. Since then, there would be newer publications on using English as a medium of instruction, or newer strategies using technology to teach, that cannot be included in this systematic review. Although all efforts were made to ensure searches were thorough, however, incidences of publication bias cannot be ignored. In addition, more sophisticated electronic search strategies might have become available that this study was not able to use at the time of this search.

The selected studies used a variety of research methods and approaches. However, there was a predominance of qualitative types of research, together with various different approaches to data collection. These qualitative studies showed that the authors used numerous data collection methods to provide triangulation and to strengthen the trustworthiness of their studies. However, these studies employed a rather small number of samples which could impede generalisability. More quantitative research studies should be conducted in order to provide further insight into the factors which are barriers to preschool teachers' use of English during instructional tasks. Correlation or relational types of research which can answer questions such as, 'what significance do barriers have

for preschool teachers in teaching and learning?’ or ‘are there improvements in how preschool teachers use English when they initiate strategies to overcome those barriers?’ Research can give insights into how factors and strategies established in this review interrelate and how they have improved teaching and learning.

It is advisable to investigate further the issues concerning English language proficiency (which dominate the results of this systematic review) to provide a more specific understanding of the ways and the areas in which they influence preschool teachers' effective use of English in instructional tasks. More attention could also be paid to the government and school training provided – how effective have they been? In conclusion, although future research is required to determine the importance of each of the identified factors and facilitating strategies, the present findings have identified a range of factors and facilitating strategies, both of which are important for addressing issues pertaining to preschool teachers' use of English as a medium of instruction.

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References

- Azman, H (2016). Implementation and challenges of English language education reform in Malaysian primary schools. *3L: The Southeast Asian Journal of English Language Studies*, 22(3), 65-78. <https://doi.org/10.17576/3L-2016-2203-05>
- Ambotang, A. S. & Hashim, M. H. M. (2010). Hubungan iklim kerja dan stress dalam pengurusan bilik darjah dalam kalangan guru prasekolah (The relation of work environment and stress in classroom management among preschool teachers). *Journal of Techno-Social*, 2(2), 69-81.
- Barber, M., Chijioke, C. & Mourshed, M. (2010). *How the world's most improved school systems keep getting better*. London: McKinsey & Company. <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/how-the-worlds-most-improved-school-systems-keep-getting-better>
- Bell, D. & Bogan, B. L. (2013). English language learners: Problems and solutions found in the research of general practitioners of early childhood. *The Journal of Balanced Literacy Research and Instruction*, 1(2), art. 5, 18-23. <https://digitalcommons.lsu.edu/jblri/vol1/iss2/5/>
- Bowles, T. V. & Brindle, K. A. (2017). Identifying facilitating factors and barriers to improving student retention rates in tertiary teaching courses: A systematic review. *Higher Education Research & Development*, 36(5), 903-919. <https://doi.org/10.1080/07294360.2016.1264927>
- Butler, Y. G. (2004). What level of English Proficiency do elementary school teachers need to attain to teach EFL? Case studies from Korea, Taiwan, and Japan. *TESOL Quarterly*, 38(2), 245-278. <https://doi.org/10.2307/3588380>

- Chee, J., Mariani, M. N., Nor Mashitah, M. R., Yusof, C. M., Kadir, A. & Salim, S. N. (2015). The preschool curriculum implementation versus problems. *International Journal of Early Childhood Education and Care*, 4(1), 31-42.
<https://ejournal.upsi.edu.my/index.php/SAECJ/article/view/968/668>
- Clegg, J. & Afitska, O. (2011). Teaching and learning in two languages in African classrooms. *Comparative Education*, 47(1), 61-77.
<https://doi.org/10.1080/03050068.2011.541677>
- Cunningham, A. E., Zibulsky, J. & Callahan, M. D. (2009). Starting small: Building preschool teacher knowledge that supports early literacy development. *Reading Writing*, 22(4), 487-510. <https://doi.org/10.1007/s11145-009-9164-z>
- De Mejía, A. (2008). Enrichment bilingual education in South America. In N. H. Hornberger (Ed.), *Encyclopedia of language and education*. Springer, Boston, MA.
https://doi.org/10.1007/978-0-387-30424-3_134
- Dresser, R. (2012). The impact of scripted literacy instruction on teachers and students. *Issues in Teacher Education*, 21(1), 71-87. <https://files.eric.ed.gov/fulltext/EJ986817.pdf>
- Du Plessis, S. & Louw, B. (2008). Challenges to preschool teachers in learner's acquisition of English as language of learning and teaching. *South African Journal of Education*, 28(1), 53-75. <https://repository.up.ac.za/handle/2263/6527>
- Dhillon, J. K. & Wanjiru, J. (2013). Challenges and strategies for teachers and learners of English as a second language: The case of an urban primary school in Kenya. *International Journal of English Linguistics*, 3(2), 14-24.
<http://www.ccsenet.org/journal/index.php/ijel/article/view/25954>
- Early, M. & Norton, B. (2014). Revisiting English as medium of instruction in rural African classrooms. *Journal of Multilingual and Multicultural Development*, 35(7), 674-691.
<https://doi.org/10.1080/01434632.2014.908890>
- EPPI-Centre (2017). *EPPI-Centre methods for conducting systematic reviews*. EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
<https://eppi.ioe.ac.uk/>
- Feza, N. N. (2016). Basic numeracy abilities of Xhosa Reception year students in South Africa: Language policy issues. *Issues in Educational Research*, 26(4), 576-591.
<https://www.iier.org.au/iier26/feza.pdf>
- Fu, C. S. (2015). The effect of emotional labor on job involvement in preschool teachers: Verifying the mediating effect of psychological capital. *The Turkish Online Journal of Educational Technology*, 14(3), 145-156. <http://www.tojet.net/articles/v14i3/14314.pdf>
- Goh, P. S. C. (2013). Conceptions of competency: A phenomenographic investigation of beginning teachers in Malaysia. *The Qualitative Report*, 18(Art.40), 1-16.
- Goh, P. S. C. (2019). Preschool teachers' perspectives on using English language to teach. *GEMA Online Journal of Language Studies*, 19(4), 346-362.
<https://doi.org/10.17576/gema-2019-1904-18>
- Goh, P.S.C. & Matthews, B. (2011). Listening to the concerns of student teachers in Malaysia during teaching practice. *The Australian Journal of Teacher Education*, 36(3), 92-103. <https://doi.org/10.14221/ajte.2011v36n3.2>
- Goh, P. S. C. & Loy, C. L. (in press). Factors influencing preschool teachers' use of the English language as a medium of instruction. *International Journal of Instruction*.

- Goh, P. S. C., Saad, N. S. & Wong, K. T. (2012). The 'voices' of beginning teachers in Malaysia about their conceptions of competency: A phenomenographic investigation. *Australian Journal of Teacher Education*, 37(7), 58-70.
<https://doi.org/10.14221/ajte.2012v37n7.5>
- Gort, M. & Sembiane, S. F. (2015). Navigating hybridized language learning spaces through translanguaging pedagogy: Dual language preschool teachers' languaging practices in support of emergent bilingual children's performance of academic discourse. *International Multilingual Research Journal*, 9(1), 7-25.
<https://doi.org/10.1080/19313152.2014.981775>
- Isa, Z. M., Luen, L. C., Sewestian, A. V. & Omar, A. (2013). The effect of a reader's theater on preschool children's reading fluency and comprehension. *Journal of Research, Policy & Practice of Teachers & Teacher Education*, 3(2), 17-30.
<https://ejournal.upsi.edu.my/index.php/JRPPITE/article/view/170>
- Khairie Hisyam Aliman (2013). Why are our English teaching standards so low? *Malay Mail Online*, 16 September. <https://www.malaymail.com/news/opinion/2013/09/16/why-are-our-english-teaching-standards-so-low/525409>
- Kyeyune, R. (2003). Challenges of using English as a medium of instruction in multilingual contexts: A view from Ugandan classrooms. *Language, Culture and Curriculum*, 16(2), 173-184. <https://doi.org/10.1080/07908310308666666>
- Leung, S. C. S., Lim, A. S. E. & Li, Y. L. (2013). Implementation of the Hong Kong language policy in pre-school settings. *Early Child Development and Care*, 183(10), 1381-1396. <https://doi.org/10.1080/03004430.2013.788816>
- Machida, T. (2016). Japanese elementary school teachers and English language anxiety. *TESOL Journal*, 7(1), 40-66. <https://doi.org/10.1002/tesj.189>
- Ministry of Education Malaysia (2010). *To uphold bahasa Malaysia [Malay language] and to strengthen the English language*. Putrajaya: Ministry of Education Malaysia.
- Ministry of Education Malaysia (2015). *English language education reform in Malaysia: The Roadmap 2015-2025*. Putrajaya: Ministry of Education Malaysia.
https://www.academia.edu/35736437/The_Roadmap
- Mudzielwana, N. P. (2014). Assessing the effects of second language as a medium of instruction in teaching preschool children. *International Journal of Educational Sciences*, 7(1), 87-98. <https://doi.org/10.1080/09751122.2014.11890172>
- Mulovhedzi, S. A., Ngobeli, D. T. & Mudzielwana, N. P. (2017). The effects of second language as a medium of instruction on pre-school learners. *International Journal of Educational Sciences*, 10(1), 110-114. <https://doi.org/10.1080/09751122.2015.11890347>
- Mustafa, M. C., Ngajib, S. H., Isa, Z. M., Omar, A., Osman, Z., Ahmad, N. A., Arip, M. A. S. M. & Amran, A. N. F. M. (2018). Early childhood teachers' challenges in using English to interact with young English language learners. *International Journal of Academic Research in Business and Social Sciences*, 8(6), 60-73.
<https://doi.org/10.6007/IJARBS/v8-i6/4179>
- Mwalongo, L. J. (2016). Learning through English language in early childhood education: A case of English medium schools in China. *Journal of Education and Practice*, 7(28), 28-35. <https://www.iiste.org/Journals/index.php/JEP/article/view/33551/34492>
- Neuman, S. B. (2010). Lesson from my mother: Reflections on the national early literacy panel report. *Educational Researcher*, 39(4), 301-304.
<https://doi.org/10.3102/0013189X10370475>

- Ng, P. F. & Yeo, K. J. (2014). Preschool teachers' beliefs and practices on early literacy instruction. *Sains Humanika*, 2(4), 139-146.
<https://sainshumanika.utm.my/index.php/sainshumanika/article/view/481>
- Nunan, D. (2003). The impact of English as a global language on educational policies and practices in the Asia-Pacific region. *TESOL Quarterly*, 37(4), 589-613.
<https://doi.org/10.2307/3588214>
- Owu-Ewie, C. & Eshun, E.S. (2015). The use of English as medium of instruction at the upper basic level (primary four to junior high school) in Ghana: From theory to practice. *Journal of Education and Practice*, 6(3), 72-82.
<https://eric.ed.gov/?id=EJ1083758>
- Palviainen, A, Protassova, E., Mård-Miettinen, K. & Schwartz, M. (2016). Two languages in the air: A cross-cultural comparison of preschool teachers' reflections on their flexible bilingual practices. *International Journal of Bilingual Education and Bilingualism*, 19(6), 614-630. <https://doi.org/10.1080/13670050.2016.1184615>
- Pandian, A. (2006). What works in the classroom? Promoting literacy practices in English. *3L Journal of Language Teaching, Linguistics and Literature*, 11(1), 15-39.
http://journalarticle.ukm.my/1188/1/ap_final.pdf
- Petticrew, M. & Roberts, H. (2006). *Systematic reviews in the social sciences: A practical guide*.
<https://onlinelibrary.wiley.com/doi/book/10.1002/9780470754887>
- Piper, B., Zuilkowski, S. S., Dubeck, M., Jepkemei, E. & King, S. J. (2018). Identifying the essential ingredients to literacy and numeracy improvement: Teacher professional development and coaching, student textbooks, and structured teachers' guides. *World Development*, 106, 324-336. <https://doi.org/10.1016/j.worlddev.2018.01.018>
- Puteh, S. N. & Ali, A. (2013). Preschool teachers' perceptions towards the use of play-based approach in language and literacy development for preschool. *Malaysian Journal of Learning and Instruction*, 10(1), 79-98. <http://e-journal.uum.edu.my/index.php/mjli/article/view/7652/774>
- Sak, R., Erden, F. T. & Morrison, G. S. (2016). Child-centred education: Preschool teachers' belief and self-reported practices. *Early Child Development and Care*, 186(8), 1185-1202. <https://doi.org/10.1080/03004430.2015.1081185>
- Selvaraj, A. M. (2013). Need for more routes to teach English. *The STAR Online*, 22 September. <https://www.thestar.com.my/news/education/2013/09/22/need-for-more-routes-to-teach-english/>
- Shankar, P. & Gunashekar, P. (2016). Early childhood education in English in India. In V. A. Murphy & M. Evangelou (Eds.), *Early childhood education in English for speakers of other languages* (pp. 75-90). London: British Council.
https://www.teachingenglish.org.uk/sites/teacheng/files/pub_F240%20Early%20Childhood%20Education%20inners%20FINAL%20web.pdf
- Syed Ali Rethza, S. B. & Jamaluddin, S. (2010). Preschool teachers' assessment practices, knowledge and perceptions in selected districts. *Jurnal Pendidikan*, 30(1), 127-157.
<http://www.myjurnal.my/public/article-view.php?id=72259>
- Tackie-Oforu, V., Mahama, S., Vandyck, E. S. T. D., Kumador, D. K. & Tokou, N. A. A. (2015). Mother tongue usage in Ghanaian pre-schools: Perceptions of parents and teachers. *Journal of Education and Practice*, 6(34), 81-87.
<https://www.iiste.org/Journals/index.php/JEP/article/view/27611>

- Tan, Y. S. & Raman, S. R. (2007). Problems and challenges of learning through a second language: The case of teaching of science and mathematics in English in the Malaysian primary schools. *Kajian Malaysia*, 25(2), 29-54.
[http://web.usm.my/km/25\(2\)2007/01274082_25.2.2007_29-54.pdf](http://web.usm.my/km/25(2)2007/01274082_25.2.2007_29-54.pdf)
- The STAR* (2010). More hours in English to bring positive results. *The Star*, 11 April.
<https://www.thestar.com.my/news/education/2010/04/11/more-hours-in-english-to-bring-positive-results>
- Vella, L. A., Mifsud, C. L. & Muscat, D. (2018). *Language use in early childhood education classrooms in Malta*. National Literacy Agency of Malta.
<https://education.gov.mt/en/Documents/Language%20Use%20in%20Early%20Childhood%20Education%20Classrooms%20in%20Malta.pdf>
- Vellutino, F. R., Tunmer, W. E., Jaccard, J. J. & Chen, R. (2007). Components of reading ability: Multivariate evidence for a convergent skills model of reading development. *Scientific Studies of Reading*, 11(1), 3-32. <https://doi.org/10.1080/10888430709336632>
- Wong, C. W. (2014). Barking up the wrong tree. *The STAR Online*, 23 November.
<https://www.thestar.com.my/opinion/columnists/on-the-beat/2014/11/23/our-real-problem-isnt-bahasa-malaysia-but-english-and-it-is-incredible-that-so-many-of-us-have-refus/>

Appendix: Summary of the studies in the present review

	Author, year, country and title of article	Research design	Barriers (as described in 'Discussion')	Facilitating strategies (as described in 'Discussion')
1	Bell & Bogan (2013) United States of America English language learners: Problems and solutions found in the research of general practitioners of early childhood	Critical analyses of problems facing teachers teaching in English for English language learners	Lack preparation and training; lack of confidence and fear towards using the language	Teacher preparation programs
2	Chee et al. (2015). Malaysia The preschool curriculum implementation versus problems	Case study through interviews, teaching observation and document analysis. (n=4)	English language proficiency; somewhat unable to differentiate instructions to meet the needs of all learners hampered through the use of the language	Not stated
3	Clegg & Afitska (2011) Africa Teaching and learning in two languages in African classrooms	Critically discusses the attitudes of teachers and authorities to the use of two languages (English and the mother tongue)	Negative attitudes of teachers towards code switching to assist learners when English is used as the medium of instruction; lack coordination between schools and policy makers [tensions]	Teacher education; policy driven

4	de Mejía (2008) South America Enrichment bilingual education in South America	Critically discusses the use of two languages (English and the mother tongue)	Not ready to use the language; environment outside the classroom did not encourage the use of English	Teacher training
5	du Plessis & Louw (2008) Africa Challenges to preschool teachers in learner's acquisition of English as language of learning and teaching	Quantitative: survey questionnaire (n=32)	Lack of support of parents or caregivers; low proficiency in the language	Interactive workshops
6	Feza (2016) Africa Basic numeracy abilities of Xhosa Reception year students in South Africa: Language policy issues	Mixed method design through mathematical reasoning questions (n=26) and interviews (n=10)	Code switching by preschool teachers	Teacher education; policy driven
7	Goh (2019). Malaysia Preschool teachers' perspectives on using English language to teach	Mixed method design through questionnaires (n=204) and interviews (n=12)	Lack of English language proficiency; limited involvement in the lesson for fear of exposing limited proficiency; children find it hard to follow in English; limited resources	Language switching (code switching) between English and mother tongue; and speaking more slowly in English
8	Kyeyune (2003). Africa Challenges of using English as a medium of instruction in multilingual contexts: A view from Ugandan classrooms	Qualitative research through interviews (n=11)	Negative attitudes of students towards teachers using English to teach; students prefer mother-tongue	Teacher training programs to provide motivation and solution to teachers
9	Leung, Lim & Li (2013). Hong Kong Implementation of the Hong Kong language policy in pre-school settings	Mixed methods design through questionnaires (n=276) and focused interviews (n=40)	Negative beliefs, goals, practices; absence of a supportive language-learning environment outside the classroom; syntactic and phonological differences between Chinese and English; and overall differences in teaching plan in English.	Professional development; teaching environment and resources; parental influence; parental involvement; special teaching resources (example, remedial classes after school); and differentiated teaching practices

10	Machida (2016). Japan Japanese elementary school teachers and English language anxiety	Quantitative research through survey questionnaire (n=133)	Anxiety among teachers due to differing support and training, low level of English proficiency; overall lack of preparation	Training
11	Mudzzielwana, N. P. (2014) Africa Assessing the effects of second language as a medium of instruction in teaching preschool children	Qualitative research through interviews and classroom observation (n=8).	Lack theoretical knowledge to use English as a medium of instruction; lack of knowledge and understanding of the conceptual teaching in the preschool curriculum using English	Support system to help teachers in its use as a medium of instruction
12	Mulovhedzi, Ngobeli, & Mudzielwana (2017). Africa The effects of second language as a medium of instruction on preschool learners	Qualitative research through interviews and classroom observation (n=8).	Resistant to the use of English as a medium of instruction	Training
13	Mustafa et al. (2018). Malaysia Early childhood teachers' challenges in using English to interact with young English language learners	A phenomenological study (n=6)	Limited English proficiency; teachers' lack of confidence in using English; and unsupportive environment	Not indicated
14	Mwalongo (2016). China Learning through English language in early childhood education: A case of English medium schools in China	Qualitative research through interviews with preschool children's parent to obtain their perspectives (n=4)	Low proficiency created competency issue in using English language; and lack of conducive environment for English language practice time	Teacher training
15	Owu-Ewie & Eshun (2015). Africa The use of English as medium of instruction at the upper basic level (primary four to junior high school) in Ghana: From theory to practice	Qualitative research through interviews and observations (n=140)	Pupils' lack of proficiency to follow lessons in the English language; teachers flouting the policy and using the mother-tongue; overburdened / too many tasks; children were not interested in English	Tighter policy control

16	Palviainen, Protassova, Mård-Miettinen & Schwartz (2016). Finland and Israel	Qualitative research through observations and interviews (n=5)	Adjustments to two languages; take up time in the classroom	Flexible use of two languages; responsible code-switching; contextual and linguistic supports; adjustments for individual children; and role-modelling.
	Two languages in the air: A cross-cultural comparison of preschool teachers' reflections on their flexible bilingual practices			
17	Shankar & Gunashekar (2016). India	Critically discusses the use of two languages (English and the mother tongue).	Low proficiency in English possibly affecting the competency in teaching	
	Early childhood education in English in India			
18	Tackie-Ofosu et al. (2015). Africa	Quantitative research through survey questionnaire (n=120)	Adjustments to two languages; time factor when two languages are used; more time used in planning; large class sizes; sometimes lack parental involvement;	Better teaching and learning materials; Training
	Mother tongue usage in Ghanaian pre-schools: Perceptions of parents and teachers			
19	Tan & Raman (2007). Malaysia	Critically discusses the problems and challenges of learning through a second language	Lack of proficiency in the English language; lack of support and guidance in integrating English in their practice	Training
	Problems and challenges of learning through a second language: The case of teaching of science and mathematics in English in the Malaysian primary schools			
20	Vella, Mifsud & Muscat (2018). Malta	Quantitative survey questionnaire (n=440) and qualitative interviews (n=5)	Lack of proficiency in the English language; role expectations and coordination between schools and Dept of Education; bureaucratic obstacles lead to instructional pressure	Pre-service and in-service professional development opportunities
	Language use in early childhood education classrooms in Malta			

Pauline Swee Choo Goh (corresponding author) is an Associate Professor at the Sultan Idris Education University (Universiti Pendidikan Sultan Idris), Malaysia, and has taught in the tertiary sector for more than fifteen years. Her publications, research interests and expertise are focused on developing and improving both pre-service and beginning teachers' knowledge, skills and practice.

Email: goh.sc@fpm.upsi.edu.my Orcid ID: 0000-0001-7994-3164

Chee Luen Loy is Associate Professor of Early Childhood Education at the Sultan Idris Education University, Malaysia. His areas of expertise include puppetry, drama in education and children's theatre.

Email: loy.cl@fpm.upsi.edu.my

Norwaliza Abdul Wahab is a senior lecturer at the Sultan Idris Education University, Malaysia. Her primary research interests focus on alternative ways of teaching and learning that promote the authority of indigenous learners.

Email: norwaliza@fpm.upsi.edu.my

Raja Nor Safinas Raja Harun is an Associate Professor at the Sultan Idris Education University, Malaysia. Her research interests are in the areas of ESL teacher education, innovative and transformative pedagogy and classroom discourse.

Email: nor.safinas@fbk.upsi.edu.my

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<http://www.iier.org.au/iier30/goh.pdf>